Project Design Phase-I
(Proposed Solution)

Personal Assistance for Seniors Who Are Self-Reliant

Date	19 September 2022
Team ID	PNT2022TMID06228
Project Name	Project - **Proposed Solution**
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	PARAMETER	Description
1.	**Problem Statement (Problem to be solved)**	Tracking the health of a person and proper medication improves their life time. Studies suggest the most of the deaths of the elderly people have occurred during the night when the person is asleep. A Caretaker cannot assist a person all the time. This work proposes a personal assistant for an elderly people or a patient. The Personal assistants can provide in-home respite care, allowing family members or other caretakers to take a temporary break. The main objective of this work is to help seniors maintain their quality of life at home and to keep them living their lives their way, as well as to lighten the load of full-time or family caretaker.
2.	**Idea / Solution description**	When the elderly wear the device, the pulse sensor present in the device measures the pulse rate, later these readings are sent to the Arduino-uno. The data from different sensors are sent to the Arduino and through NodeMCU. These measured values are sent to the doctor application and then the caretaker can check the readings frequently. If the patient does not know how to use the mobile then the device has some push buttons just by pressing them the alert is sent to the doctor or caretakers mobile application

3.	**Novelty / Uniqueness**	Giving consideration to others can be distressing and can probable upload to despondency and proper disorder. Studies have exhibited that round 16% of parental figures record their wellbeing has intensified due to the fact they became guardians. Providing care might also result in more budgetary weights; roughly 40% of guardians collect new financial costs diagnosed with administrations, items, and sporting activities. One gauge expresses that 26% of parental figures spend round 10% of their month to month pay on supplying care costs.
4.	**Social Impact / Customer Satisfaction**	When the elderly wear the device, the pulse sensor present in the device measures the pulse rate, later these readings are sent to the Arduino-uno. The data from different sensors are sent to the Arduino and through NodeMCU.These measured values are sent to the doctor application and then the caretaker can check the readings frequently. If the patient does not know how to use the mobile then the device has some push buttons just by pressing them the alert is sent to the doctor or caretakers mobile application.
5.	**Business Model (Revenue Model)**	With the continuously increasing utilization of internet in this point in time, this assignment paintings has been engaged to execute a framework depending on web innovation which could discuss through internet for health checking of patients and for giving assist to vintage people. It provides shape and operating of an IOT based totally Personal Assistance Device which is a helpful device using low force Atmega328 microcontroller and ESP8266. In this paintings, accelerometer is utilized to apprehend the development of patient even though heart beat sensor module supply pulse of patient that is ship to microcontroller unit which sends this statistics to everything communicate producer to reveal the readings using ESP8266 Wi-Fi conference. During the crisis situations, a caution might be raised over the internet level telling the expert/overseer by way of the patient simply by squeezing a seize in the helpful machine. This offers a trustworthy framework which can screen the well-being reputation continuously of a patient or an vintage individual

6.	**Scalability of the Solution**	An experiment is conducted on an elderly person who is in need of Personal Assistant Device and the following results are obtained. the screen shot of the message received by the care taker when the push button is pressed. the medicine reminder that gives the information regarding the intake of medicine by the person using the personal Assistant Device