

Experiment Procedure

Before the day

- Hang up sign outside the room
- Hang up sign on other room
- Prepare consent forms and pens
- Verify experiment tool is running
 - <http://131.188.64.202>
- Open backend
 - http://131.188.64.202/_/#/collections?collectionId=kny9jbmadqxa5qj&filter=&sort=-created
- Set up beamer
- Write URL of experiment tool on blackboard

Before experiment

- Hand out informed consent sheets and pens
- Smalltalk with participants
- Explain task motivation and goal
 - Train selecting 2D data, very common task
 - Improve data engineering for everyone by gathering info about the best syntax to do so
- **Informed consent**
 - Explain that consent is optional and does not affect MADE grades
 - Explain that participants can leave at any point without negative consequences and revoke their consent at any point as well
 - Ask if anyone has any questions about it
 - Have everyone that wants to sign their matriculation id and name on an informed consent sheet
 - Give them one to take home
- Ask student to open experiment website and do nothing else
- Ask them to not reload or use the back button

Experiment

- **Explain task flow**
 - First, we will go through prep together
 - There will be two different sets of tasks, 4 tasks each with alternating languages
 - One set of tasks about writing code to select data
 - Show the example task (/s/0)
 - One set of tasks about reading code and understanding what it will select
 - Show the example task (/s/5)
 - We measure time and correctness, if in doubt favor correctness
 - At the end, there will be a short survey
 - After that, you are done, please behave quietly until everyone is done
 - Everything together should take a maximum of 40 minutes

- **First, tell participants to not click continue without being asked to**, then ask participants to put in their matriculation number as experiment id and not change the sequence
- Go through prep
 - Ask participants to read consent and confirm if they are okay with it
 - Point out they can continue without accepting
 - Open documentation in the background
- **Ask if there are any open questions, did the participant understand the task setup?**
- Tell participants clearly that after they click submit, we will no longer interact with them until the end
 - Technical questions are okay, please raise your hand, we'll come to you
- Ask them to start
 - Password is "**made24**"
- Announce time every 10 minutes
- End experiment after 40 minutes

After the experiment

- Gather up informed consent sheets
- Thank the participants
- Ask them to close the browser window
- Ask students to not share experiment setup with other participants
- Ask if they have any questions

Post experiment

- Make a backup
 - http://131.188.64.202/_/#/settings/backups
- Check the backup into Git
- Analyze the backup with the offline Notebook to make sure the experiment worked

End of Day

- Check the backup into Git
- Check the backup into samba research data
- Submit informed consent sheets to secretaries