## PROJECT DESIGN PHASE - II

## TECHNOLOGY ARCHITECTURE

| Date          | 17 October 2022                        |
|---------------|--|
| Team ID       | PNT2022TMID44298                       |
| Project Name  | Analytics for Hospital Healthcare Data |
| Maximum Marks | 4 Marks                                |

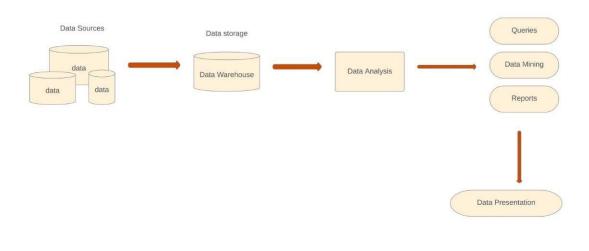




Table – 1 : Components and Technologies

| S.NO | Component      | Description  | Technology   |
|------|----------------|--|--|
| 1    | User Interface | The user interacts with application using web UI         | HTML, CSS,<br>Javascript                           |
| 2    | Database       | Datatype and<br>Configurations                           | MySQL  |
| 3    | File Storage   | File storage requirements                                | IBM blocks storage or other storage service        |
| 4    | Cloud Database | Database service on Cloud                                | IBM Cloudant                                       |
| 5    | Prediction     | ML algorithms are used for predicting the length of stay | ML algorithms –<br>Random Forest,<br>Decision tree |

 $Table-2: Applications\ Characteristics$ 

| S.NO | Component             | Description                 | Technology          |
|------|-----------------------|-----------------------------|---------------------|
| 1    | Open source framework | Open source frameworks      | Python              |
|      |                       | used                        |                     |
| 2    | Security              | The security controls       | Firewall, Antivirus |
|      | Implementations       | implemented use of          |                     |
|      |                       | firewalls                   |                     |
| 3    | Scalable Architecture | Scalability consists of 3   | Supports higher     |
|      |                       | tiers                       | workloads           |
| 4    | Availability          | Justify the availability of | AWS used            |
|      |                       | application                 |                     |
| 5    | Performance           | Design consideration for    | Dashboard, Report,  |
|      |                       | the performance of the      | Stories             |
|      |                       | application                 |                     |