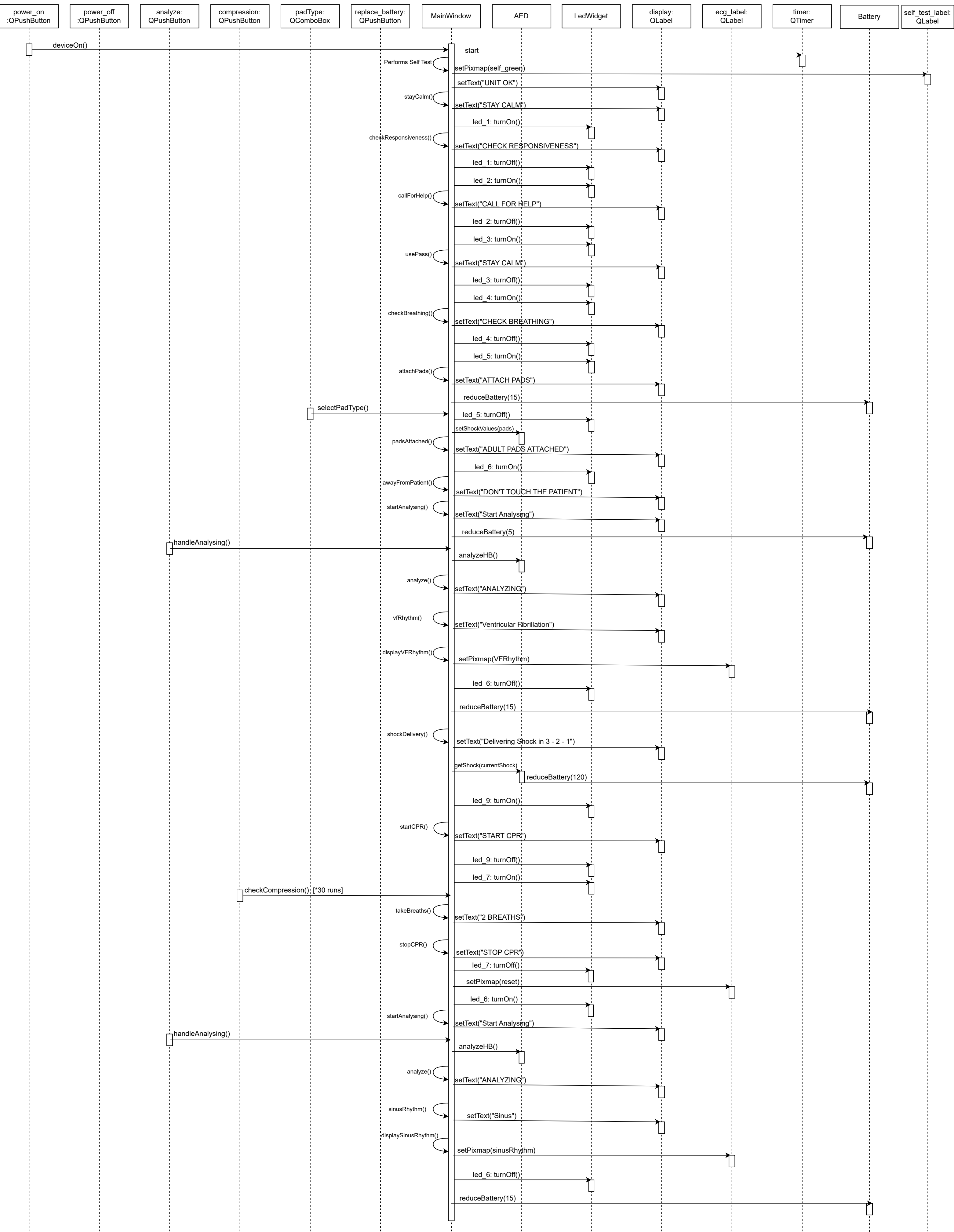


Sequence Diagrams

[Due to the size of certain Sequence Diagrams, they aren't properly visible in this document and thus their source files have been included in the submission]

