

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

Date	9 <sup>th</sup> November 2022
Team ID	PNT2022TMID53915
Project Name	Analytics for Hospital Health-Care Data

## TECHNICAL ARCHITECTURE:

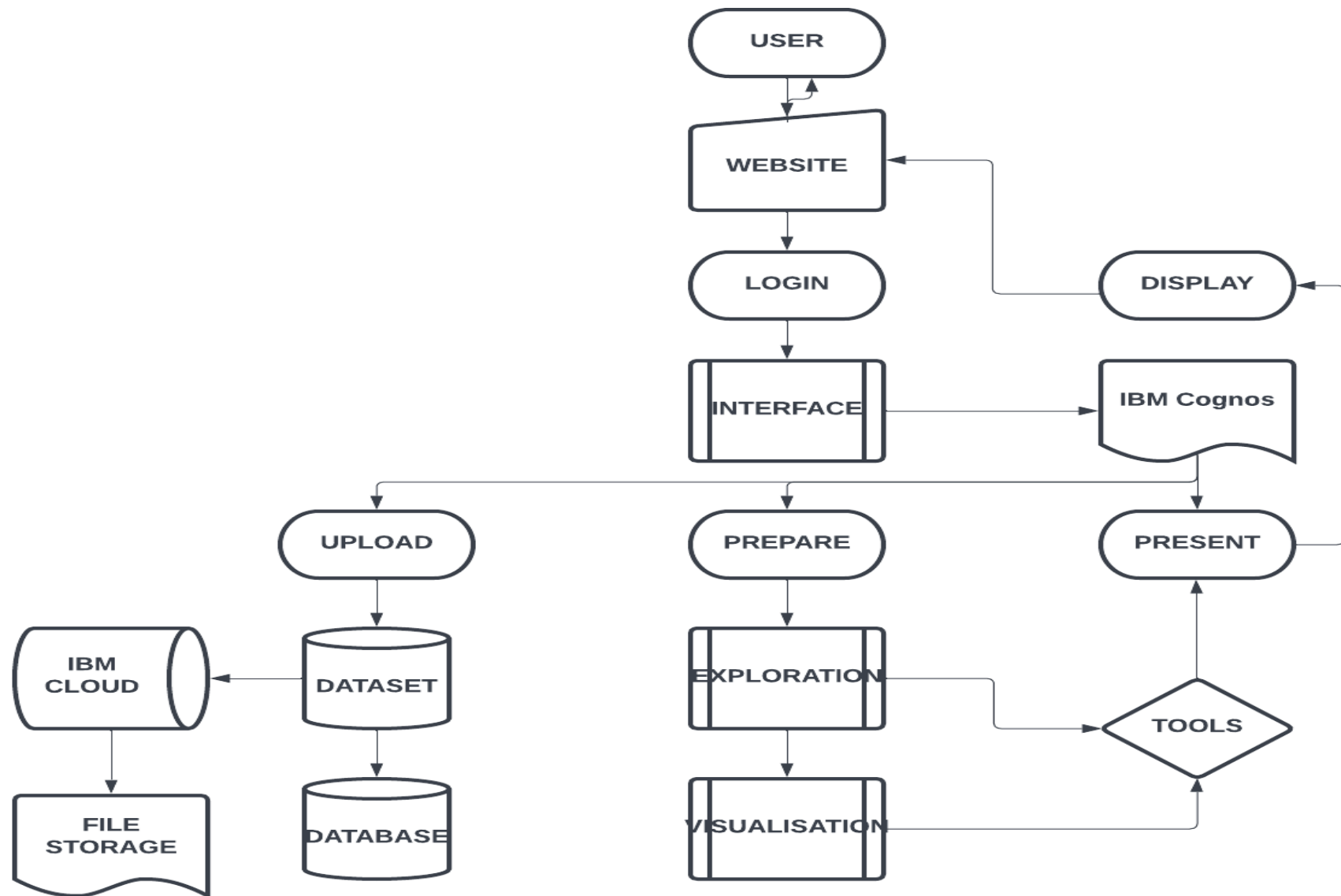


Table-1 : Components & Technologies:

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