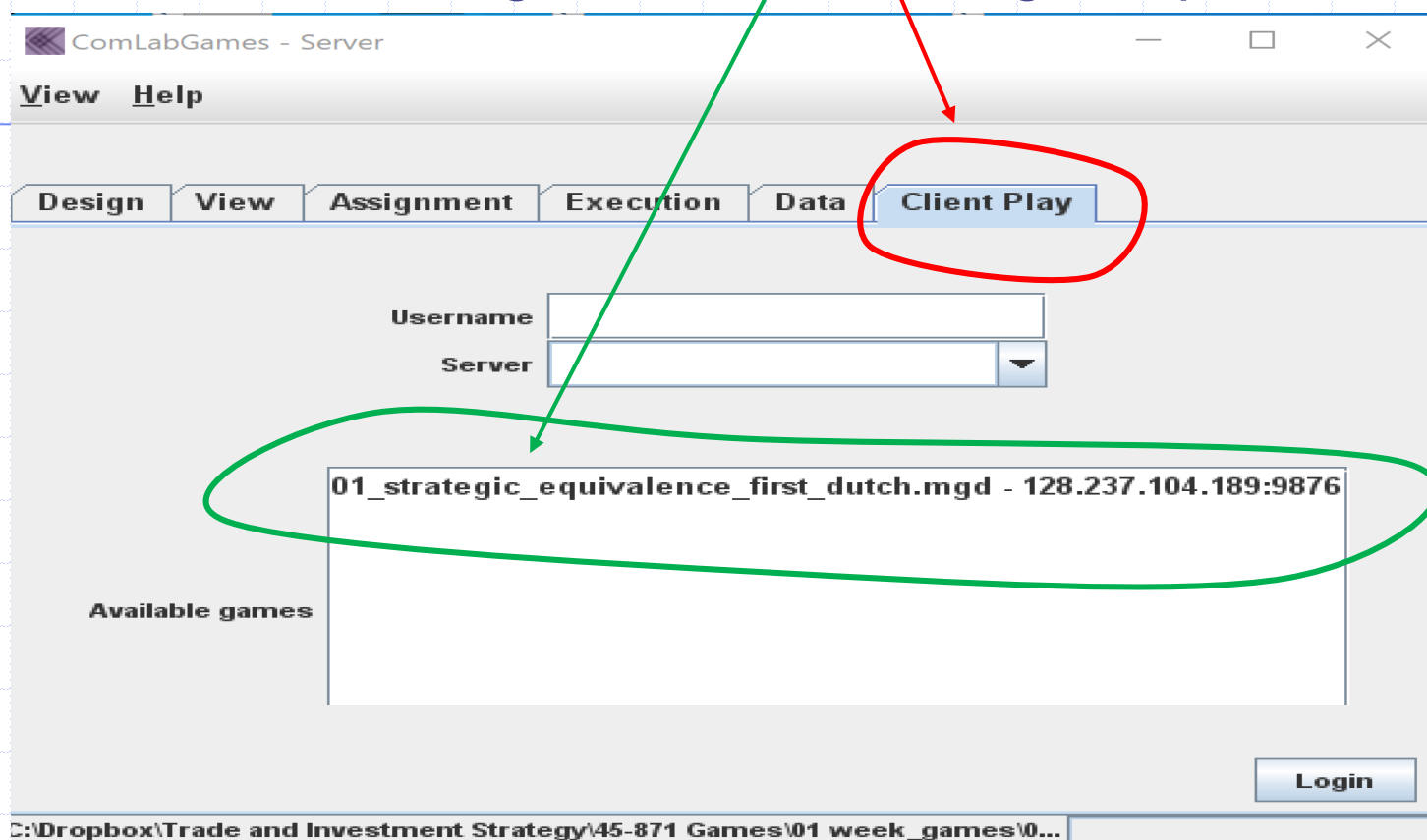
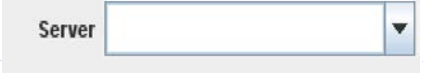