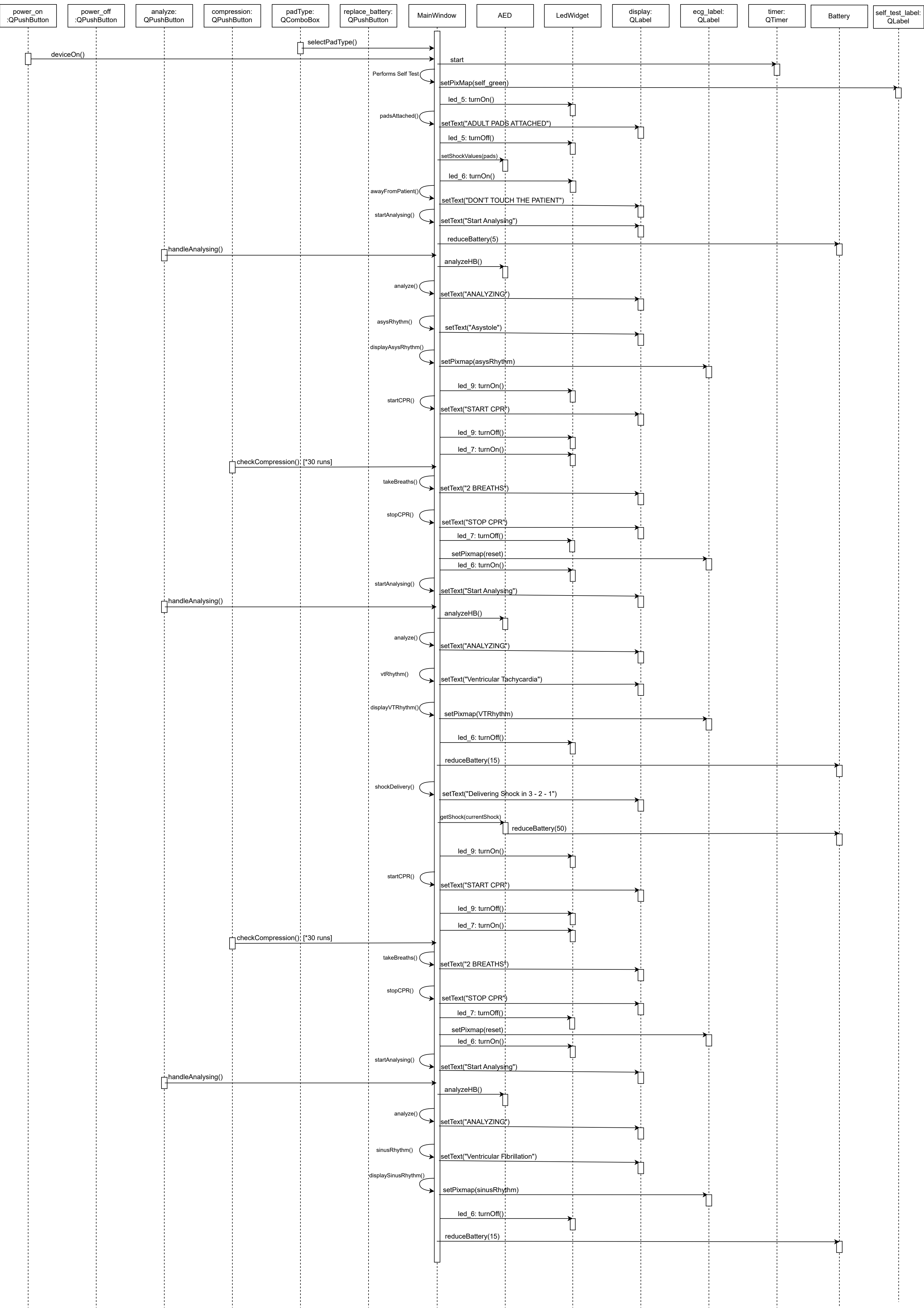
Success Scenario-1: This scenario depicts the case in which an AED is used from the very beginning without attaching the pads to the patient before hand. In the depicted scenario, the patient is an Adult, and after analyzing their heartbeat it is deemed of the VF (Ventricular Fibrillation) type. Thus, the patient is delivered a 120J shock and consequently administered CPR. After CPR, the patient's heartbeat is analyzed again and this time it is of the Sinus type. Thus, the patient's heartbeat is normal, and the patient has recovered.

Source File – Success Scenario 1 – Full Use (.drawio File)



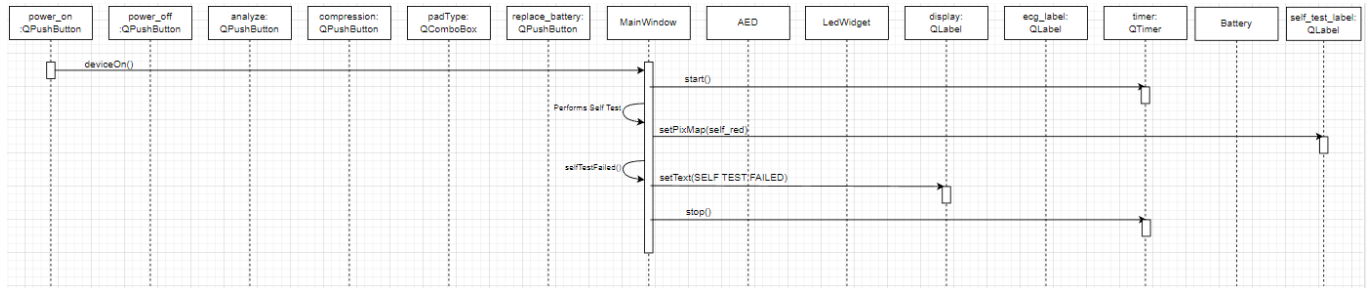
Success Scenario-2: This scenario depicts the case in which an AED is turned on after attaching the pads to the patient before hand. In the depicted scenario, the patient is an Infant, and after analyzing their heartbeat it is deemed of the Asystole type. So, the AED suggests starting CPR. After, CPR and consequently analyzing the heartbeat again, the heartbeat is analyzed of the VT (Ventricular Tachycardia) type. Thus, the patient is delivered a 50J shock and consequently administered CPR. After CPR, the patient's heartbeat is analyzed again and this time it is of the Sinus type. Thus, the patient's heartbeat is normal, and the patient has recovered.

