OASIS Pro Device Use Cases

UC1: Turn Device On

Primary Actor:

- Device User

Precondition:

- User has a device

Main success scenario:

- 1. User push the power button and the battery graph will light green (The battery level is round up to the nearest integer/scale for displaying purpose).
- 2. The device turns on.

Postcondition

1. The lights on the bar graph (indicating the battery level) lights up.

Extensions:

1a. The device does not turn on

1a1. If the device does not turn on, then the user is required to charge the device battery. If the battery is charged and the device still does not turn on, the user must contact customer service.

UC2: Turn Device Off

Primary Actor:

- Device User

Precondition:

User has a device, and the device is on.

Main success scenario:

1. User push and hold the power button until the device turns off.

- 2. The device powers off the display and the simulator becomes non-functional.
- 3. If no action is made by the user within 30 seconds, the device turns off automatically.

Postcondition:

- The device has been turned off and is not consuming battery.

UC3: Select Session Group

Primary Actor:

Device User

Precondition:

- The device is turned on and has enough battery.
- Need power level of at least 4 if running a session longer than 60 seconds.

Main success scenario:

- 1. User presses the up or down button to select and change the session group.
- 2. Repeat step 1 until the desired the session time is reached (20min, 45min, or user designated).

Postcondition:

- The session time has been adjusted to the user's desired group.

Extensions:

1a. User presses the power button 4 times then the first choices (20min) are being selected.

UC4: Select Session Type and Start the Session

Primary Actor:

Device User

Precondition:

- The device has been turned on and a session length time is being selected.

Main success scenario:

- 1. User presses the INT Up/Down arrow buttons to highlights the session being selected.
- 2. Once a desired session is reached, user presses the select controls (the check mark button).
- 3. User attaches the ear clips on the CES cable to the ear lobes
- 4. If the device passes the connection test (UC5), the session will start.

Postcondition:

- The session status message changes to "On" and the timer starts counting down.
- The battery level decreases as the session runs and decreases at a faster speed as intensity level going up, or vice versa.

Extensions:

- 3a. The session will not start if the battery level is lower than the threshold / requirement.
- 3b. The session running will stop if the battery level is lower than the threshold / requirement.

Related Information:

- Sessions can be ended at any time if the user presses and holds the power off button for more than 5 seconds. The device will turn off.

UC5: Test the Connection

Primary Actor:

- The device

Precondition:

- The device has been turned on.
- A session is being selected and select control is pressed.
- User has attached the ear clips on the CES cable to the earlobes.

Main success scenario:

- 1. Device passes the connection test, will run with either an "Okay" or "Excellent" connection.
- 2. If the device detects the ear clips are being disconnected, it will pause the session and wait for the ear clips to be reconnected.
- 3. Repeat 1 and 2 until device passes the connection test and starts the session.

Postcondition:

- Device passes the connection test and starts the session.

Related Information:

- If the connection displayed is "Okay" then the intensity may have to be turned up higher before it can be felt or may not be felt at all.

UC6: Adjust the Intensity

Primary Actor:

Device user

Precondition:

- The device has been turned on.
- A session is started.

Main success scenario:

- 1. User presses and holds the INT Up/Down arrow buttons until desired intensity is reached (the stimulation is barely felt).
- 2. The intensity value on the admin panel is in sync with the simulator and show the current intensity level.

Postcondition:

- A session is running with the adjusted intensity level. Latest intensity level is saved.

UC7: Customize Sessions

Primary Actor:

- Device user

Precondition:

- User has access to the DAVID Session Editor.

Main success scenario:

- 1. User enters the session length of time and selects the session type.
- 2. User enters the intensity level for the session being customized.
- 3. Only the latest setting will be saved for each session type under User Designated Session group.

Postcondition:

- Settings for user designated sessions are saved and can be selected on the device simulator.

UC8: Save Sessions

Primary Actor:

- Device user

Precondition:

- A session is currently running, or the session has concluded.

Main success scenario:

- 1. User presses the Save button below the recordings display
- 2. The device saves the current session information (session group, session type, duration, and intensity level (latest selected)) to the database (History of Treatments)

Postcondition:

- A desired session has been saved to the device's History of Treatments

Extensions:

- 1a. User presses and hold the power button.
 - 1a1. The device will be turned off without saving the session.
- 2a. If any information is missing (Duration,type,intensity), save custom session will fail.

UC9: View Saved Sessions

Primary Actor:

- Device user

Precondition:

- The device has been turned on.

Main success scenario:

- 1. User presses the View button.
- 2. The device displays all currently saved sessions to the user. If no session has been saved, nothing is displayed.

Postcondition:

- All currently save sessions are displayed to the user.

Extensions:

- 2a. User holds the View button
 - 2a1. The recording display will turn off.

UC10: Clear Saved Sessions

Primary Actor:

- Device user

Precondition:

- The device has been turned on.

- User has pressed the View button and there are recordings displayed.

Main success scenario:

- 1. User presses the Clear button.
- 2. The device deletes all currently saved sessions.
- 3. The recording display will turn off.

Postcondition:

- All currently save sessions are deleted

UC11: Deplete the Battery

Primary Actor:

- The device

Precondition:

- User trying to use the device

Main success scenario:

- 1. The device cannot be turned on if the battery is completely drained (battery level set to 0 on the admin panel).
- 2. A session cannot be started or finished if the battery level is below the threshold/requirement (use case 4). Warning message will be displayed.
- 3. If the battery level is too low while the device is on, a warning message will be displayed and will turn off the device once battery level reaches to 0.

Extensions:

- 1a. User cannot turn on the device
 - 1a1. The battery must be charged (by increasing the battery level on the admin panel).
- 2a. The maximum battery level is scaled to 8, minimum is 0.

Use Case Diagram:

