

Experimental Protocol v0.1

Day in advance:

1. Charge up 5 EEG headsets
2. Charge up 5 chairs
3. Charge up 5 power banks for body's arduinos
4. Charge up 1 power bank for environmental arduino
5. Charge up 5 smartphones

In hour in advance:

1. Start environmental data recording near the open window (for CO2 calibration)
2. Check the charge for all 5 phones
3. Turn on every arduino and check the connection
4. Turn on every Polar heart rate sensor and connect it to a smartphone
5. Synchronise the time on each computer
6. Check if LoL is installed on each computer

Before the first game:

1. Sit on the chair and turn on the computer
2. Put on the badge with arduino
3. On the right hand:
 - 3.1. Put on GSR on the right hand (ring and little finger)
 - 3.2. Put on IMU
 - 3.3. Put on EMG electrodes
 - 3.4. Fix cables with a captain band
4. On the left hand:
 - 4.1. Put on Polar heart rate sensor
 - 4.2. Put on IMU
 - 4.3. Put on GSR electrodes
 - 4.4. Fix cables with a captain band
5. Put on EEG headset
6. Check EEG signal quality and apply gel if needed
7. Attach the heart rate monitor to the ear
8. Log in to the game if not yet
9. Set the permanent monitor position
10. Check if webcam can record face expressions
11. Calibrate eye tracker
12. Start Polar heart rate recording
13. Set up the infrared camera and start infrared camera recording

Before each game:

1. Start the input logger
2. Start screen recording
3. Start webcam recording
4. Start eye tracker recordings
5. Start sensors recordings
6. Start EEG recordings
7. Search for a game
8. Write down the exact time when the game starts

After each game:

1. Save replays
2. Stop input logger
3. Stop and **save** screen recording
4. Stop webcam recording
5. Stop eye tracker recordings
6. Stop sensors recordings
7. Stop EEG recordings

After the last game:

1. Take sensors off
2. Log out from the game
3. Ask each player to fill in the form for Amazon voucher
4. Stop Polar heart rate recording
5. Stop infrared cameras

Data collection:

1. Find game replays in *Documents/League of Legends/Replays* and upload them to the cloud
2. Find input logger data in the Desktop on each computer and upload it to the cloud
3. Find screen recordings somewhere in Documents, convert it to video with 50% resolution, 10 fps and upload both to the cloud
4. Find webcam videos somewhere in videos and upload it to the cloud
5. Find eye tracker data somewhere and upload it to the cloud
6. Get the data from each arduino (including environmental arduino) either through FTP either manually from each SD card and upload the data to the cloud.
7. Find EEG data on Anton's Mac and upload it to the cloud
8. Run the python script to collect data from Polar heart rate sensors and upload the data to the cloud
9. Find infrared images on each smartphone in "Pictures" folder and upload them to the cloud