Source File – Success Scenario 2 – Pads Attached (.drawio File)



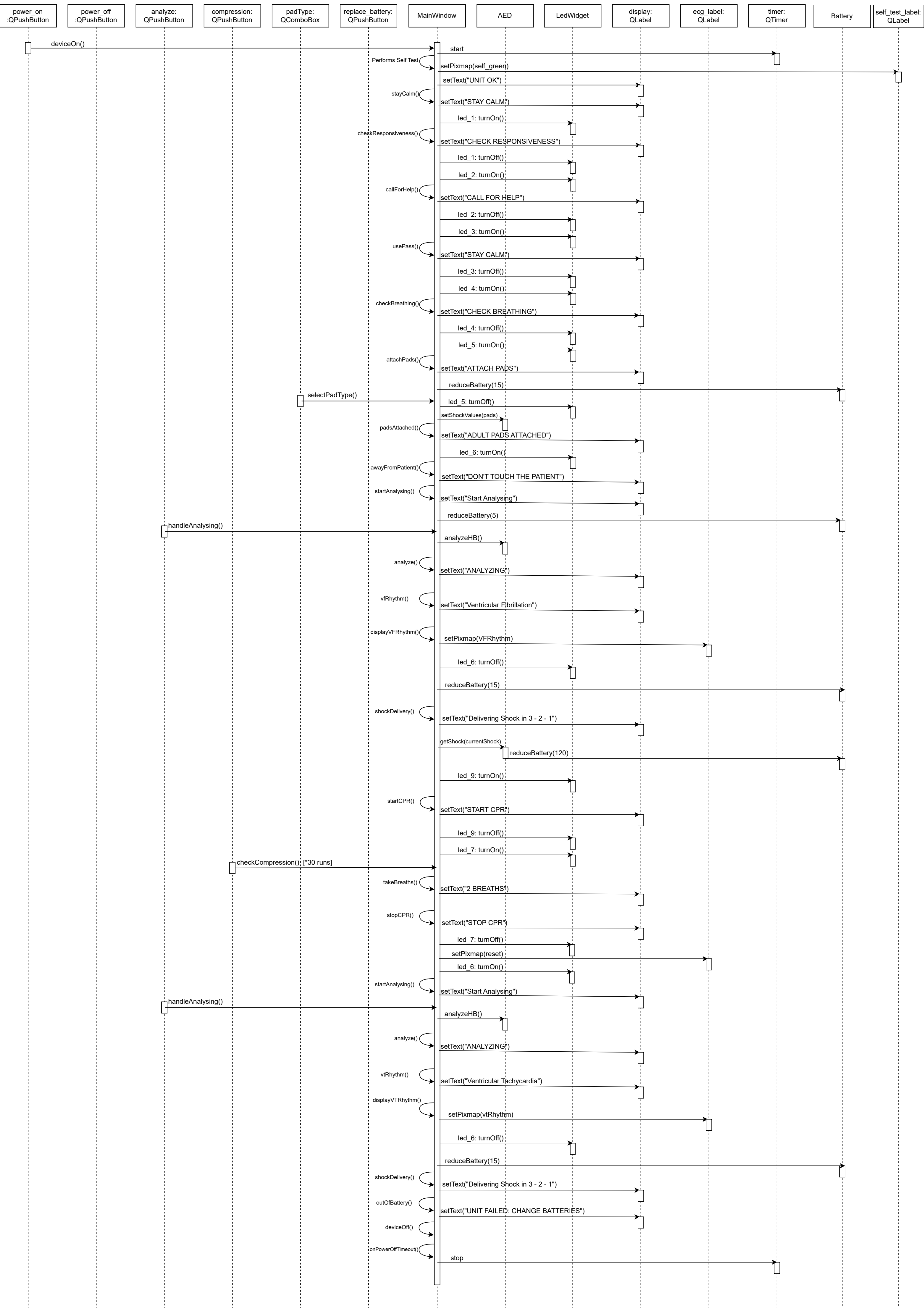
Safety Scenario-1: This scenario depicts the case in which an AED is turned on and fails the self test. So, the display shows: “SELF TEST FAILED” and the Self Test Indicator displays a red cross instead of the usual Green Tick Mark.

Source File – Safety Scenario 1 – Self Test Fail (.drawio File)



Safety Scenario-2: This scenario depicts the case in which an AED is turned on and works normally and delivers one shock to the patient who has a VF rhythm. After CPR, and analyzing again, it again gets a VT rhythm but this time before delivering the shock the AED runs out of battery and displays the required Warning Message instead of delivering the shock

Source File – Safety Scenario 2 – Low Battery (.drawio File)



Safety Scenario-3: This scenario depicts the case in which an AED is turned on and works normally and before analyzing the pads get detached. The GUI won't allow you to continue with analyzing until you attach the pads again correctly.

Source File – Safety Scenario 3 – Connection Lost (.drawio File)

