

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

|               |   |
|---------------|---|
| Date          | 7th November 2022                       |
| Team ID       | PNT2022TMID5432                         |
| Project Name  | Analytics for Hospital Health-Care Data |
| Maximum Marks | 4 Marks                                 |

## TECHNICAL ARCHITECTURE:

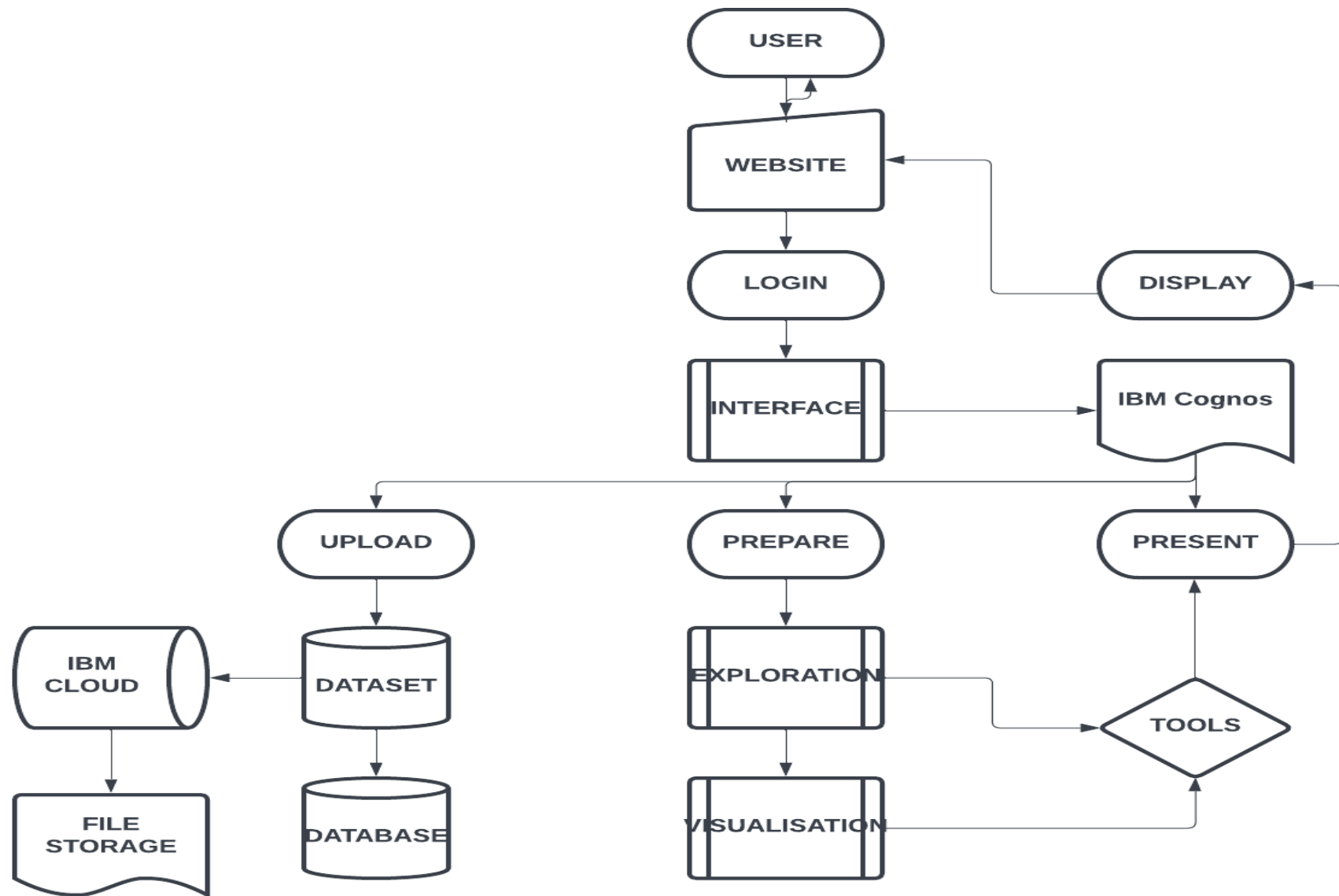


Table-1 : Components & Technologies:

| S.No | Component                  | Description   | Technology   |
|------|----------------------------|---|--|
| 1.   | User Interface             | How the user interacts with the interface e.g. Web UI, etc. | HTML, CSS, JavaScript / Angular Js / React Js etc.             |
| 2.   | Dashboard Logic-1          | Logic for a process in the dashboard                        | IBM Cognos Analytics   |
| 3.   | Dashboard Logic-2          | Logic for a process in the dashboard                        | MS Excel   |
| 4.   | Database                   | Data Type, Configurations etc.                              | MySQL, NoSQL, etc.   |
| 5.   | Cloud Database             | Database Service on Cloud                                   | IBM Cloud  |
| 6.   | File Storage               | File storage requirements                                   | IBM Block Storage or Other Storage Service or Local Filesystem |
| 7.   | Uploading and Presentation | Using Exploration and Visualization                         | IBM Cognos Analytics   |

**Table-2: Dashboard Characteristics:**

| S.No | Characteristics          | Description   | Technology   |
|------|--------------------------|---|--|
| 1.   | Open-Source Frameworks   | List the open-source frameworks used.   | IBM Cognos   |
| 2.   | Security Implementations | List all the security / access controls implemented, use of firewalls etc.  | Authentication and Authorization, Firewall, etc..  |
| 3.   | Scalable Architecture    | Justify the scalability of architecture (3 – tier, Micro-services)  | 3-tier Architecture can be implemented so that the project can be worked by splitting up into 3 tiers namely presentation tier, application tier, data tier. |
| 4.   | Availability             | Justify the availability of application (e.g. use of load balancers, distributed servers etc.                             | High availability enables your IT infrastructure to continue functioning even when some of its components fail.  |
| 5.   | Performance              | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | A field of practice that uses various tools, processes, and ideas in a scientific manner to improve the desired outcomes of individuals and organizations    |