Study protocol G-06

Participant ID's: lan: 1-9:, Lothaire: 10-19, Marco: 20-29, Sophie: 30-39, Markus: 40-49

Introduction and Setup

- 1. Welcome participant
- 2. Participant fills out demographic questionnaire #1, assign them a unique ID of your pool
- 3. Run npm with vue app on laptop
- 4. Open browser on phone (needs to be on same network, might not work on public network), navigate to local address of vue npm server, scroll such that address bar goes away
- 5. Explain the study purpose to the user:
 - a. First, explain to him/her the context of the app: suppose the app knows the energy usage of all of the devices at his/her home, the app wants to motivate the users to consume less energy
 - b. What is measured is how the user interacts with the app
 - c. Tell him/her what the participant needs to do (not play the game just do the tasks)
- 6. Explain all the screens to the user
 - a. On Dashboard, explain sand watch and challenges, show how to accept them
 - b. On Ranking, show what rankings exist and how to switch between them
 - c. On Shop, show where bought and buyable themes are, how to buy and equip them
 - d. On Usage, show how to switch timeframes and how to go into details (do not forget the bubble button)
 - e. Quickly show settings but tell them it's not relevant to the test
- 7. Explain the answer sheet and have the user read everything on it, ask if they have any questions, provide them a pen, and fill in ID beforehand

Study

- 8. Navigate to dashboard
- 9. Reload page to restart timer, then give phone to user
- 10. Participant performs task with prototype A or B
- 11. When finished participant fills out questionnaire #2, ask them for any comments
- 12. IMPORTANT: go to settings -> debug-menu and note all 8 relevant numbers
- 13. Reload page to restart timer, then give phone to user
- 14. Participant performs task with Prototype B or A
- 15. When finished participant fills out questionnaire #2, ask them for any comments
- 16. IMPORTANT: go to settings -> debug-menu and note all 8 relevant numbers

Debrief

- 17. Participant fills out questionnaire #3
- 18. Verbally ask participant about any comments
- 19. Debrief
- 20. Dismiss participant

Experiment procedure

Task A

- 1. A Locate the challenges section on the dashboard, locate and accept the **dishwasher challenge** (A), fill the reward into the sheet.
- 2. A Move on to the rankings, find your place on the **monthly family ranking** (A) and fill it into the sheet.
- 3. A Move on to the usage, find the electricity usage of your **Fridge** (A) over the last 24h and fill it into the sheet.
- 4. A Move on to the shop, find, buy and equip **Purple Dark** (A).

Task B

- 1. B Locate the challenges section on the dashboard, locate and accept the **phone challenge** (B), fill in the reward on the sheet.
- 2. B Move on to the rankings, find your place on the **annual country ranking** (B) and fill it into the sheet.
- 3. B Move on to the usage, find the electricity usage of your **AC and Heating** (B) over the last month and fill it into the sheet.
- 4. B Move on to the shop, find, buy and equip **Purple Light** (B)

Answer Sheet A

ID:

Reward of dishwasher challenge		
Reward of solar panel challenge		
Rank on monthly worldwide ranking		
Rank on yearly friends ranking		
Electricity usage of Fridge over last 24h		
Electricity usage of Chargers over last Month		

Answer Sheet B

ID:

Reward of stove challenge		
Reward of TV challenge		
Rank on yearly country ranking		
Rank on weekly worldwide ranking		
Electricity usage of		
Lighting over last 24h		
Electricity usage of TV Box over last Month		