Use Cases

USE CASE 1: New Session **Primary Actor:** Neureset users **Stakeholders and Interests:**

- Neureset users - Users of the device would need to start a new session before they begin treatment.

Precondition: The user has access to a Neureset device.

Main success scenario:

- 1. User presses "new session" button to go to session window
- 2. User presses play to initiate a new session
- 3. A timer opens and starts once the contact is initiated, and the blue light turns on.
- 4. An overall baseline is calculated for all 7 EEG sites concurrently.
- 5. The baseline for the EEG sites is calculated over ~1 minute, and an average dominant frequency for that site is determined.
- 6. The treatment is applied at that site for 1 second, and a green light flashes.
- 7. Steps 4-6 are repeated until there is no remaining untreated EEG site.
- 8. An overall baseline is calculated for all 7 EEG sites concurrently.
- 9. The session data is created and stored in the session log.

Extensions:

- 2a. Contact is lost.
 - 2a1. Red light flashes, session is paused automatically, and the device starts beeping until contact is reestablished.
 - 2a2. If contact is not reestablished within 5 minutes, the device automatically turns off and the session is erased.
- 1-9a. User presses pause.
 - 1-9a1. The session is paused.
 - 1-9a2. If contact is not reestablished within 5 minutes, the device automatically turns off and the session is erased.
- 1-9b. User presses stop.
 - 1-9b1. Session is terminated and user goes back to main menu
- 1-9c. User presses "view waves"
 - 1-9c1. Waveform window opens
 - 1-9c2. User can select between 1 of 7 sites to view
- 1-9d. Device runs out of battery
 - 1-9d1. User is notified that the device has lost power.
 - 1-9d2. Device powers off.

USE CASE 2: Session Log

Primary Actor: Neureset users **Stakeholders and Interests:**

- Doctors/Therapists: If doctors use this device as part of their treatment, it will be useful for them to be able to view session information
- Neureset users Users of the device would want to keep track of their sessions
- Neureset engineers The session log is a great tool for testing, especially when baselines are exported to PC

Precondition: The user has conducted at least one session

Main success scenario:

- 1. User presses the "Session Log" button
- 2. Session log menu opens and can be scrolled through, displaying dates and times, and a "send to pc" button

Extensions:

- 2a. User presses the "send to pc" button
 - 2a1. User session logs are sent to pc with a confirmation message
 - 2a2. If user hasn't selected a log to send to the pc, an error message is displayed
 - 2a3. If user tries to add a session twice, a warning message is displayedt

USE CASE 3: Date and Time Setting

Primary Actor: Neureset users **Stakeholders and Interests:**

 Neureset users - Users of the device would want to make sure the dates and times of their sessions are correctly calibrated

Precondition: The user has access to a Neureset device.

Main success scenario:

- 1. User presses the "date and time" button in main menu
- User can set their desired date and time using the arrows or by inputting it using their keyboard.

Extensions:

- 2a. User presses the "today" button
 - 2a1. Date gets set to the current day
- 2b. User presses the "right now" button
 - 2b1. Current time gets adjusted to the current minute

USE CASE 4: Using the PC Primary Actor: Neureset users Stakeholders and Interests:

 Neureset users - Users of the device could be interested to check their treatment history - Therapist - Therapist will need to use the PC to conduct treatment and collect general EEG data for interpretation

Precondition: Users have access to an external PC to run the software, and they have conducted at least one session.

Main success scenario:

- 1. User sends the session(s)' information to the PC by clicking the "send all" button.
- 2. The PC window pops up and a scrollable list of the session(s)' information (date, time log, initial baseline, and final baseline) is shown.

Extensions:

1-7a. User presses the "close" button.

1-7a1. The PC window is closed.