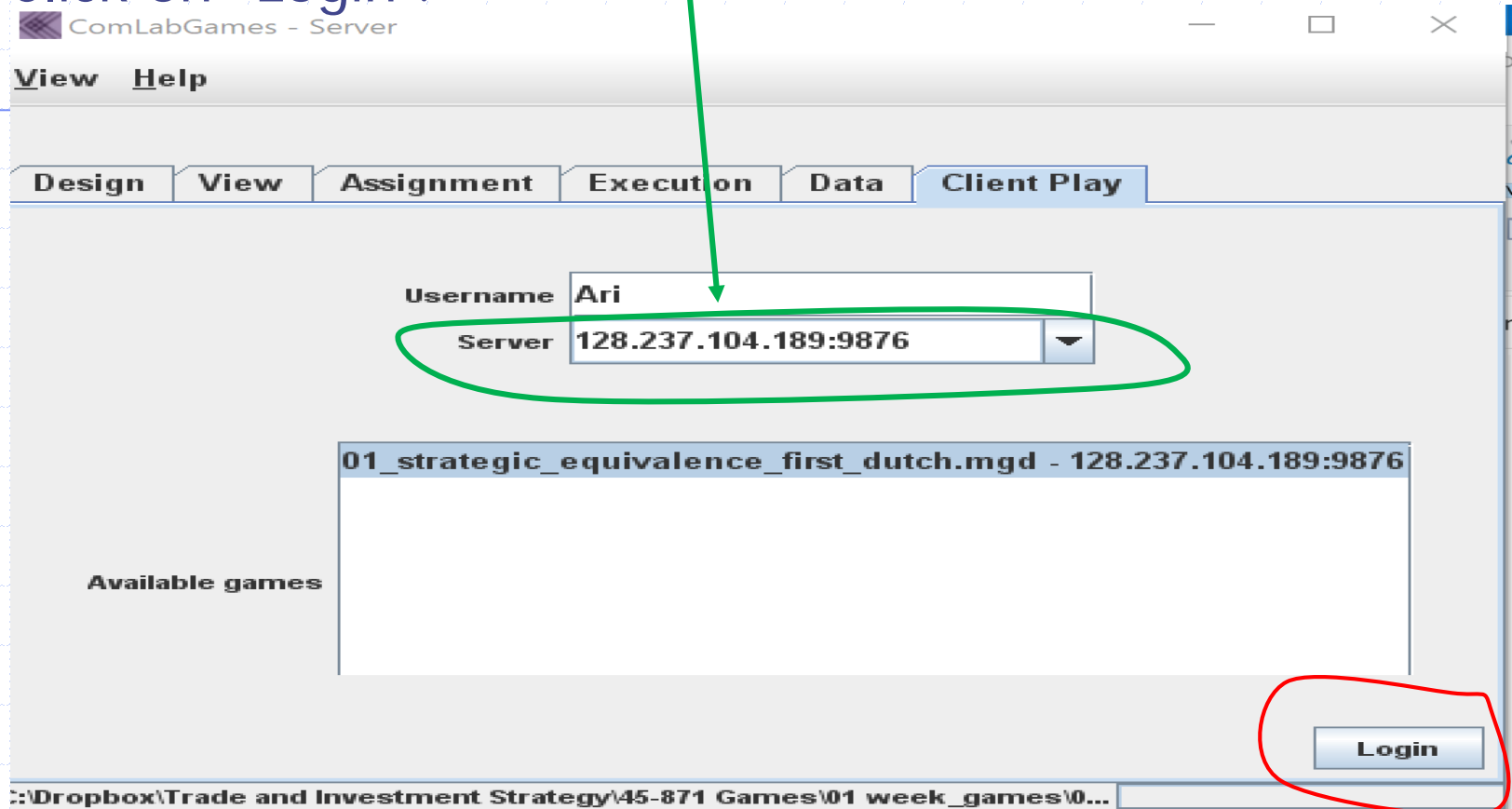
Login instructions for auction game

1. To play a game, click on “Client Play”.
2. Click on Available games: “01_strategic_equivalence...”



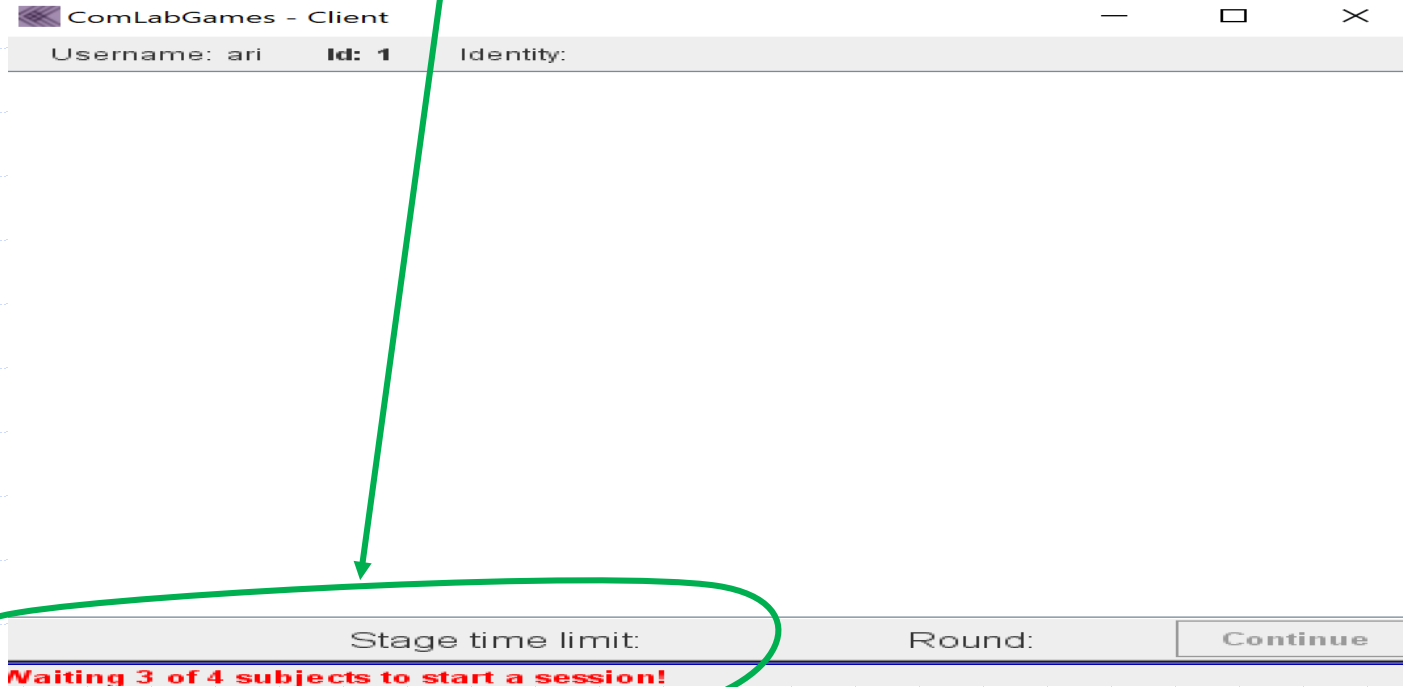
Required steps to login

1. Server address: 128.237.104.189:9876 will appear *automatically* after selecting "01_strategic...". If not type 128.237.104.189 in .
2. Write a username.
3. Click on "Login".



Auction window

1. In this example four subjects need to login to start the auction game. The first three subjects to login will see a blank screen.
2. When a required number of subjects login, the auction window replaces the blank window.



Auction window and instruction window

1. Instruction and auction window appears on your screen.
2. To close the instruction window click on "x". To retrieve it click on "Description".


ComLabGames - Client

Username: ari Id: 12 Identity: 1

Description

First Price Sealed Bid Common Value Auction

Number of companies participating: 4



Your signal is: 806.95. This signal is randomly drawn from the interval $(v - 100)$ to $(v + 100)$. Each signal is equally likely. Each of you gets a different signal.

Place your bid and click Enter.

The highest bid wins the auction!

Stage time limit: unlimited Round: 1


Player type: consortium (1) Please make a move now!

Waiting 4 of 4 subject(s) to proceed the session!

ComLabGames - Client

Username: ari Id: 12 Identity: 1

Instructions for First price sealed bid auction and for Dutch auction



You are about to participate in an auction for oil-drilling rights in Gulf of Mexico. You do not know exactly what the project would generate in terms of financial value if you win this contract. You know that the common value, denoted by v , would be between \$500 and \$1,000 (millions). Operationally, a computer will generate a random number between \$500 and \$1000, so that any number in this range is equally likely.

