Project Design Phase-II Technology Stack (Architecture & Stack)

| Date | 30 October 2022 |
|---------------|---|
| Team ID | PNT2022TMID49153 |
| Project Name | Visualizing and Predicting Heart Diseases with an |
| | Interactive Dash Board |
| Maximum Marks | 4 Marks |

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table 1 & table 2

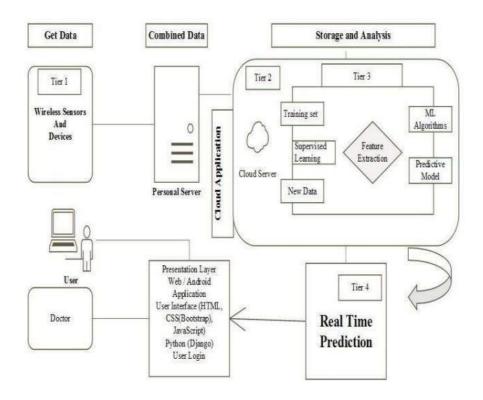


Table-1 : Components & Technologies:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|--|--|
| 1. | Open-Source Frameworks | List the open-source frameworks used | Technology of Opensource framework |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | e.g. SHA-256, Encryptions, IAM Controls, OWASP etc. |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | Technology used - IaaS, PaaS, SaaS (IBM Cloud). |
| 4. | Availability | Availability of application | Technology used - The Availability of getting used to this software or |

Table-2 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|--|
| 1. | User Interface | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | HTML, CSS, PYTHON etc. |
| 2. | Application Logic-1 | Logic for a process in the application | Python |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Cognos Analytics |
| 4. | Application Logic-3 | Logic for a process in the application | IBM Watson Assistant |
| 5. | Database | Data Type, Configurations etc. | MySQL etc. |
| 6. | Cloud Database | Database Service on Cloud | IBM DB2, IBM pak etc. |
| 7. | File Storage | File storage requirements | Use Professional Records Storage, IBM Block Storage or Other Storage Services. |
| 8. | External API-1 | Purpose of External API used in the application | IBM Weather API, etc. |
| 9. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration : | Personal Server, IBM Cloud Server etc. |

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-

during-pandemic/ https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture