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

Date	03 October 2022
Team ID	PNT2022TMID23557
Project Name	Project - Analytics for hospital's healthcare Data
Maximum Marks	4 Marks

Technical Architecture:

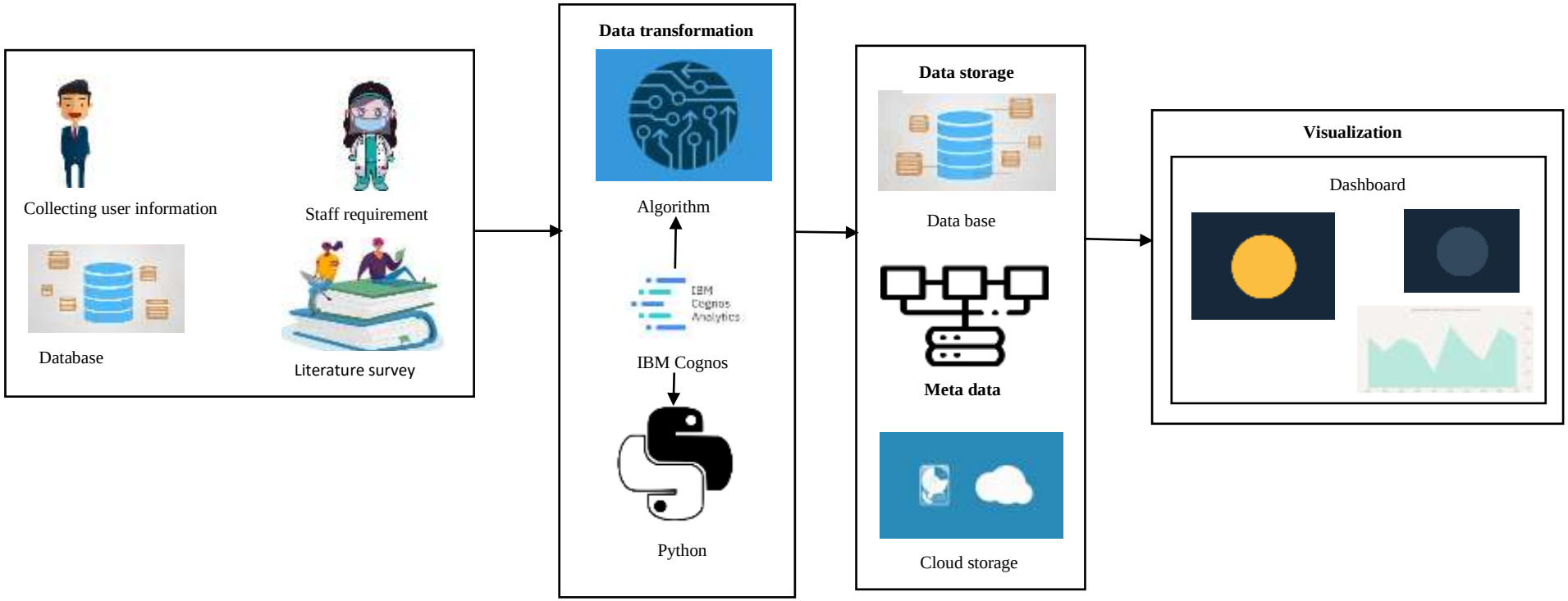

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with application using dashboard	IBM COGNOS ANALYTICS
2.	Data Processing	The data from the dataset is pre processed	IBM COGNOS ANALYTICS
3.	Cloud Database	The clean dataset is stored on IBM Cloud	IBM Cloud
4.	Data Visualization	The data is visualization into different forms	IBM COGNOS ANALYTICS, python
5.	Prediction	ML algorithm are used for predicting the length stay	ML algorithms-Fuzzy Logic, Tree Bagger ,Random Forest, Decision Tree

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	IBM Cognos analytics,Python
2.	Security Implementations	Request authentications using encryption	Encryption
3.	Scalable Architecture	Scalability consist of 3 – tiers	Dashboard - IBM Cognos analytics Application server – Python Database server – IBM cloud
4.	Availability	The application is available for cloud users	IBM cloud hosting
5.	Performance	The user can know the prolonged period of stay.	ML Algorithms