During the auction you will not know what the exact common value. Instead, you will be receive a signal. This will narrow down the range of possible values for determining your bid, denoted by b . There are 4 companies, counting your company, involved in this auction. Each of you gets a different signal. We generate the value of a signal from the common value, and a random variable, epsilon (ϵ). So, the signal that you get will be somewhere between $(v - \epsilon)$ and $(v + \epsilon)$. Any number in this interval has an equal chance of being drawn. The value of ϵ is \$100. If you win the auction, your profit is: Common value minus price. This can be a gain or a loss.

First Price auction

Each bidder submits a bid simultaneously. Once everybody submits a bid the auction is closed. The bidder with the highest bid wins the license for drilling rights and pays the amount she bid. The other bidders neither pay nor receive anything.

PROFIT = COMMON VALUE - THE HIGHEST BID

If the difference is negative, it represents a loss. If you lose the auction, you will receive zero.

Dutch auction

Each 3 seconds the auctioneer places consecutive limit order order that lowers the price of the auctioned item by 20 dollars until the first bidder clicks on **Buy** button. At that time the auction concludes. A company who submitted a market order to **Buy** buys the rights to drill at the current (most attractive) limit order price. The winning company's profit is the common value minus the current limit order price. The other companies neither pay nor receive anything.

Write a bid in a first price sealed bid auction


1. Write a number and click Enter (you can enter decimal number like 800.25).
2. After submitting the bid, your bid should be colored in red.

ComLabGames - Client

Description Username: ari Id: 12 Identity: 1

First Price Sealed Bid Common Value Auction

Number of companies participating: 4



Your signal is: **806.95** This signal is randomly drawn from the interval $(v - 100)$ to $(v + 100)$. Each signal is equally likely. Each of you gets a different signal.

Place your bid and click Enter.

The highest bid wins the auction!

Stage time limit: unlimited Round: 1 Continue

Player type: consortium (1) Please make a move now!

ComLabGames - Client

Description Username: ari Id: 12 Identity: 1

First Price Sealed Bid Common Value Auction

Number of companies participating: 4



Your signal is: **806.95** This signal is randomly drawn from the interval $(v - 100)$ to $(v + 100)$. Each signal is equally likely. Each of you gets a different signal.

Place your bid and click Enter.

The highest bid wins the auction!

Stage time limit: unlimited Round: 1 Continue

Player type: consortium (1) Please wait for other players to make their choices!

Waiting 3 of 4 subject(s) to proceed the session!

