

Project Design Phase-II
Technology Architecture

Date	03 October 2022
Team ID	PNT2022TMID07428
Project Name	Analytics for Hospitals' Health-Care Data
Maximum Marks	4 Marks

Technical Architecture:

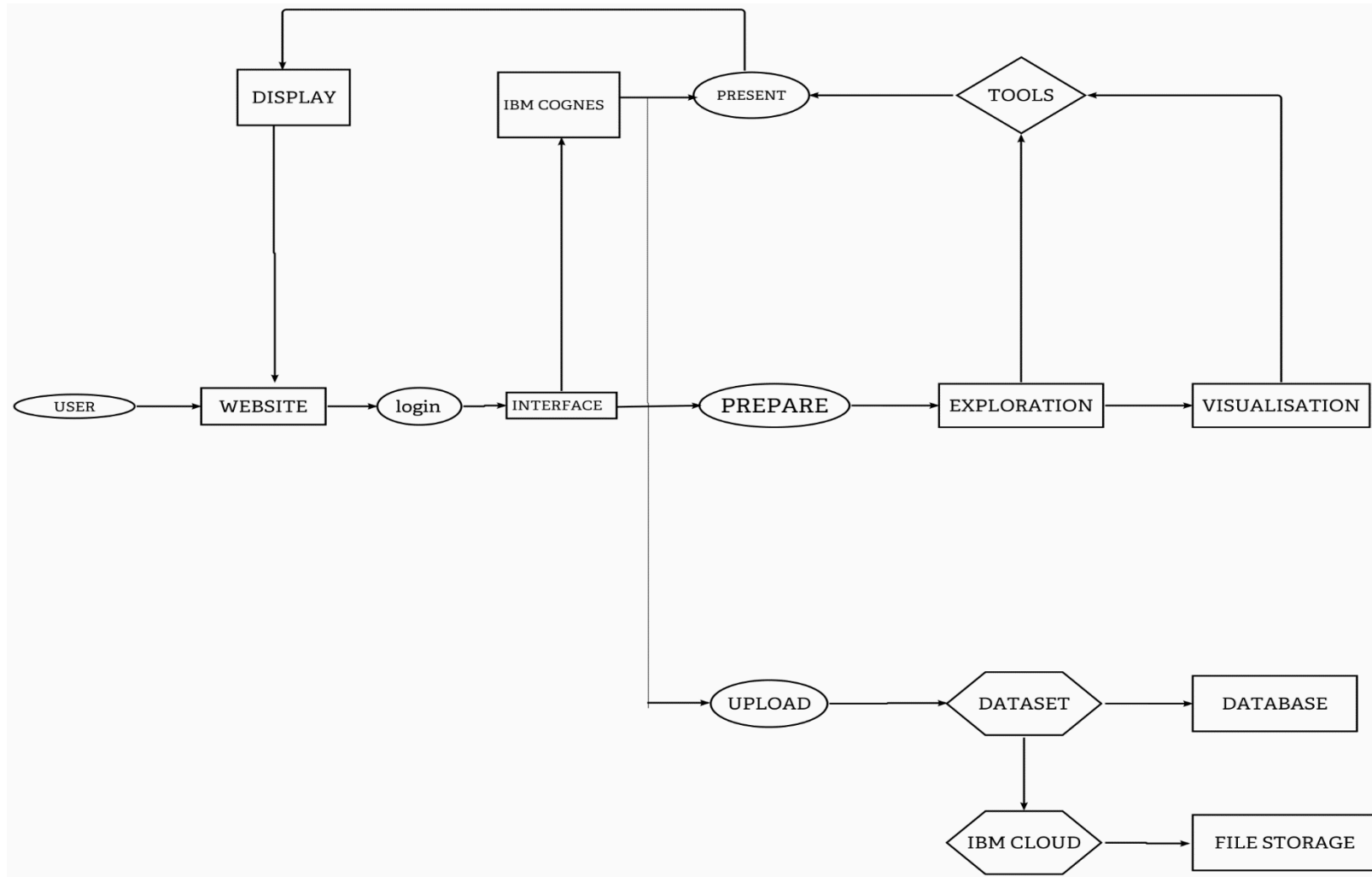


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, etc.	HTML, CSS, Java, PHP
2.	Application Logic-1	Logging in as a user or patient in the application.	Python
3.	Application Logic-2	Logging in as an admin in the application.	IBM Watson STT service
4.	Database	All the data about the patient like disease, address, Details and etc.,	MySQL
5.	Cloud Database	Database Service on Cloud	IBM Cloud
6.	File Storage	IBM Watson cloud is used for storage, Cloud	IBM Block Storage or Other Storage Service or Local Filesystem
7.	Machine Learning Model	Machine Learning Models are used to predict the length of the stay of patient using available data	Logistic Regression, Decision Tree, SVM,
8.	Uploading and Presentation	Using Exploration and Visualization	IBM Cognos Analytics

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Numpy,Pandas,Scikit,Matplotlib.	Python, IBM Cloud
2.	Security Implementations	security / access controls implemented, use of firewalls etc.	Authentication and Authorization
3.	Scalable Architecture	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.	3 tier
4.	Availability	The application will be for 24/7. It can be used anywhere using smart devices.	HTML, CSS, Java and IBM Cloud