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| 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 | **Battery:** This class will handle the power drain implementation. The battery will start to decrease. **MainWindow:** This class handles all the UI changes, sets the default menu selections and starts required timer for auto off. | 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 | **Battery:** This class will handle the power drain implementation. The battery will stop decreasing **MainWindow:** This class handles all the UI changes, | 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 μA | 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 | **MainWindow:** This class handles the visual UI changes and cycles through the different times.  CountDownClock: This class will properly calculate the display numbers and return a String of output for MainWindow to display. | User can press the timer button to cycle through the times, this will be updated on the device display. **See Test Case 5** |
| Identifier # | Use Case Name | Requirements | Design Elements | Design Description | Test Description |
| 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** |
| Identifier # | Use Case Name | Requirements | Design Elements | Design Description | Test Description |
| 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** |