

Instructions

First-price No Communication Treatment

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

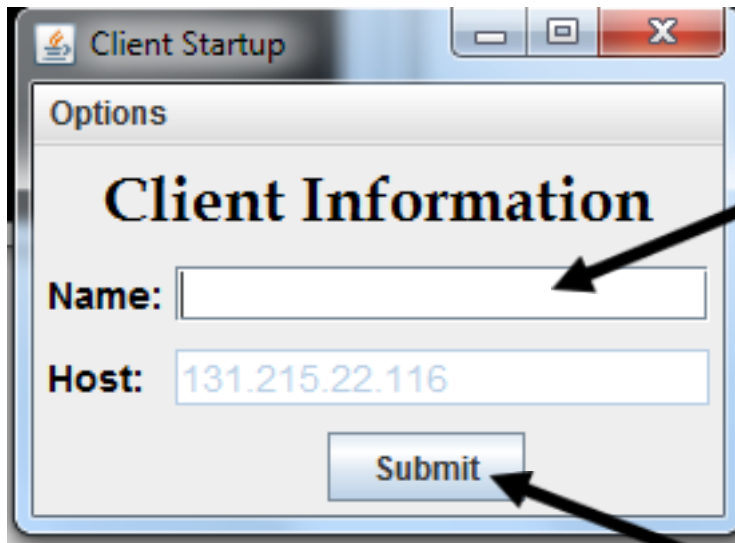
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The screenshot shows a window titled "Client Startup" with a standard Windows-style title bar (minimize, maximize, close buttons). Below the title bar is a section labeled "Options". Underneath, the heading "Client Information" is displayed in a large, bold, serif font. There are two input fields: "Name:" followed by an empty text box, and "Host:" followed by a text box containing the IP address "131.215.22.116". At the bottom of the form is a "Submit" button. Two black arrows point from the text on the right to the "Name:" field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whomever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her value for the item **minus** the **price**, which equals **the highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 51.50

• Your payoff

$$65.00 - 51.50 = 13.50 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 55.70
- Your partner wins the item
- **Price** of the item is 55.70

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 55.70 points

Screenshot

Subject ID: 3



Your Value for the item is 77.64

Please type your bid below and click the submit button.

Your History

Switch to Tabbed View

Match	Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	1	56.89	32.00	32.00	32.00	24.89
2	1	80.71	3.00	23.00	23.00	0.00
3	1	77.64				

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 10 rounds of real play.
- In each round, you will randomly be matched with another subject.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

First-price Pure Communication Treatment

(random matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

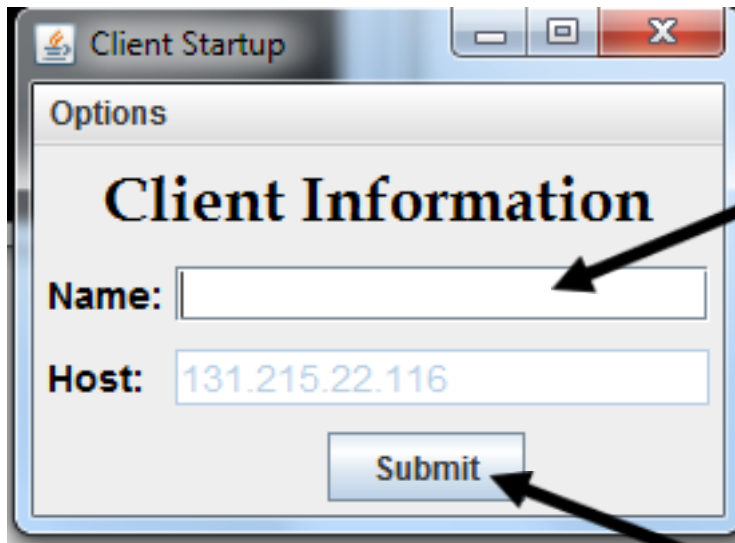
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whomever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her value for the item **minus** the **price**, which equals **the highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 51.50

• Your payoff

$$65.00 - 51.50 = 13.50 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 55.70
- Your partner wins the item
- **Price** of the item is 55.70

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 55.70 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 15 rounds of real play.
- In each round, you will randomly be matched with another subject.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

