

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

Date	18 October 2022
Team ID	PNT2022TMID39429
Project Name	PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF RELIANT
Maximum Marks	4 Marks

#### **SOLUTION REQUIREMENTS:**

#### **Functional Requirements**

	<b>Functional Requirement (Epic)</b>	<b>Sub Requirement (Story / Sub-Task)</b>
FR-1	<b>TITLE</b>	Personal Assistance for Seniors Who are Self Reliant
FR-2	<b>PURPOSE</b>	Providing assistance for seniors to monitor their regular activities such as health updates, pill remainder, GPS tracking and movement detection from their residents.
FR-3	<b>VIEWPOINTS OF THE DEVICE</b>	Monitoring their health condition using sensors which includes pulse-oxy meter, accelerometer, ECG signal detection which sends the data to the device and notifies to the caretaker. Pills monitoring using sensors is also done and it notifies to the pharmacist. GPS tracking and movement detection are analysed and sends notification to the caretaker, ambulance and hospital in emergency situations.
FR-4	<b>ANALYSING AND WORKING PROCESS</b>	The device gives the information about ECG, Blood pressure, body temperature, heart rate and it is monitored. When pills gets over, the device automatically notifies to the user, caretaker and pharmacist then the pills directly delivers to the user. The device gives alert during emergency situation by monitoring the routine activities and movements.
FR-5	<b>OPERATION</b>	The device collects the data from various sensors and data are stored in database, then using the mobile application the entire report can be viewed by the caretakers.

## Non-functional Requirements

Non-Functional Requirement	FR No.	Description
<b>USABILITY</b>	NFR-1	It is used for old person to know about their health conditions , pill remainder, GPS tracking and movement detection.
<b>SECURITY</b>	NFR-2	By using this device, the old person's movements and action is continuously tracked. It sends notification to the caretaker also prevent them from dangerous . The security is also provided to the database which prevent from unauthorized access.
<b>RELIABILITY</b>	NFR-3	The device is very efficient, comfortable and safe for old persons which reduces depression and loneliness. Thus, they can live independent and longer.
<b>PERFORMANCE</b>	NFR-4	The device consumes less time which reduces complication also provides accurate measurement and more features .Thus, it will be a trouble free device.
<b>SCALABILITY</b>	NFR-5	It will be user-friendly device which can be easily accessed by the user and their caretakers. It is also Environmental friendly device which can be used anywhere.