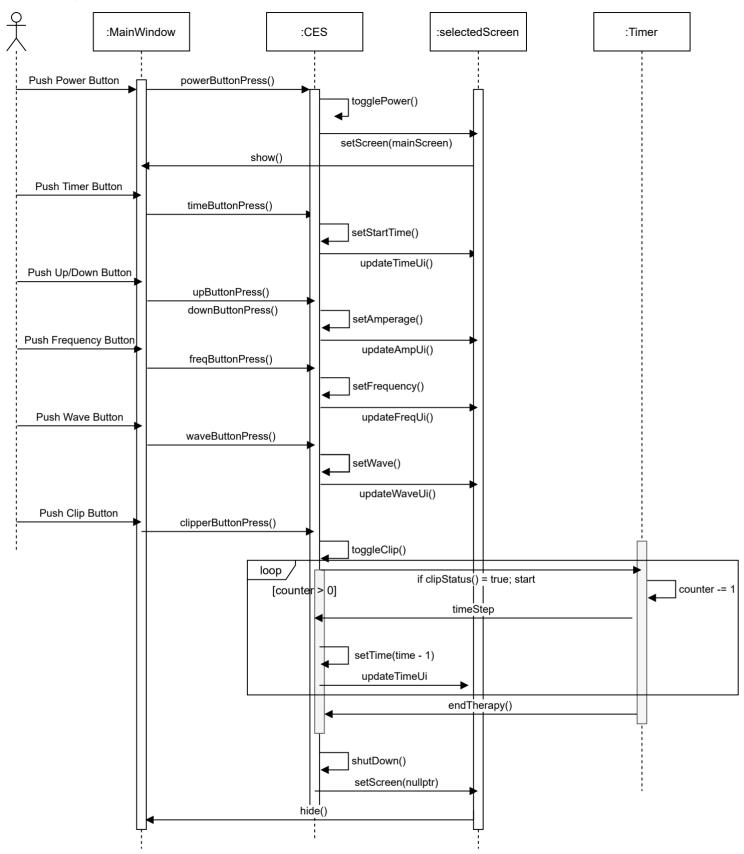
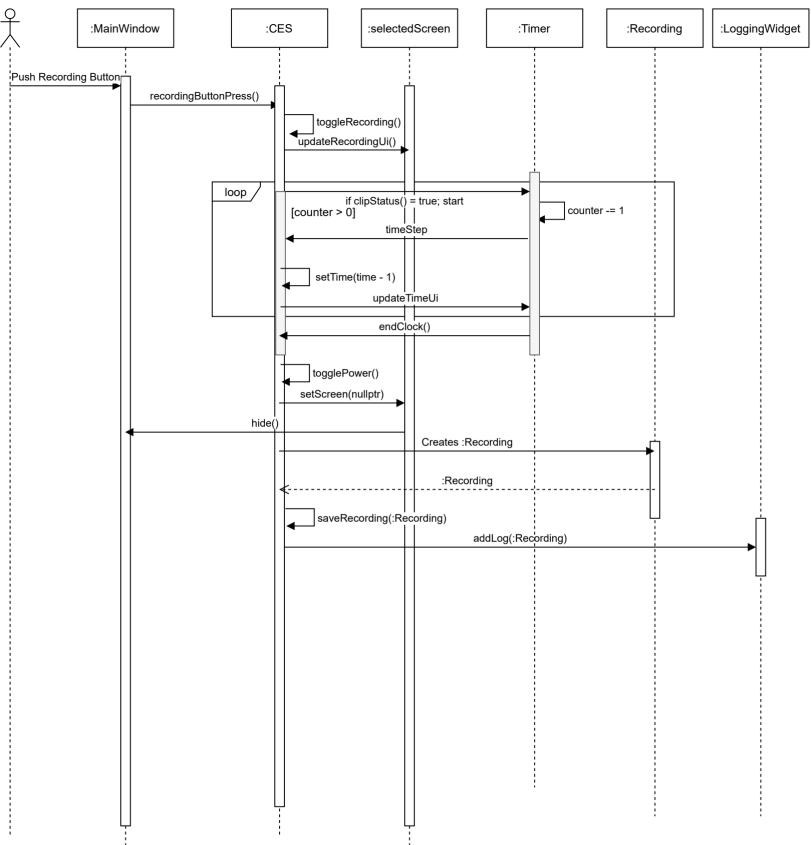
## **Sequence Diagram 1: Therapy Session**



This sequence diagram details the event of a therapy session. The sequence of event is the following:

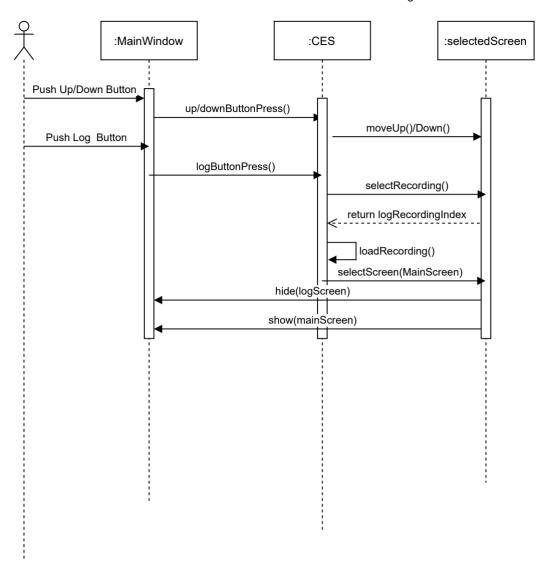
- 1. The user press the power button
- 2. The user select their desired amperage, frequency, amperage and time
- 3. The user checks the "ear clip connected" box to start the therapy session
- 4. This will trigger the clock which will decrement to 0 as long as the earclip checkbox is ticked
  - 4a. For every tick, the Timer object sends a signal to the CES which prompts it to update its value
  - 4b. when the counter of the timer reaches 0, a end() signal is sent to the CES
- 5. upon receiving the endTherapy signal, the CES shutsdown and set the screen to null (meaning no screen is shown).
- 6. The therapy session is completed

Pre-condition: Power is On & Clipper is On selectedScren == mainScreen



This sequence diagram details the sequence where a user wants to save a therapy. As a pre-condition, the power is on and the user is currently running a therapy (alhough the user can select recording before starting the therapy). The recording triggers once the therapy session is completed. If the CES forces itself to shutdown or the CES reset of losing contact with the ear clip, these event will not save the recording. Here's how it works:

- 1. The user press recording
- 2. The clock timer starts (the timer is explained in more dertailed in sequence diagram 1)
- 3. Upon receiving the endSession() if the isRecording bool is true, then the recording is added to the recordings list.



This sequence diagram details the flow of even when the user wants to load one of its saved recording. The precondition for this event is that the device is on and the user has already saved some recordings and already selected the logScreen menu. First the user press the up/down button to select the recording they want. In the diagram we did not demonstrate a loop, but it is assumed that the user presses up and down until they land on their desired recording. To load the recording, the user only needsto press the log button again which will do the following:

- 1. find the appropriate index so that the CES can give the Recording in a list  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right)$
- 2. Change the CES values to that of the Recording
- 3. Bring the user back to the Main Screen