

ID	Requirement	Related Use Case(s)	Fulfilled By	Test	Description
1	Pulse Generation	<ul style="list-style-type: none"> - Using real CPR help - Using the Semi-automatic AED Plus Graphical User interface 	Heart.h, Heart.cpp	Pulse is generated in the Heart and heart rate is calculated through them. Heart rate is displayed on the LCD screen	Pulse generation is dynamic and simulates the cardiac arrest scenario and is closely related to the CPR process and the graphical interface of the AED, which monitors and displays heart rate and rhythm.
2	Pulse Analysis	<ul style="list-style-type: none"> - Using the Semi-automatic AED Plus - Using the LCD Display 	Heart.h, Heart.cpp	Pulse analysis over 6 seconds determines heart rhythm and heartbeat. Shown on the LCD screen	Pulse analysis determines the state of the victim's heart and displays data on the LCD.
3	Shock administration	<ul style="list-style-type: none"> - Using the Semi Automatic AED Plus 	Heart.h, Heart.cpp	Status of shock administration shown on the LCD screen	Shock administration in case of certain cardiac conditions, mainly VTACH or VFIB
4	Heart State Update	<ul style="list-style-type: none"> - Using the Semi Automatic AED Plus Graphical User Interface - Using the LCD Display 	Heart.h, Heart.cpp	Heart updates regularly to output change in patient's status. Changes observed on screen after interacting with UI prove this	Updating the heart state helps AED monitor patient's status and provide updated data on the ECG