Use Case 1:

<u>Name</u>: New session <u>Primary Actor(s)</u>: User

Precondition(s): Contact is initiated, blue light turns on

Main Success Scenario:

- 1. New session button pressed
- 2. Timer starts, shows approx. time remaining and session progress bar indicated by a percentage
- 3. Pause timer
- 4. Start of session overall baseline calculated for all 21 EEG sites, concurrently, at the same time
- 5. Calculates a baseline for EEG site
- 6. Determining the average dominant frequency for that site
- 7. Applies the treatment over the duration of one second, green light turns on
- 8. Moves on to the next site
- 9. Repeat steps 5 to 8 til all 21 EEG sites have been individually covered
- 10. End of session overall baseline calculated for all 21 EEG sites, concurrently, at the same time

Extensions (if necessary):

- 2a. Contact is lost for over five minutes (Use case 4)
- 3a. <u>Timer is paused for over five minutes</u> (Use case 4)

Success guarantee(s) (equivalently Post-conditions): user is able to log a session

Use Case 2:

Name: Session log

Primary Actor(s): User

Precondition(s): None/have previous session? idk

Main Success Scenario:

- 1. New session button pressed
- 2. Displays time and date of the sessions
- 3. Using date and time log, before and after baseline records (before and after dominant average frequencies for each EEG site, taken during the overall baselines at the beginning and end of the session, compared side by side as a numerical value) can be uploaded to a PC and viewed there

Extensions (if necessary):

<u>Success guarantee(s) (equivalently Post-conditions)</u>: User is able to access and see session information

Use Case 3:

Name: Date and time
Primary Actor(s): User
Precondition(s): None
Main Success Scenario:

- 1. Date and time button pressed
- 2. The user inputs the current date and time

Extensions (if necessary):

<u>Success guarantee(s) (equivalently Post-conditions)</u>: User can input current date and time so the device clock can accurately track the sessions.

Use case 4: Connection loss between electronodes and the device:

Name: Contact is lost **Primary Actor(s):** User

Stakeholder and Interests: Neureset Company/Stakeholders

<u>Precondition(s):</u> An active session is ongoing after contact was initiated (blue light on the device is showing).

Main success scenario:

- 1. One or many electrodes lose contact with the user during a started session.
- 2. The red light flashes and the session is paused.
- 3. The device starts beeping (until contact is re-established).
- 4. After up to 5 minutes of beeping, if the contact is not re-established, the device turns off automatically.
- 5. Session is erased.

Extensions:

1a. The user presses pause voluntarily during a session, establishing a loss of contact.

4a. Within the 5 minutes, contact is re-established, then the beeping stops and contact & session is resumed.

<u>Success guarantee(s) (equivalently Post-conditions):</u> Either session is erased or connection and session resumes if connection re-establishes within 5 minute time frame.

Use case 5: Battery Low Response of the Device:

Name: Low Battery

Primary Actor(s): Neureset device

Stakeholder and Interests: Neureset Company/Stakeholders, User

Precondition(s): The user is using the Neureset device for an active session.

Main success scenario:

- 1. During an active session, the device detects a low battery level.
- 2. The device alerts the user about low battery level.

- 3. The user receives the alert and decides to continue the session (without stopping to charge).
- 4. The device continues to operate until the battery drains fully.
- 5. The device automatically saves the current session.
- 6. The device turns off.

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Extensions:

3a. The user decides to stop and charge the device.

3a1. The user pauses the session voluntarily and has 5 minutes to reestablish contact and resume session -> else: session is terminated and device turns off automatically

3a2: User saves session and disconnects, charges device

<u>Success guarantee(s) (equivalently Post-conditions):</u> User is made aware that battery is low and the device battery gets charged or drains completely.

Use case 6: Therapy History Viewing with PC:

Name: Therapy History

Primary Actor(s): User/Therapist

Stakeholder and Interests: Neureset Company/Stakeholders, User

Precondition(s): The user has completed at least one therapy session using the Neureset device.

Main success scenario:

- 1. The user opens the Neureset software application on their PC (LENS?) and connects their neureset device.
- 2. The Neureset software application recognizes the connected device and displays the option to view therapy history that has been uploaded.
- 3. The user selects the option to view therapy history.
- 4. The Neureset software application displays the therapy history.
- 5. The user reviews the therapy history.
- 6. The user closes the PC viewing history page and disconnects the Neureset device from their PC after reviewing the therapy history.

Extensions:

- 3a. The user decides to unplug for any reason (charging or other) in which case no more data can be uploaded but existing history that was already uploaded to the PC is still viewable.
- 5a. The Neureset software application is unable to retrieve the therapy history from the connected device.
 - 5a1. The user tries again, calls support.
 - 5a2. The user has no existing uploaded data to retrieve and view.

<u>Success guarantee(s) (equivalently Post-conditions):</u> User is able to view the history of therapy sessions on their PC.