First-price Pure Communication Treatment

(complete strangers matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

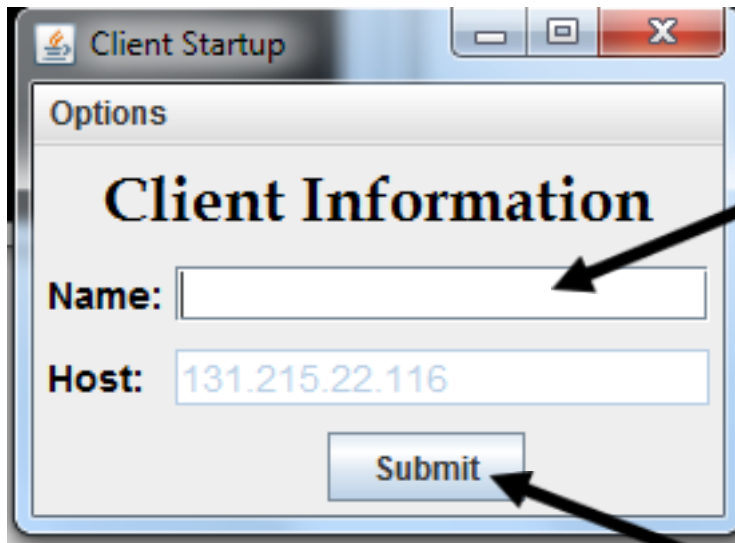
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The screenshot shows a window titled "Client Startup" with a standard Windows-style title bar (minimize, maximize, close buttons). Below the title bar is a section labeled "Options". Underneath, the heading "Client Information" is displayed. There are two input fields: "Name:" followed by an empty text box, and "Host:" followed by a text box containing the IP address "131.215.22.116". At the bottom of the form is a "Submit" button. Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the sticker behind your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whomever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her value for the item **minus** the **price**, which equals **the highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 51.50

• Your payoff

$$65.00 - 51.50 = 13.50 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 55.70
- Your partner wins the item
- **Price** of the item is 55.70

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 55.70 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 10 rounds of real play.
- In each round, you will randomly be matched with another subject and you will never interact with any of the participants more than once.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

First-price Communication and Transfers Treatment

(random matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

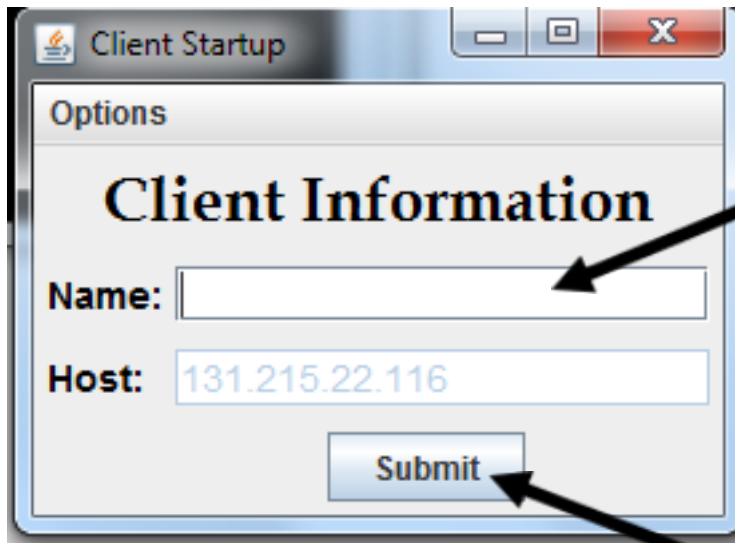
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whomever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her value for the item **minus** the **price**, which equals **the highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 51.50

• Your payoff

$$65.00 - 51.50 = 13.50 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 55.70
- Your partner wins the item
- **Price** of the item is 55.70

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 55.70 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.

Message Window

1-->m: hello world

Item Value: 34.25

Please type your bid below and click the submit button.

1

1

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25				

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.
- You will then observe the winning bid, the price of the item, and whether you won the auction or not (history panel).

The Structure of the Experiment

- After bids have been submitted, and the winner of the item has been determined, you will be able to **transfer points to the subject paired with you**.
- The points you transfer will be subtracted from your earnings (and added to your partner's) at the end of that round.
- You can enter any non-negative number and then click Submit Transfer. (If you don't want to transfer any points, enter zero).
- The subject paired with you will similarly have an opportunity to transfer points to you.

Message Window

1->me: hello world

Please enter amounts (up to 2 decimal places) to transfer to the other player.

Player 1

Submit Transfers

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25	10.00	10.00	2.00	32.25

The Structure of the Experiment

Finally, you will observe the winning bid, the price of the item, whether you won the auction or not and your total earnings in that round's auction, accounting for the transfers made.

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 15 rounds of real play.
- In each round, you will randomly be matched with another subject.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

