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bms2019

Behavioral Management Science - Introduction to oTree

Behavioral Management Science Introduction Course website:

https://jestang49.github.io/bms2019/

Summer 2019

Lecture slides

Note: slides will become avaiable sequentially as the time of session approaches.

- Session 1 (03.04.19):
- Session 2 (17.04.19):
- Session 3 (24.04.19):

Does everybody have Python 3.*, oTree 2.*, Anaconda and PyCharm installed?

IF NOT,

- Please install Python and PyCharm following these instructions now.
- Please install oTree and Anaconda before the next session.
- If you encounter problems, sign up for help here.

INTRODUCTION

- The key idea of the tutorial: You will
 - learn how to program simple experiments in oTree
 - learn how to deploy and run these experiments
- Limitations:
 - attention is restricted to simple experiments
 - you will see how to retrieve experimental data, but not how to analyze it.

PRELIMINARY SCHEDULE

- 1. oTree overview and Python and HTML tutorial
- 2. Conceptual overview of oTree and programming of surveys and quizzes
- 3. Advance oTree concepts and programming of multiplayer games
- Note: There will be two homework programming exercises for which you can earn up 16 points (8 points for each) to your final exam (conditional on passing).

INTRODUCTION TO OTREE

- oTree is an open-source and online software for implementing interactive experiments
 - Project started in 2013 at ETH Zürich (current version: 2.1)
 - See the paper: Chen, Daniel L., Martin Schonger, and Chris Wickens. "oTree— An open-source platform for laboratory, online, and field experiments." *Journal of Behavioral and Experimental Finance 9 (2016): 88-97.*
 - Cite the paper when using oTree for your research

INTRODUCTION TO OTREE

- In order to conduct an experiment, the following suffices:
 - 1. A programmed experiment in oTree
 - 2. A server (this can be a cloud server or even your laptop) where the experiment is deployed
 - 3. Subjects' devices with a web browser
- Sample games and admin interface here

USAGE

1. Lab

Standard or multiple labs simultaneously

2. Online

- Surveys, quizzes, and interactive games
- Lab + online (hybrid) possible
- Amazon MTurk integration

3. Field

- Internet connection not neccesary
- e.g., remote village bring laptops and a server

Contribute

How much will you contribute to the project (from 0 to 100)?

points

Next

Instructions

In this study, you will be in a randomly formed group of 3 participants. Each participant in the group is given 100 points. The group has the opportunity to undertake a joint project. Each participant in the group decides how much she or he is going to contribute to the project. Contribution could be any integer from 0 to 100 points.

The earnings from the project are calculated as follows: The contributions of all 3 participants are added up, the total contribution is multiplied by a factor of 2, and the resulting amount is the total earnings from the project, which is evenly split among all 3 participants. Your payoff equals your earnings from the project, plus the amount you did not contribute.