Project Design Phase-II Solution Requirements (Functional & Non-functional)

| Date | 09 October 2022 |
|---------------|--|
| Team ID | PNT2022TMID48701 |
| Project Name | Project – Visualizing and predicting heart disease |
| | with an interactive dashboard |
| Maximum Marks | 4 Marks |

Functional Requirements:

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|--------|-------------------------------|--|
| FR-1 | User Registration | Registration through Facebook |
| | | Registration through Gmail |
| | | Registration through google |
| FR-2 | Account creation | User fill Gmail and password for account creation |
| FR-3 | User Confirmation | Confirmation via Email |
| | | Confirmation via OTP |
| FR-4 | Personal details for account | Apart from the basic details, user need to enter details |
| | | such as name, age, sex, height, weight, previous |
| | | medical records, etc |
| FR-5 | Regular medical condition | Entry present medical records, symptoms, etc |
| | updation in app | |
| FR-6 | Doctor consultation | Expert doctor consultation through app |

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description |
|--------|----------------------------|---|
| NFR-1 | Usability | As usability is a prerequisite for success of health and wellness mobile apps, our proposed solution aims to provide insights and suggestions for improving usability experience of the mobile health app by exploring the degree of alignment between app insiders and users. |
| NFR-2 | Security | Our proposed solution can empower patients, streamline communication, and provide real-time monitoring and self-management of medical conditions by building a secure app that puts security, privacy and compliance by considering authentication, privilege management, secure data storage and communication, compliance and testing and installation. |

| NFR-3 | Reliability | Measuring reliability can improve the quality and value of health care apps. Our proposed solution will provide accurate prediction of disease with a lower risk of errors that cause harm to user and reduces the death rate. Our solution provides Safety to user's data with lot of benefits simply in home which is Efficient without wasting equipment, supplies, ideas, and energy. |
|-------|--------------|---|
| NFR-4 | Performance | The performance of this project is to reduce heart disease death rate by earlier accurate disease prediction. Our solution offers services such as disease prevention, diagnosis and treatment, and rehabilitation. |
| NFR-5 | Availability | Availability is important because, while there are often shortages in human resources, deployed providers are frequently inappropriately absent or, when present, are not actively delivering health care because they are engaged in other duties. Our proposed solution provides immediate access to care anytime anywhere |
| NFR-6 | Scalability | It can be integrated with smart watch and apps for further advancements which is very helpful for earlier prediction. And further, we can provide live doctor consultancy, keep up the old data records for increasing accurate prediction and advices to prevent heart disease. Notifies alerts to nearby hospital when person is at risk |