First-price Communication and Transfers Treatment

(complete strangers matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

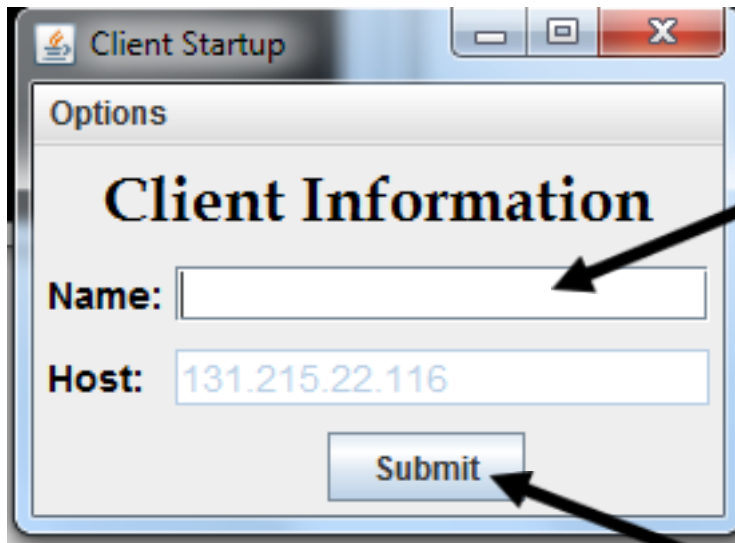
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the sticker behind your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whomever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her value for the item **minus** the **price**, which equals **the highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 51.50

• Your payoff

$$65.00 - 51.50 = 13.50 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 55.70
- Your partner wins the item
- **Price** of the item is 55.70

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 55.70 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.

Message Window

1-->m: hello world

Item Value: 34.25

Please type your bid below and click the submit button.

1

1

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25				

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.
- You will then observe the winning bid, the price of the item, and whether you won the auction or not (history panel).

The Structure of the Experiment

- After bids have been submitted, and the winner of the item has been determined, you will be able to **transfer points to the subject paired with you**.
- The points you transfer will be subtracted from your earnings (and added to your partner's) at the end of that round.
- You can enter any non-negative number and then click Submit Transfer. (If you don't want to transfer any points, enter zero).
- The subject paired with you will similarly have an opportunity to transfer points to you.

Message Window

1->me: hello world

Please enter amounts (up to 2 decimal places) to transfer to the other player.

Player 1

Submit Transfers

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25	10.00	10.00	2.00	32.25

The Structure of the Experiment

Finally, you will observe the winning bid, the price of the item, whether you won the auction or not and your total earnings in that round's auction, accounting for the transfers made.

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 10 rounds of real play.
- In each round, you will randomly be matched with another subject and you will never interact with the same participant more than once.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

**First-price Repeated without Communication
Treatment**

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

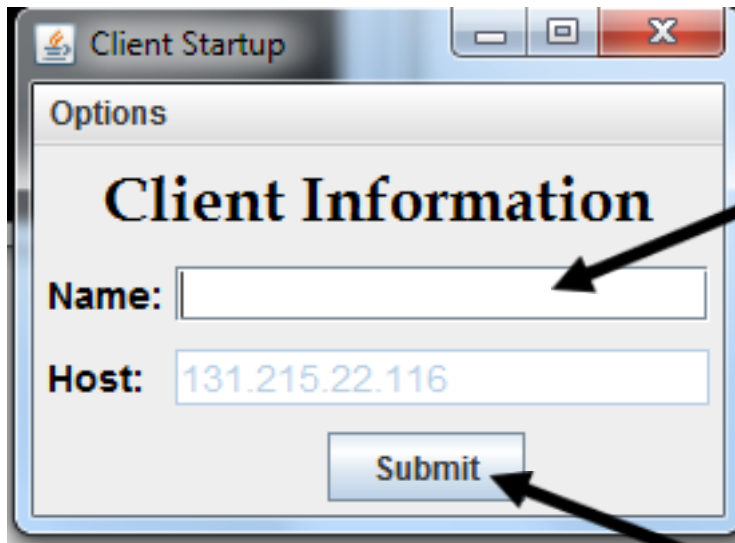
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, **you will interact only with the subject you were paired with at the beginning of the experiment.**
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, you will interact only with the subject you were paired with at the beginning of the experiment.
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whomever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her value for the item **minus** the **price**, which equals **the highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 51.50

• Your payoff

$$65.00 - 51.50 = 13.50 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 55.70
- Your partner wins the item
- **Price** of the item is 55.70

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 55.70 points

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid). After that, the experiment begins.
- The experiment is structured as follows.
- In each round, there is a 10% chance that it is the last round of the experiment.
- You will start by playing 10 rounds of the experiment.
- In the first 10 rounds you will not be told whether the experiment has ended or not during these 10 rounds.

The Overall Experiment, cont...

- At the end of round 10, you will be told whether the experiment has ended or not, and if it ended in which round:
 - If the experiment has ended before round 10, then this is the end of the session.
 - If the experiment has not ended, then you will play another round and learn at the end of **that round** if the experiment has ended or proceed to the next round, etc. (termination probability = 10%).
- You will be paid for all rounds that occurred before the experiment has ended.
- Remember that in all rounds of the experiment you will be playing with the same subject you were paired with at the beginning of the experiment.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

