ID	Requirement	Related Use Case	Fulfilled By	Description
1.	The application interface contains buttons, display, icons and electrodes.	N/A	MainWindow.ui	Using QT's built in user interface framework, and all the buttons are clickable with the mouse.
2.	The device simulation can be turned on and off, disabling normal device functionality when the device is turned off.	Turn on the device(UC2), Turn off the device(UC3)	MainWindow	The power button, when clicked, sends a signal to MainWindow to disable or enable the screen and all the buttons on the OASIS Pro simulator.
3.	A message box will show up when the battery level is getting low.	N/A	MainWindow,	The *MainWindow* class keeps track of the battery level, and a message bow shows up when the battery level is less than 25%.
4.	The device becomes non-functional when the battery level reaches 0.	Turn off the device(UC3)	MainWindow	When the battery level reaches 0, the function that handles battery decay will show the "Battery is fully depleted" alert on screen and make the *MainWindow* class to turn off the device.
5.	The application battery level is dependent on connection status and intensity level	N/A	MainWindow	As a session is run, the battery level will decrease consistently until it reach 0.
6.	Device supports 3 session group	Selecting a session(UC4)	MainWindow, Session	The session groups are represented as *Session* objects. These have a session length, session type, timer and therapy duration.
7.	Device supports 4 sessions	Selecting a session(UC4)	MainWindow, Session	The session groups are represented as Session objects. These have a session length, session type, timer and therapy duration.
8.	Device will turn off automatically when no session is selected within 1 minute.	Turn off the device(UC3)	MainWindow	When *MainWindow* realize there are no sessions are selected, start a *Qtimer* for 1 min and make the device shut off.

9.	Intensity has 8 levels, the intensity level icon will light up when it is selected.	Adjusting intensity(UC8)	MainWindow	These 8 intensity icons are stored in an array as *Qlabel**, and there's a function in *MainWindow* class change their label size to make them light up when they are selected.
10.	Electrodes are simulated for application on earclip.	How to place the electrodes (UC6)	MainWindow	The *MainWindow* class keeps track of whether or not the both left earclip and right earclip are connected. The session timer will only advance if earclips are both connected.
11.	Treatment time pauses when one of the left ear clip or right ear clip or ces jack is disconnected.	How to place the electrodes (UC6)	MainWindow	When a session is running, the *MainWindow* class keeps track of the earclips and ces connection status, the session timer will be pause if one of their status is false.
12.	The device has 3 connection states, "no" connection, "okay" connection and "excellent" connection states.	Connection test(UC7)	MainWindow	Connection states are represented by the the numbers and colors on the connection bar icons and the states are dependent on the earclips connection status.
13.	The history of treatment will be recorded when the session is being ended during the therapy or when the therapy is finished.	Saving preferences(UC9)	MainWindow, Record	When the running session *Qtimer* is stopped, the function handle add record will be called, and store the treatment history as a new *Record* Object.
14.	A saved record saves session type, session length, duration and intensity level.	Saving preferences(UC9)	MainWindow, Record, Session	The *Record* class has attributes for the session type, session length, duration and intensity level of treatments. The *MainWindow* class keeps a collection of *Record* objects as they are created.

15.	At the start of a session treatment, the timer starts at the time of session length and counts down to 0 when the session is ended or finished.	N/A	MainWindow	the screen displays session time remaining which will start at the session length and subtract time off of it until it reaches zero, at which point the treatment ends.
16.	User can delete their designed sessions	N/A	MainWindow	User designed sessions are stored as *QlistWidget**, user can click the "Del Session" button to delete the selected session.