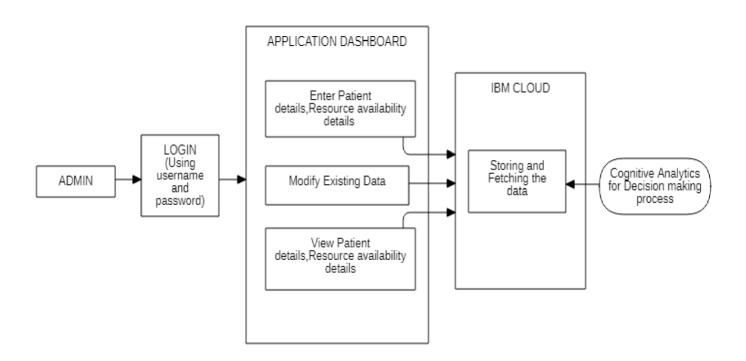
## Project Design Phase-II Technology Stack (Architecture & Stack)

| Date          | 03 October 2022                           |  |
|---------------|---|--|
| Team ID       | PNT2022TMID22855                          |  |
| Project Name  | Analytics for Hospitals' Health-Care Data |  |
| Maximum Marks | 4 Marks                                   |  |

## Technical Architecture:



| S.No | Characteristics          | Description  | Technology                                     |
|------|--------------------------|--|--|
| 1.   | Open-Source Frameworks   | List the open-source frameworks used   | IBM Cognos Analytics                           |
| 2.   | Security Implementations | List all the security / access controls implemented, use of firewalls etc.                     | Encryption and Firewall protection             |
| 3.   | Scalable Architecture    | Justify the scalability of architecture (3 – tier, Micro-services)                             | IBM Cloud - Can<br>support higher<br>workloads |
| 4.   | Availability             | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | IBM Cognos Analytics                           |

| 5. | Performance | the application (number of requests per sec, | Use of Cognitive analytics |
|----|-------------|--|----------------------------|
|    |             | use of Cache, use of CDN's) etc.             |                            |

**Table-1: Components and Technologies:** 

| S.No | Component           | Description  | Technology  |
|------|---------------------|--|---|
| 1.   | User Interface      | How user interacts with application e.g.<br>Web UI, Mobile App, Chatbot etc. | Web application using<br>HTML,CSS and Javascript                  |
| 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   |
| 6.   | Cloud Database      | Database Service on Cloud  | IBM Cloud   |
| 7.   | File Storage        | File storage requirements  | IBM Block Storage or Other Storage<br>Service or Local Filesystem |

**Table-2: Application Characteristics:**