First-price Repeated with Communication Treatment

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

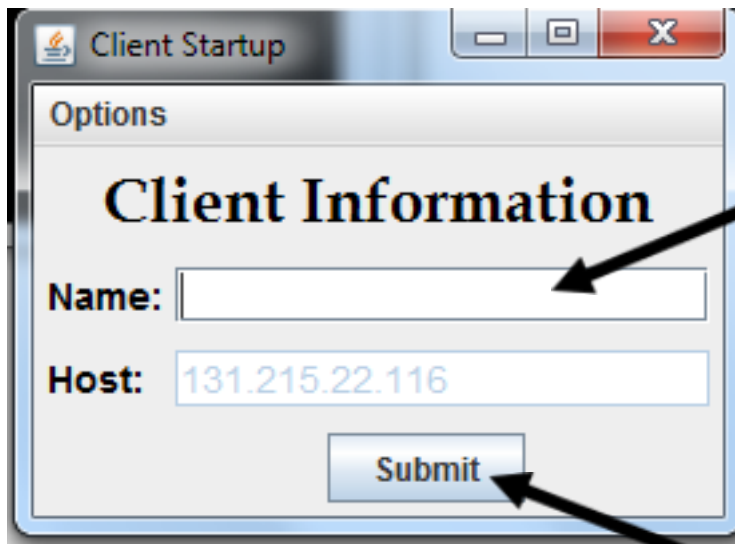
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, **you will interact only with the subject you were paired with at the beginning of the experiment.**
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, you will interact only with the subject you were paired with at the beginning of the experiment.
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whomever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her value for the item **minus** the **price**, which equals **the highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 51.50

• Your payoff

$$65.00 - 51.50 = 13.50 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 55.70
- Your partner wins the item
- **Price** of the item is 55.70

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 55.70 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid). After that, the experiment begins.
- The experiment is structured as follows.
- In each round, there is a 10% chance that it is the last round of the experiment.
- You will start by playing 10 rounds of the experiment.
- In the first 10 rounds you will not be told whether the experiment has ended or not during these 10 rounds.

The Overall Experiment, cont...

- At the end of round 10, you will be told whether the experiment has ended or not, and if it ended in which round:
 - If the experiment has ended before round 10, then this is the end of the session.
 - If the experiment has not ended, then you will play another round and learn at the end of **that round** if the experiment has ended or proceed to the next round, etc. (termination probability = 10%).
- You will be paid for all rounds that occurred before the experiment has ended.
- Remember that in all rounds of experiment you will be playing with the same subject you were paired with at the beginning of the experiment.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

Second-price No Communication Treatment

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

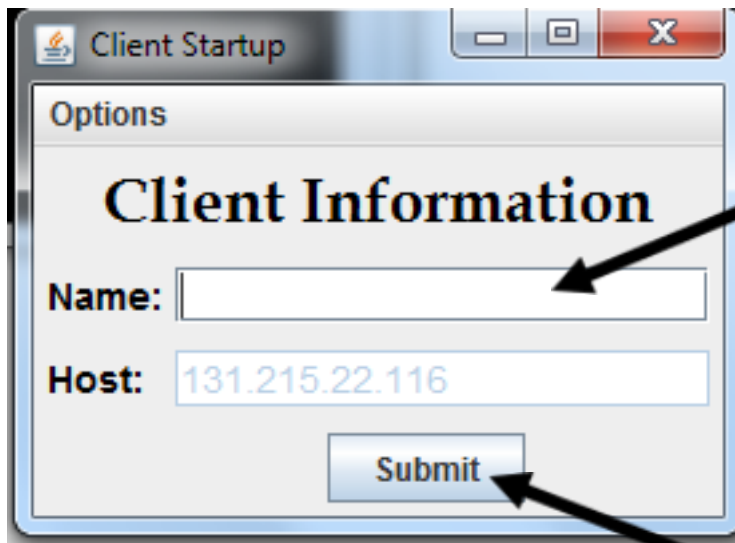
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whoever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her **value** for the item **minus** the **price**, which equals the **second highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 40.00

• Your payoff

$$65.00 - 40.00 = 25.00 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 57.00
- Your partner wins the item
- **Price** of the item is 51.50

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 51.50 points

Screenshot

Your Value for the item is 77.64

Please type your bid below and click the submit button.

Your History

Switch to Tabbed View

Match	Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	1	56.89	32.00	32.00	32.00	24.89
2	1	80.71	3.00	23.00	23.00	0.00
3	1	77.64				

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 10 rounds of real play.
- In each round, you will randomly be matched with another subject.

