

# Use Cases

## Use Case 1: Session

### Primary Actor:

- The User

### Stakeholders and Interests:

- The User - To have therapy that treats a wide variety of conditions including ADHD, PTSD, TBI (traumatic brain injury), anxiety, chronic pain, etc. as well as optimizing brain function and cognitive performance.
- The Handheld Device System - To perform the therapy treatment and to display information regarding the treatment.
- The PC System - To hold session info: Before and after baselines of the session along with time and date log information

### Precondition:

- The User presses the on button (runs the program)

### Success Guarantees:

- To treat the User and to upload to the PC the session information log

### Main Success Scenario:

1. The Handheld Device displays "New Session", "Session Log", and "Time and Date"
2. The User navigates to "New Session"

3. The User presses the start button
4. The Handheld Device displays the time and progress bar and a blue light is lit up
5. The Handheld Device will calculate a baseline for each EEG site over approximately 1 minute
6. The Handheld Device will apply the treatment over the duration of one second
7. The Handheld Device will flash green during that second
8. The Handheld Device will upload the session log information to the PC

**Exceptions:**

- \*a. The User presses the off button
  - \*a1. Cancel Use Case

**Extensions:**

- 2a. The User navigates to "Session Log"
  - 2a1. The User presses the start button (Use Case 2)
- 2b. The User navigates to "Time and Date"
  - 2b1. The User presses the start button (Use Case 3)
- 5a. The User presses the pause button
  - 5a1. The Handheld Device flashes a red light
  - 5a2. The Handheld Device starts to beep
    - 5a2a1. The Handheld Device beeps for 5 minutes
    - 5a2a2. The Handheld Device terminates the session
    - 5a2a3. The Handheld Device erases the session
    - 5a2a4. The Handheld Device turns off
    - 5a2a5. Cancel Use Case
  - 5a3. The User reestablishes contact

- 5b. The User loses contact to the Handheld Device
    - 5b1. The Handheld Device flashes a red light
    - 5b2. The Handheld Device starts to beep
      - 5b2a1. The Handheld Device beeps for 5 minutes
      - 5b2a2. The Handheld Device terminates the session
      - 5b2a3. The Handheld Device erases the session
      - 5b2a4. The Handheld Device turns off
      - 5b2a5. Cancel Use Case
    - 5b3. The User reestablishes contact
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## Use Case 2: Session Log History Display

### Primary Actor:

- The Handheld Device

### Stakeholders and Interests:

- The Handheld Device - To display session log history to the User
- The User - To view displayed session logs

### Precondition:

- The User presses the start button when "Session Log" is selected

### Success Guarantees:

- To display session log history

### Main Success Scenario:

1. The Handheld Device will display the time and date of the session
2. The User presses the back button

**Exceptions:**

- \*a. The User presses the off button
  - \*a1. Cancel current Use Case and Use Case 1

**Extension:**

- 1a. The User scrolls through session logs
    - 1a1. The User scrolls up or down through session logs
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## **Use Case 3: Set Time and Date**

**Primary Actor:**

- The User

**Stakeholders and Interests**

- The User - To manually set the time and date of the device
- The Handheld Device - To set the desired time and date of the User to accurately track the sessions

**Precondition:**

- The User presses the start button when "Time and Date" is selected

**Success Guarantees:**

- To set time and date to the new desired time and date

**Main Success Scenario:**

1. The Handheld Device will prompt the User to input time and date
2. The User inputs desired time and date

**Exceptions:**

- \*a. The User presses the off button
  - \*a1. Cancel current Use Case and Use Case 1