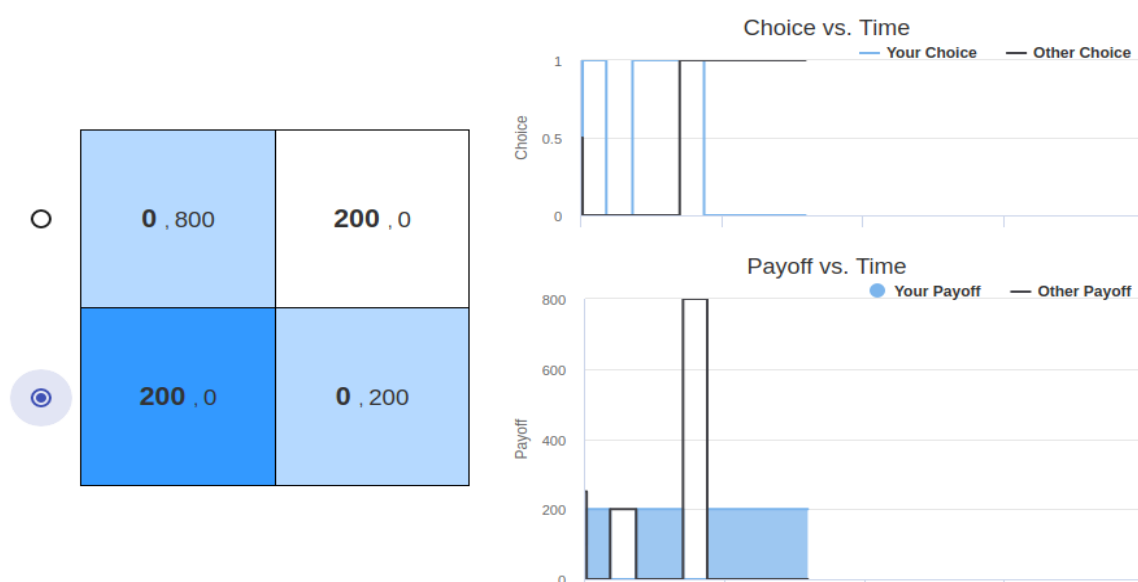


# Experiment Instructions

Welcome, and thank you for participating! During the experiment, you will earn points in each game. At the end of the experiment, one round will be randomly chosen, from which your points will be converted to US dollars. You are guaranteed a show-up fee of \$5.00 but can earn considerably more.

In this experiment, you will interact with other participants in 20 games. The first 3 games are for practice and we will randomly pick a game from Game 4 to Game 20 and pay you with the payoff you earn in that game. In each game, you are matched randomly and anonymously with a counterpart, that is, with one of the other participants. Your counterpart changes every game. Each game lasts for 90 seconds and participants interact in two possible environments:

## Continuous Time



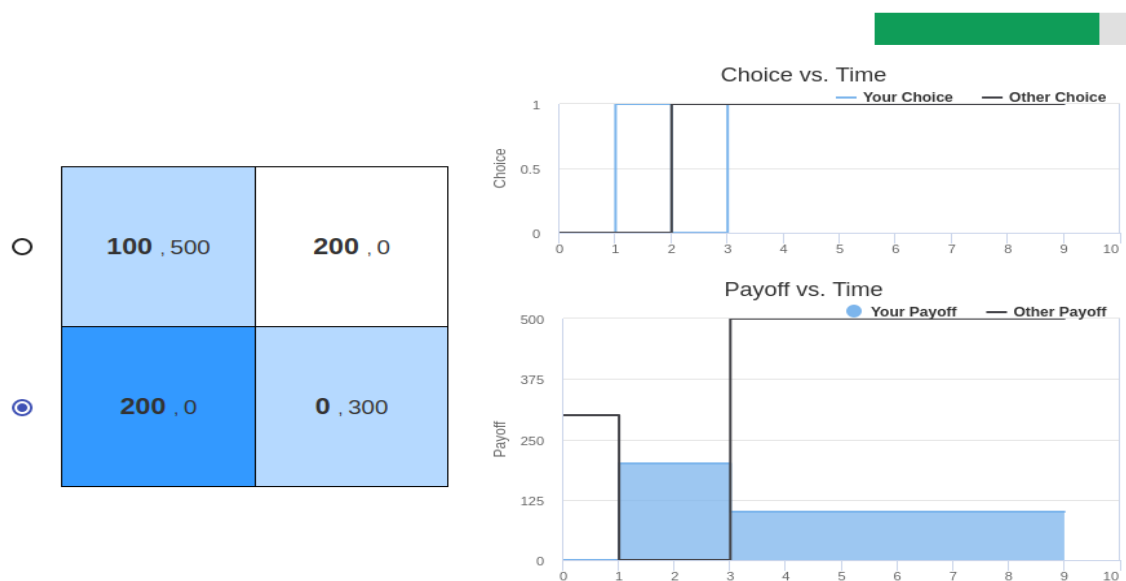
The left side of the screen shows what you can do and the payoff you and your counterpart can get by your choices. Each of you chooses between two possible actions. Your possible actions will always include the top row and the bottom row, and your payoffs are always in bold numbers in each cell of the payoff matrix. The counterpart's choices include the left and right columns, and their payoffs are after the comma in each cell. Both you and your counterpart's choices will be shaded in blue on the payoff matrix, **where the double-shaded cell determines your payoffs**.

For example, on the screen above, you are choosing the bottom row (shaded light blue) and your counterpart is choosing the left column (also shaded), then you would earn the payoffs shown in the doubly shaded cell --- here, 200 points for you (in bold) and 0 for your counterpart.

You and your counterpart interact in real-time, which allows the choices and payoff to be adjusted and calculated instantaneously. At any moment, you and your counterpart can switch between your choices by clicking the radio buttons, thus moving among the 4 cells of the payoff matrix. The payoffs (for you and the counterpart) are calculated instantaneously, so every time you switch, the payoff is recalculated immediately which translates into an immediate change in your (and your counterpart's) accumulated payoffs. Your payoff in this game is the average payoff flow you earn in this 90-second game.

The time graphs on the right side of the screen show what happened so far in the current game. The top graph shows how participants' choices changed over time, where "1" represents top for you (left for your counterpart), and "0" represents bottom for you (right for your counterpart). The bottom graph shows the payoff as heights. In both graphs, the blue area shows your choices/payoff and the black line shows your counterpart's choice and payoff. Both graphs will be updated in real-time during each game. The game ends when the graphs are fully filled-up.

## Discrete Time



The user interface of the discrete time environment is similar to that in the continuous time environment. However, each 90-second game is broken down into  $X$  periods of equal length (so  $90/X$  seconds each period). During the period you can freely click back and forth between the rows using the radio buttons (So can your counterpart, but you will not see what she does during the period). **The shaded column on the payoff matrix shows your counterpart's choice in the last period.** Your period payoff (and the counterpart's) depends only on the **last** choice you make before the end of the period. Your payoff in this game is the average payoff you earn in  $X$  periods.

The time graphs on the right side of the screen will be updated periodically during each game. The green fill bar at the top shows the time remaining of the current period.