Your Earnings



Today **30 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

Second-price Pure Communication Treatment

(random matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

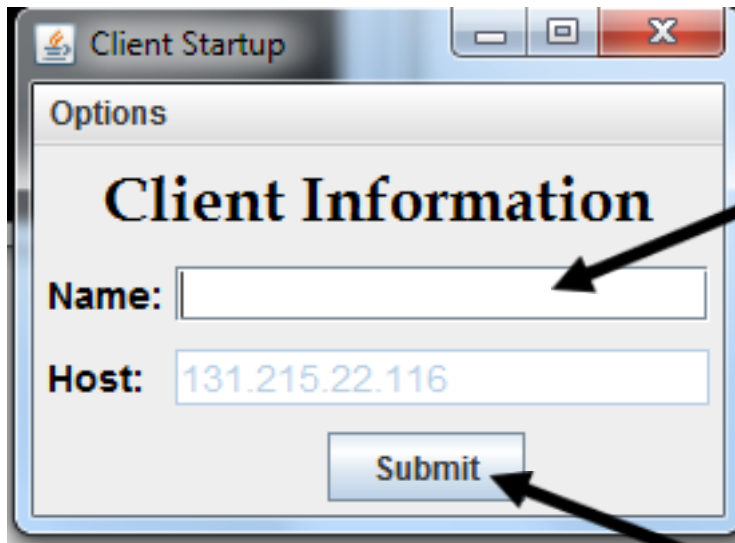
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whoever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her **value** for the item **minus** the **price**, which equals the **second highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 40.00

• Your payoff

$$65.00 - 40.00 = 25.00 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 57.00
- Your partner wins the item
- **Price** of the item is 51.50

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 51.50 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 10 rounds of real play.
- In each round, you will randomly be matched with another subject.

Your Earnings



Today **30 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

Second-price Pure Communication Treatment

(complete strangers matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

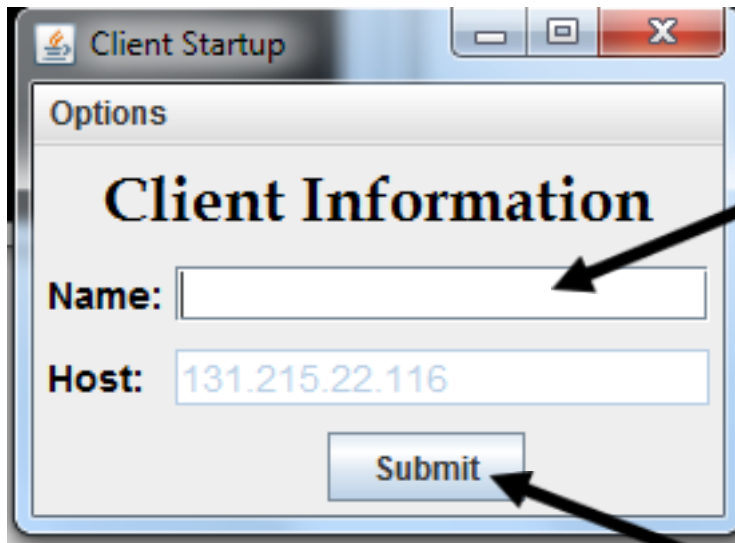
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will have a value for an item that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whoever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her **value** for the item **minus** the **price**, which equals the **second highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 40.00

• Your payoff

$$65.00 - 40.00 = 25.00 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 57.00
- Your partner wins the item
- **Price** of the item is 51.50

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 51.50 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid).
- After that, you will participate in 10 rounds of real play.
- In each round, you will randomly be matched with another subject and you will never interact with any of the participants more than once.

Your Earnings



Today **30 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

Second-price Communication and Transfers Treatment

(random matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

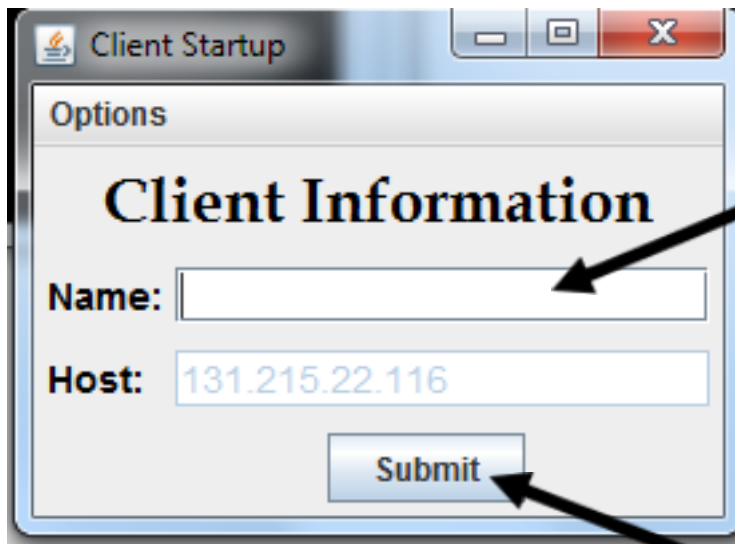
You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". Inside the window, there is a form titled "Client Information" under the heading "Options". The form contains two input fields: "Name:" which is currently empty, and "Host:" which contains the IP address "131.215.22.116". Below these fields is a "Submit" button. Two black arrows point from the text on the right to the "Name" field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will receive a **value for an item** that you will be bidding for. This value represents how much the item is worth to you in points.
- These values are determined randomly by the computer. All values are between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will receive a value for an item that you will be bidding for. This value represents how much the item is worth to you in points.
- These values are determined randomly by the computer. All values are between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whoever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her **value** for the item **minus** the **price**, which equals the **second highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 40.00

• Your payoff

$$65.00 - 40.00 = 25.00 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 57.00
- Your partner wins the item
- **Price** of the item is 51.50

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 51.50 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.

