

INTRODUCTION TO OTREE



Runs on any device

1. SESSION

By Jesper Armouti-Hansen

- Controlled behavioral experiments in economics, market research, psychology, and related fields
- Multiplayer strategy games, like the [prisoner's dilemma](#), [public goods game](#), and [auctions](#).
- [Surveys](#) and quizzes, especially those that require customized or dynamic functionality not available with conventional survey software.



bms2019

Behavioral Management Science - Introduction to oTree

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Course website:

<https://jieshan49.github.io/bms2019/>

Summer 2019

Lecture slides

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

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

Exercises

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 necessary
- 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.