

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

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| Date | 05 October 2022 |
| Team ID | PNT2022TMID34361 |
| Project Name | Visualizing and Predicting Heart Diseases with an Interactive Dashboard |
| Maximum Marks | 4 Marks |

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

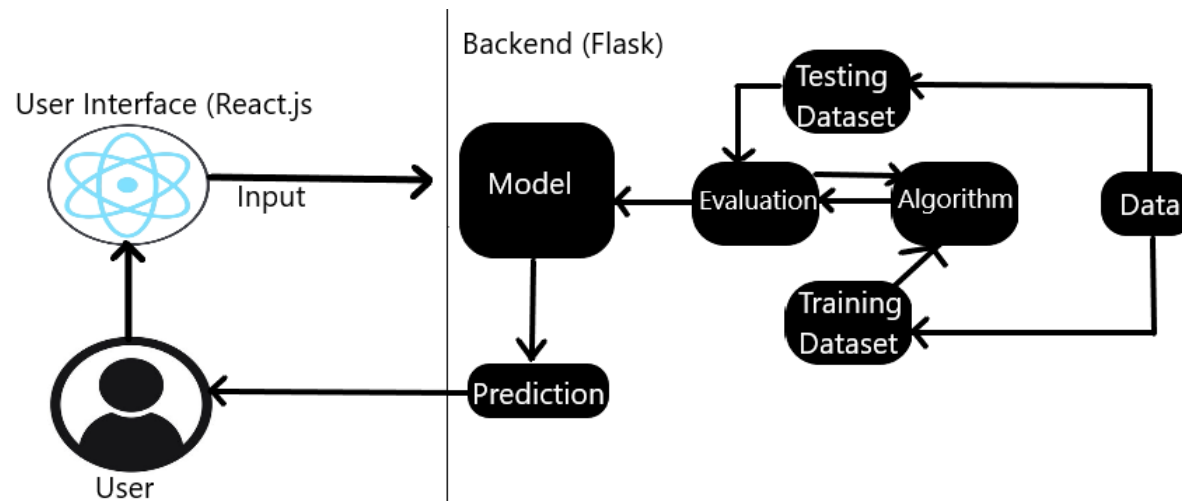


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|---|--------------------------------|
| 1. | User Interface | How user interacts with application | React.js/JavaScript/HTML/CSS |
| 2. | Application Logic-1 | Logic for a process in the application | Flask |
| 3. | Application Logic-2 | Logic for a process in the application | IBM Cognos |
| 4. | Database | Data Type, Configurations etc. | MySQL, NoSQL, etc. |
| 5. | Cloud Database | Database Service on Cloud | MongoDB |
| 6. | File Storage | File storage requirements | Local Filesystem |
| 7. | Machine Learning Model | Purpose of Machine Learning Model | KNN ML Algorithm/Random Forest |
| 8. | Infrastructure (Server / Cloud) | Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration : | Local etc. |

Table-2: Application Characteristics:

| S.No | Characteristics | Description | Technology |
|------|--------------------------|---|---|
| 1. | Open-Source Frameworks | List the open-source frameworks used | React.js |
| 2. | Security Implementations | List all the security / access controls implemented, use of firewalls etc. | SHA-256 |
| 3. | Scalable Architecture | Justify the scalability of architecture (3 – tier, Micro-services) | 3-tier |
| 4. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Function/Stateless components used. CSS animations. Memoization of React components |