Message Window

1-->m: hello world

Item Value: 34.25

Please type your bid below and click the submit button.

1

1

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25				

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.
- You will then observe the winning bid, the price of the item, and whether you won the auction or not (history panel).

The Structure of the Experiment

- After bids have been submitted, and the winner of the item has been determined, you will be able to **transfer points to the subject paired with you**.
- The points you transfer will be subtracted from your earnings (and added to your partner's) at the end of that round.
- You can enter any non-negative number and then click Submit Transfer. (If you don't want to transfer any points, enter zero).
- The subject paired with you will similarly have an opportunity to transfer points to you.

Message Window

1->me: hello world

Please enter amounts (up to 2 decimal places) to transfer to the other player.

Player 1

Submit Transfers

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25	10.00	10.00	2.00	32.25

The Structure of the Experiment

Finally, you will observe the winning bid, the price of the item, whether you won the auction or not and your total earnings in that round's auction, accounting for the transfers made.

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- After one auction is over, you will be randomly re-matched with another participant and the next auction will begin.
- Before we start the experiment, we will go slowly through a practice round. Your earnings in this practice round do not affect your payment.
- After the practice round, you will participate in 10 auctions. We will sum up all the points you earned in these 10 auctions and convert them to US dollars.

Your Earnings



Today **30 points = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Instructions

Second-price Communication and Transfers Treatment

(complete strangers matching protocol)

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

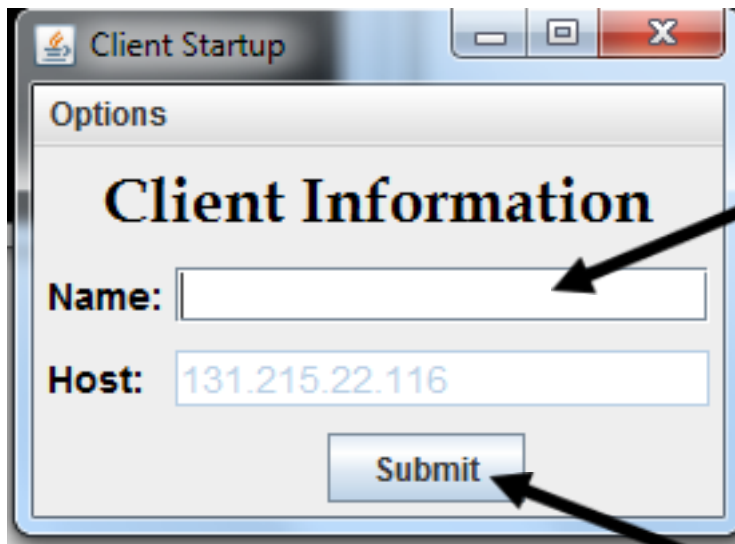
You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". Inside the window, there is a form titled "Client Information" under the heading "Options". The form contains two input fields: "Name:" which is currently empty, and "Host:" which contains the IP address "131.215.22.116". Below these fields is a "Submit" button. Two black arrows point from the text on the right to the "Name" field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will receive a **value for an item** that you will be bidding for. This value represents how much the item is worth to you in points.
- These values are determined randomly by the computer. All values are between 0.00 and 100.00 (all equally likely).

The Experiment

- In each round, you will be randomly paired with another subject in the room.
- Each of you will receive a value for an item that you will be bidding for. This value represents how much the item is worth to you in points.
- These values are determined randomly by the computer. All values are between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whoever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her **value** for the item **minus** the **price**, which equals the **second highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 40.00

• Your payoff

$$65.00 - 40.00 = 25.00 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 57.00
- Your partner wins the item
- **Price** of the item is 51.50

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 51.50 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.

Message Window

1-->m: hello world

Item Value: 34.25

Please type your bid below and click the submit button.

1

1

Send Message

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25				

The Structure of the Experiment

- After the communication is over you will be asked to submit **your bid**.
- You and the subject paired with you will submit your bids simultaneously.
- You will then observe the winning bid, the price of the item, and whether you won the auction or not (history panel).

The Structure of the Experiment

- After bids have been submitted, and the winner of the item has been determined, you will be able to **transfer points to the subject paired with you**.
- The points you transfer will be subtracted from your earnings (and added to your partner's) at the end of that round.
- You can enter any non-negative number and then click Submit Transfer. (If you don't want to transfer any points, enter zero).
- The subject paired with you will similarly have an opportunity to transfer points to you.

Message Window

1->me: hello world

Please enter amounts (up to 2 decimal places) to transfer to the other player.

