ID	Requirement	Related use case	Fulfilled by	Description	Test
1	Device establishes a baseline average frequency for an EEG site over the period of one minute	Starting New Session (UC1)	NeuresetDevice, EEGHeadset, Electrode	When EEGHeadset starts a measurement of an electrode, a WaveForm is generated, and the dominant frequency is calculated based on extracted frequencies and amplitudes	
2	Device administers one second treatment for an EEG site according to LENS protocol	Starting New Session (UC1)	NeuresetDevice, EEGHeadset, Electrode	Upon baseline measurement completion, NeuresetDevice calls EEGHeadset's startTreatment() with increasing frequency depending on the current stage in order to set the correct offset, and applies the treatment to each electrode site	
3	Overall baseline average is calculated concurrently for all 21 EEG sites at the beginning and end of a session	Starting New Session (UC1)	NeuresetDevice, EEGHeadset, Electrode	NeuresetDevice calls calculateOverallBaseline() at the beginning and end of a session, which prompts the EEGHeadset to start a measurement of each electrode site's baseline concurrently using a QFutureSynchronizer. Once all baselines are measured, the EEGHeadset computes the average	
4	Application interface has a display, buttons, lights, and battery charge indicator	N/A	MainWindow		
5	At any given time during a session, timer shows approximate time remaining, along with a progress bar indicating percentage	Starting New Session (UC1)	MainWindow, NeuresetDevice		
6	Upon selecting the "new session" option, a timer is opened and begins once contact is initiated	Starting New Session (UC1)	MainWindow		
7	Whenever contact is lost, session is paused, red light flashes, and the device starts beeping	Handling Lost Connection (UC6), Pausing Session (UC2)	MainWindow		
8	If contact is lost and is not reestablished within 5 minutes, the device turns off and the session is erased	Handling Lost Connection (UC6)	NeuresetDevice, EEGHeadset		
9	During a session, blue light is turned on while contact is maintained	Starting New Session (UC1)	MainWindow		
10	During a session, green light flashes while one second treatment is being delivered	Starting New Session (UC1)	MainWindow		
11	User can press the pause button to pause a session at any time	Pausing Session (UC2)	MainWindow, NeuresetDevice		
12	Each session is recorded with its time and date as well as before and after baselines	Starting New Session (UC1)			
13	User can view the time and dates of past sessions by pressing the session log button	Viewing Session Log (UC3)	MainWindow		

14	The full session log (time, date, before and after baselines) can be uploaded to a PC	Uploading Session Data to PC (UC4)	MainWindow, PCWindow, PC, TransferWindow		
15	User can adjust the current time and date by pressing the time and date setting button	Changing Time and Date (UC5)	MainWindow		
16	Battery level goes down over time while application is on	N/A			
17	Device becomes non-functional when the battery level reaches 0	N/A			