Team 3 Traceability Matrix

ID	Requirement	Related Use Case	Fulfilled By	Test	Description
1	The application interface contains buttons to control the Oasis Pro and icons to display various statuses	N/A	MainWindow	Run the simulator in Qt to observe the UI.	The Oasis Pro Simulator uses Qt's built-in UI to display buttons with custom icons, LED strips, text, and icons. The buttons are all clickable with the mouse.
2	User can power on the Oasis Pro	UC4	MainWindow	Press and hold the Power button for 2 or more seconds while the device is turned off.	The LED above the power button will light up green. The battery level will be displayed for 1 second. The default selected session length and type labels will light up.
3	User can power off the Oasis Pro	UC5	MainWindow	Press and hold the Power button for 2 or more seconds while the device is turned on.	If there is a currently running session, the session will end. The LED above the power button will turn off, displaying white. All the lit-up labels will turn off.
4	User can select a session	UC6	MainWindow, Session	Press the up and down arrows to adjust the session type. Press the power button (short press) to change the time.	When the up or down arrow is pressed, the session type selected is adjusted. When the power button is pressed, the length of the session will be adjusted.
5	The user may confirm their session selection.	UC8	MainWindow, Session	Press the confirm button while a session is not currently running.	The connection test will run. The selected session will begin shortly afterward provided that the user has a good skin connection with the Oasis Pro. The Oasis Pro will wait for the user to connect skin before starting the session.
6	The user may adjust intensity.	UC7	MainWindow, Session	While a session is running, press the up/down arrows.	When the up button is pressed, the intensity will raise by 0.5 When the down button is pressed, the intensity will lower by 0.5. The updated intensity level will be displayed on the graph. The displayed intensity level is rounded down (ex. 5.5 displays 5).

7	The user may record a session	UC9	MainWindow, Recording	Press the record button while a session is running or after a session has ended.	The recording will save to a .txt file which can be accessed either by opening the file manually or printed to the console by pressing the "Print Recorded Sessions" button.
8	Battery depletes as session runs	UC1	MainWindow	Run a session and watch the battery level.	While a session is being run, the battery will deplete over time. Every 5 seconds, the battery level will be displayed on the graph. When the battery is fully depleted, the device will turn off.
9	User may designate a custom length of time.	N/A	MainWindow, Session		