Player 1

Submit Transfers

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Your History

Match 1 Match 2

Normal Match

Switch to Full View

Total Payoff this Match: 0 (\$0.00)

Round	Item Value	Your Bid	Highest Bid	Price	Your Profit
1	34.25	10.00	10.00	2.00	32.25

The Structure of the Experiment

Finally, you will observe the winning bid, the price of the item, whether you won the auction or not and your total earnings in that round's auction, accounting for the transfers made.

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- After one auction is over, you will be randomly re-matched with another participant and the next auction will begin. You will never interact with the same participant more than once.
- Before we start the experiment, we will go slowly through a practice round. Your earnings in this practice round do not affect your payment.
- After the practice round, you will participate in 10 auctions. We will sum up all the points you earned in these 10 auctions and convert them to US dollars.

Your Earnings



Today **30 points = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Instructions

Second-price Repeated without Communication Treatment

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

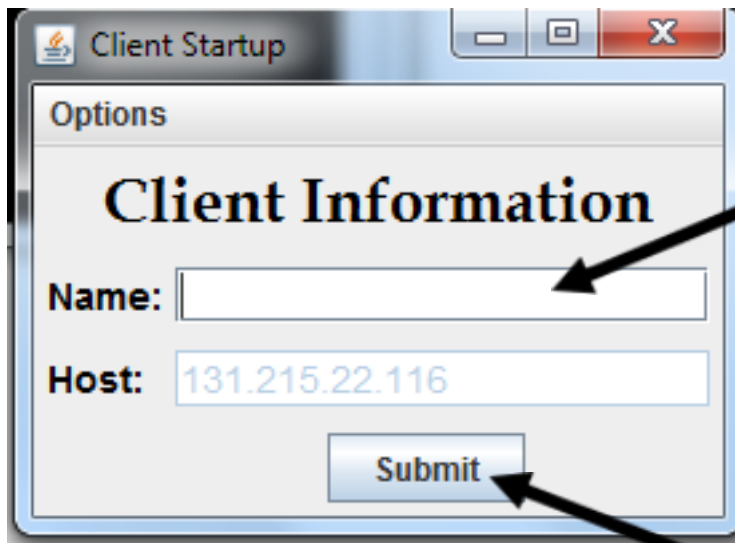
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- Options** (header)
- Client Information** (main title)
- Name:** followed by an empty text input field.
- Host:** followed by a text input field containing the IP address "131.215.22.116".
- Submit** button.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, **you will interact only with the subject you were paired with at the beginning of the experiment.**
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, you will interact only with the subject you were paired with at the beginning of the experiment.
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whoever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her **value** for the item **minus** the **price**, which equals the **second highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 40.00

• Your payoff

$$65.00 - 40.00 = 25.00 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 57.00
- Your partner wins the item
- **Price** of the item is 51.50

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 51.50 points

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid). After that, the experiment begins.
- The experiment is structured as follows.
- In each round, there is a 10% chance that it is the last round of the experiment.
- You will start by playing 10 rounds of the experiment.
- In the first 10 rounds you will not be told whether the experiment has ended or not during these 10 rounds.

The Overall Experiment, cont...

- At the end of round 10, you will be told whether the experiment has ended or not, and if it ended in which round:
 - If the experiment has ended before round 10, then this is the end of the session.
 - If the experiment has not ended, then you will play another round and learn at the end of **that round** if the experiment has ended or proceed to the next round, etc. (termination probability = 10%).
- You will be paid for all rounds that occurred before the experiment has ended.
- Remember that in all rounds of the experiment you will be playing with the same subject you were paired with at the beginning of the experiment.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.

Instructions

**Second-price Repeated with Communication
Treatment**

Welcome to ESSL

Welcome to the ESSL Lab, and thank you for participating in today's experiment.

Place all of your personal belongings away, so we can have your complete attention.

It is very important that you do not touch the computer until you are instructed to do so. When you are told to use the computer, please use it only as instructed. In particular, do not attempt to browse the web or use programs unrelated to the experiment.

Raise your hand if you need a writing utensil.

The Experiment

In today's experiment, you will participate in a series of auctions.

You will be paid for your participation in cash. Each of you may earn different amounts. How much you earn depends on your and others' decisions.

You will be using the computer for the entire experiment, and all interaction between you and others will be through the computer terminals.

Please DO NOT socialize or talk.