Summary page for sealed bid auction

1. Click "Continue" to move to Dutch auction.
2. Wait for all players in your session to click "Continue".

ComLabGames - Client

Description Username: ari Id: 12 Identity: 1

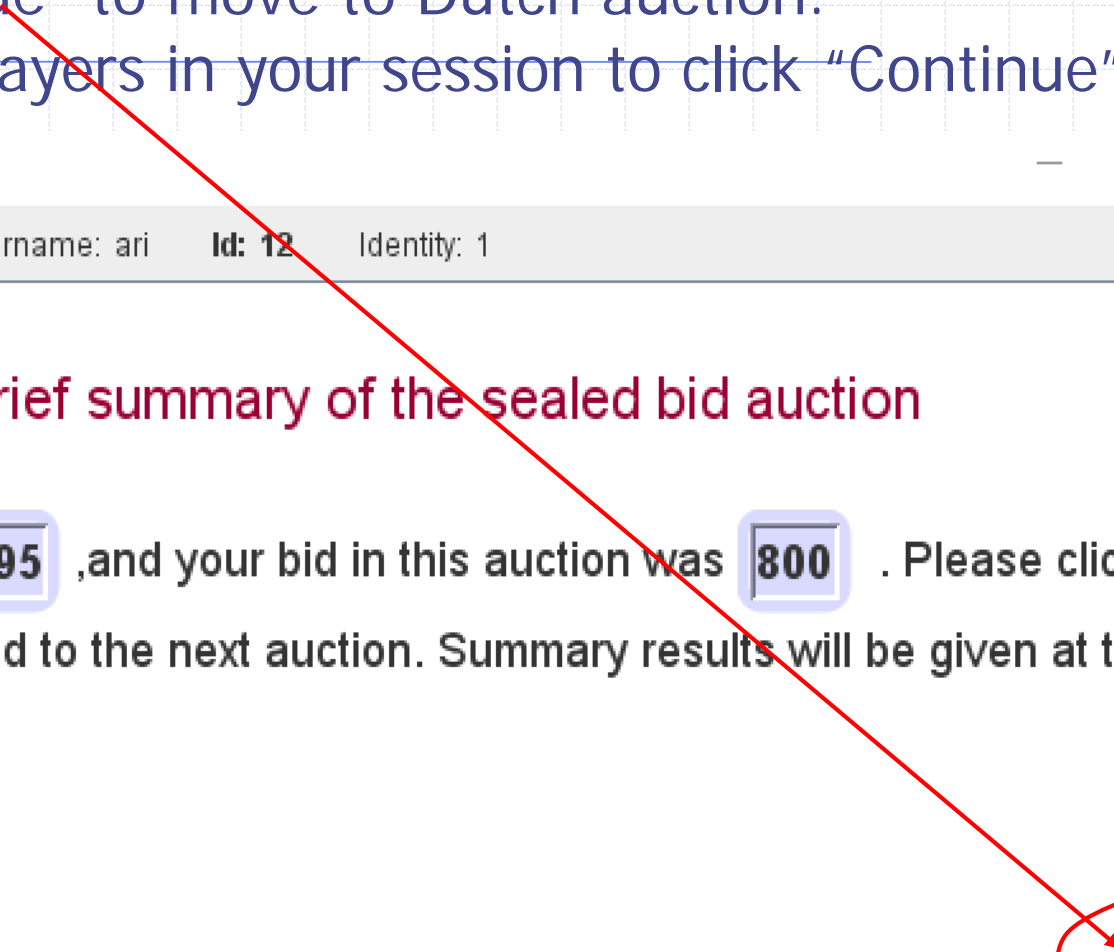
Brief summary of the sealed bid auction

Your signal was: **806.95**, and your bid in this auction was **800**. Please click "Continue" and proceed to the next auction. Summary results will be given at the end of the experiment.

Stage time limit: unlimited Round: 1 **Continue**

Player type: consortium (1) Please make a move now!

Waiting 4 of 4 subject(s) to proceed the session!



Dutch auction page

1. Every *3 seconds* limit order price is lowered by \$20.
2. The first subject in a session who click on **Buy** buys the drilling rights.

The screenshot shows a game window titled "ComLabGames - Client" with a "Description" tab. The game is a "Dutch Auction" where 4 companies participate. A player's signal is 806.95. The current limit order price is 940. A yellow "Buy" button is present. The interface includes a "Continue" button and a red warning message: "Please make a move now!".

ComLabGames - Client

Description Username: ari Id: 12 Identity: 1

Dutch Auction

Number of companies participating: 4

Your signal is: 806.95. This signal is randomly drawn from the interval $(v - 100)$ to $(v + 100)$. Each estimate is equally likely. Each of you gets a different value estimate of a project.

Current limit order price: 940

Select **Buy** if you want to buy the drilling rights.

Each 3 seconds the auctioneer places consecutive limit order order that lower the price of the auctioned item by 20 dollars until the first bidder clicks on **Buy** button. At that time the aution concludes. The bidder who submitted a market order to **Buy** buys the drilling rights at the current (most attractive) limit order price.

Stage time limit: 1 Round: 1

Player type: consortium (1) Please make a move now!

Summary page

ComLabGames - Client

Description

Username: ari Id: 12 Identity: 1

Summary

For both auctions, your signal was **806.95**, and common value (v) was **791.33**.

Sealed bid auction: The winning bid was **800**, your bid was **800** and your profit is **0**.

Dutch auction: The current limit order price at which the drilling rights were bought was **740**. You clicked on **Buy** and your profit is **51.33**. Below is the list of all the decisions, valuations, prices, and profits for all sessions.

Player's us...	s	v	b first price	Winning bi...	Profit first ...	Dutch Buy ...	Winning bi...	Profit Dutch
ari	806.95	791.33	800	800	0	<input checked="" type="checkbox"/>	740	51.33
ari1	704.03	791.33	760	800	0	<input type="checkbox"/>	740	0
ari2	839.16	791.33	800	800	-8.67	<input type="checkbox"/>	740	0
ari3	774.25	791.33	750	800	0	<input type="checkbox"/>	740	0

Stage time limit: unlimited

Round: 1

Continue

Game is over!

Player type: consortium (1)