Design Decisions

MainWindow

- MainWindow would have a HandHeldDevice object, and a PCWindow menu
- Can do all the updates to the UI from the HandHeldDevice's functions

Storing Sessions

- Session class has startDateTime, storing the session's initial start date/time (since each session should take around the same time, there is no need to store the after date/time)
- Frequency class
    - This class represents the 21 baseline before and after frequencies for the PC to view
    - This class is updated through HandHeldDevice (HandHeldDevice->session->addFrequency(float, float)) - always add 21 frequencies

Individual EEGSites

- For the 21 EEGSites, there is a separate object (stored as an array inside Headset), which stores the initial baseline frequency, along with its current baseline frequency, which gets updated based off the offset
- Stores the before, and this before attribute is NOT updated, as we need it for the session log upload to the PC

Device Timers

- HandHelpDevice class has two QTimer attributes:
    - runTimer - the timer for the one minute baseline average frequency calculation
    - stopTimer - on interruptions, (pause, disconnect), start the five minute timer before shutting down / terminating session
- MainWindow has access to the device timers, to update their respective timers

Menu Selection

- selectionList
    - Used QListWidget to keep active track of current user selection
    - QListWidget stores:
        - A list of QStrings: "NEW SESSION", "SESSION LOG" "SET DATE AND TIME"
        - A currentIndex (current selected index - current row that is highlighted on the ui)

PCWindow

- PCWindow is called from MainWindow, we can pass the sessions (from HandHeldDevice) directly into PCWindow
- Iterate through the sessions, and display the date, before frequency and after frequency

    - Already stored in each session in the Frequency class

UpdateMenu Function

- Everytime a session is completed, decrease the battery
- Updates the progress bar, based on the number of electrodes complete (Based off of the total time it will take)
    - Total process is 141 seconds
    - 43% - initial baselines calculating
    - 58% - sending treatment to 21 electrodes (21 seconds)
    - 100% - final baselines calculated

Enumerated RunStatus

- Keeps track of the states of the HandHeldDevice operations
    - ACTIVE - current session is active, and it is running through the EEG and treatment process
    - INACTIVE - session hasn't started yet (default state)
    - PAUSED - session has been paused, initiate timer for 5 minutes
    - DISCONNECTED - session has been disconnected (contact has been lost), initiate timer for 5 minutes