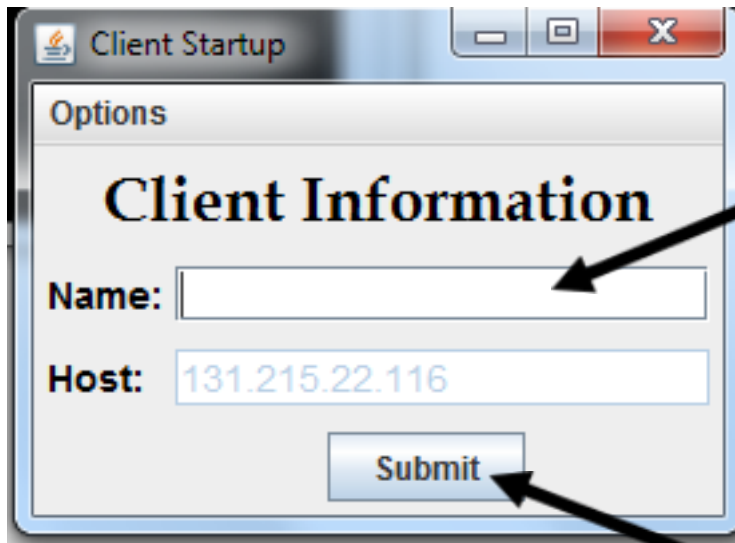
Computer Instructions

We will go through the details of the experiment and computer practice session very slowly and it is important that you follow the instructions.

If you have any questions, raise your hand and your question will be answered so everyone can hear.

Again, please do not hit any keys until you are told to do so, and when you are told to enter information, type exactly what you are told to type.

Log On Screen



The image shows a screenshot of a web browser window titled "Client Startup". The window contains a form with the following elements:

- A header section labeled "Options".
- A main heading "Client Information".
- A "Name:" label followed by an empty text input field.
- A "Host:" label followed by a text input field containing the IP address "131.215.22.116".
- A "Submit" button located below the input fields.

Two black arrows point from the text on the right to the "Name" input field and the "Submit" button.

When the computer prompts you to Log In, type the number appearing on the upper left sticker on your monitor (ESSL #).

Then click "submit" to confirm.

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, **you will interact only with the subject you were paired with at the beginning of the experiment.**
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).

The Experiment

- At the beginning of the experiment, the computer will randomly divide you into pairs.
- Throughout the experiment, you will interact only with the subject you were paired with at the beginning of the experiment.
- In each round, each of you will have a **value for an item** that you will be bidding for.
- The value is determined randomly between 0.00 and 100.00 (all equally likely).
- You will know **your own value**, but you will not know your **partner's value** for the item.

Your Task

- Each of you will submit a bid. It can be any non-negative number (with up to two decimal points).
- Whoever in your pair submits the **higher bid** will win the item.
- If both pair members submit the same bid then each has a 50% chance to win the item.
- The winner of the item will receive his or her **value** for the item **minus** the **price**, which equals the **second highest bid**.

Your Task

Example 1:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 40.00
- You win the item
- **Price** of the item is 40.00

• Your payoff

$$65.00 - 40.00 = 25.00 \text{ points}$$

• Your partner's payoff

0 points

Your Task

Example 2:

- Suppose your **value** of the item is 65.00
- You submit a **bid** of 51.50
- Your partner submits a **bid** of 57.00
- Your partner wins the item
- **Price** of the item is 51.50

• Your payoff

0 points

• Your partner's payoff

his/her value of the item – 51.50 points

The Structure of the Experiment

- In each auction, *after* you observe your value for the item and *before* you submit your bid, you will be able to **communicate** with the subject paired with you through a chat box.
- You can send any message to the subject you are paired with and you will observe all messages sent to you by him/her.

The Structure of the Experiment

- To send a message, simply type your message in the box underneath the Message Window and hit SEND.
- When you want to finish chatting, press the Finish Chatting button. You will not be able to exchange messages after either you or your partner pressed the Finish Chatting button.

Message Window

Your value is 28.58.

1

Add

Add All

Remove

Remove All

1

Send Message

Send

Finish Chatting

The End of a Round - Recording

At the end of each round, please record the details of the round on the provided sheet (please fill id now).

The Overall Experiment

- When the instructions are done, you will get to try one round of practice (unpaid). After that, the experiment begins.
- The experiment is structured as follows.
- In each round, there is a 10% chance that it is the last round of the experiment.
- You will start by playing 10 rounds of the experiment.
- In the first 10 rounds you will not be told whether the experiment has ended or not during these 10 rounds.

The Overall Experiment, cont...

- At the end of round 10, you will be told whether the experiment has ended or not, and if it ended in which round:
 - If the experiment has ended before round 10, then this is the end of the session.
 - If the experiment has not ended, then you will play another round and learn at the end of **that round** if the experiment has ended or proceed to the next round, etc. (termination probability = 10%).
- You will be paid for all rounds that occurred before the experiment has ended.
- Remember that in all rounds of experiment you will be playing with the same subject you were paired with at the beginning of the experiment.

Your Earnings



Today **20 point = 1 dollar.**

You will be paid at the end of the experiment the total amount you have earned in all rounds but the practice round.

You need not tell any other participant how much you have earned.

Let the Experiment Begin!

To ensure your privacy and that of others in the experiment, please pull out the dividers as far as they will go.

If there are no questions, we will now begin the actual experiment.