Traceability Matrix

ID	Use Case #	Requirement	Fulfilled by	Tested	Description
1	#1	Power	Mainwindow which acts as a Control System and on_powerButton()	Click power button and connected function is ran. The device turns on and all the functionalities are now available to the user	Power: "Turn On/Turn Off" and "Ending A Session" as described on p4 of the manual.
2	#2	Battery level	Mainwindow UI is actively updated every 30 secs to display the current battery power	drainBattery() is called when the device is turned on and drains the battery	Battery level: battery level and battery low warnings as per "Battery Level" section on p5 of the manual. Your simulation should handle battery depletion as a function of length of therapy, intensity, and connection to skin.
3	#3	Selecting a session	Next button next to time and session type to choose the desired session duration and type.	On_checkButton() function used to start a therapy once the duration, type and user has been selected	Selecting a session: as per "Selecting A Session" on p5 of the manual but only with 3 groups (20min, 45min and user designated) and 4 session types per group. You can choose any 4 types from p12 of the manual
4	#4	Connection test	earsRBtn checkbox replaces this functionality and if it is not checked then there is an error and the uer needs to reconnect the electrodes to their ears	When running a therapy, the connection to the ears is being checked every second to ensure that the electrodes are connected. The function that takes care of this is updateCounter()	Connection test: as per "Connection Test" on p6 of the manual.
5	#5	Intensity	Use the Up and Down arrows to toggle the intensity	toggleIntensity() function that increases or decreases the intensity depending on the button pressed	Intensity: as per "Adjusting Intensity" on p7 of the manual
6	#6	Record	Check box labelled record that allows for a therapy to be saved and used later. Information	saveTherapy() runs at the end of every therapy and saves the information to a list of records. To see records,	Record: users can choose to record a therapy and add to treatment history. Therapy session information to be recorded: session type, duration and intensity level (if changed

			saved in a record are: the user, the duration, the session type and the intensity	be sure to select the proper user	during therapy choose last selected intensity level). There would be additional interface needed beyond what Oasis Pro offers to implement this feature, and it is up to you design it.
7	#7	Replay	When there is a list of previous records, users can select a previous therapy and run the same therapy	on_replay_clicked() function is run when the replay therapy button is clicked. Information about the therapy is retrieved and the proper therapy is started	Replay: users can replay selected treatments from history of treatments.