

Identifier #	Use Case Name	Requirements	Design Elements	Design Description	Test Description
1	Turn the CES device On	The CES device can be turned on and off with an ON/OFF Switch.	MainWindow, Battery	<p>Battery: This class will handle the power drain implementation. The battery will start to decrease.</p> <p>MainWindow: This class handles all the UI changes, sets the default menu selections and starts required timer for auto off.</p>	User can press the power button to turn on the device. See Test Case 1
2	Turn the CES device Off	The CES device can be turned on and off with an ON/OFF switch	MainWindow Battery	<p>Battery: This class will handle the power drain implementation. The battery will stop decreasing</p> <p>MainWindow: This class handles all the UI changes,</p>	User can press the power button to turn off the device if the device is on. See Test Case 1
3	Set New Current	User can set the current of the device between 0-500 μ A	MainWindow,	MainWindow: This class handles the UI changes, stores the current information and allows current to be changed on specific CES device window.	User can press the up button and down button on the device to change the current on the correct screen. See Test Case 6
4	Select Time Frame	Have a timer that cycles between 20,40 or 60 min countdown cycles.	MainWindow CountDownClock	<p>MainWindow: This class handles the visual UI changes and cycles through the different times.</p> <p>CountDownClock: This class will properly calculate the display numbers and return a String of output for MainWindow to display.</p>	User can press the timer button to cycle through the times, this will be updated on the device display. See Test Case 5

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5	Select WaveForm	The device needs to have three waveform options, Alpha, Beta and Gamma.	MainWindow	MainWindow: This class will update the UI accordingly and store the selected waveform as it cycles through the choices.	User can press the change waveform button in order to change the waveform. See Test Case 4
6	Record a Therapy	Users can choose to record a therapy and add to history of treatment.	MainWindow, Record CountDownClock	MainWindow: Updates the UI, prompts the user the option to record and save a therapy, also allows history to be displayed. Record: Data class to organize the therapies data, saved in MainWindow. CountDownClock: Counts down the therapy timer and allows MainWindow knowledge of 1 instance when the User can be prompted to Record a therapy.	User can wait out the timer, or end contact for 5 seconds or hit the finish therapy button in order to prompt the display that allows them to save the Therapy as a record. See Test Case 9
7	Battery Warning and Shutoff	Battery should issue a warning at 5% and shut down at 2% after issuing another warning.	MainWindow, Battery	MainWindow: This class updates the UI, displays the new battery level and will display warning messages. Battery: This class drains the battery, provides MainWindow with the batteries level and sends error messages and tells MainWindow to shutdown the device.	User can start a therapy and watch the battery dip below the 5% and 2% to receive the warnings and then shutdown. See Test Case 12

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8	Set Frequency	The User has to be able to cycle the frequency between 3 options, 0.5Hz, 77Hz and 100Hz	MainWindow	MainWindow: This class will update the UI and allow the user to change the frequency accordingly.	User can press the change frequency button to cycle the frequency between the three options. See Test Case 3
9	Lock Settings	The device can be “Locked” so the settings can not be accidentally changed.	MainWindow	MainWindow: This class will update the UI accordingly and will allow the user to hit Lock and unlock the settings with a visual icon to notify if it is locked or unlocked.	User can press the lock button in order to lock the device settings and the lock button again in order to unlock the settings. See Test Case 13
10	Auto Off	The device will automatically timeout after a period of inactivity.	MainWindow	MainWindow: This class will reset a timer every time the user presses a button and pause the timer when a therapy is underway. If the timer ever hits zero it turns off the device.	User can turn on the device and then do nothing to watch the device turn itself off after a short period of time. See Test Case 11
11	Current Overload Shut Off	The device will permanently disable itself if a fault occurs.	MainWindow	MainWindow: This class will update the UI accordingly and permanently disable the device for the current session,	User can push the Power Surge button and the device will disable itself. See Test Case 14