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

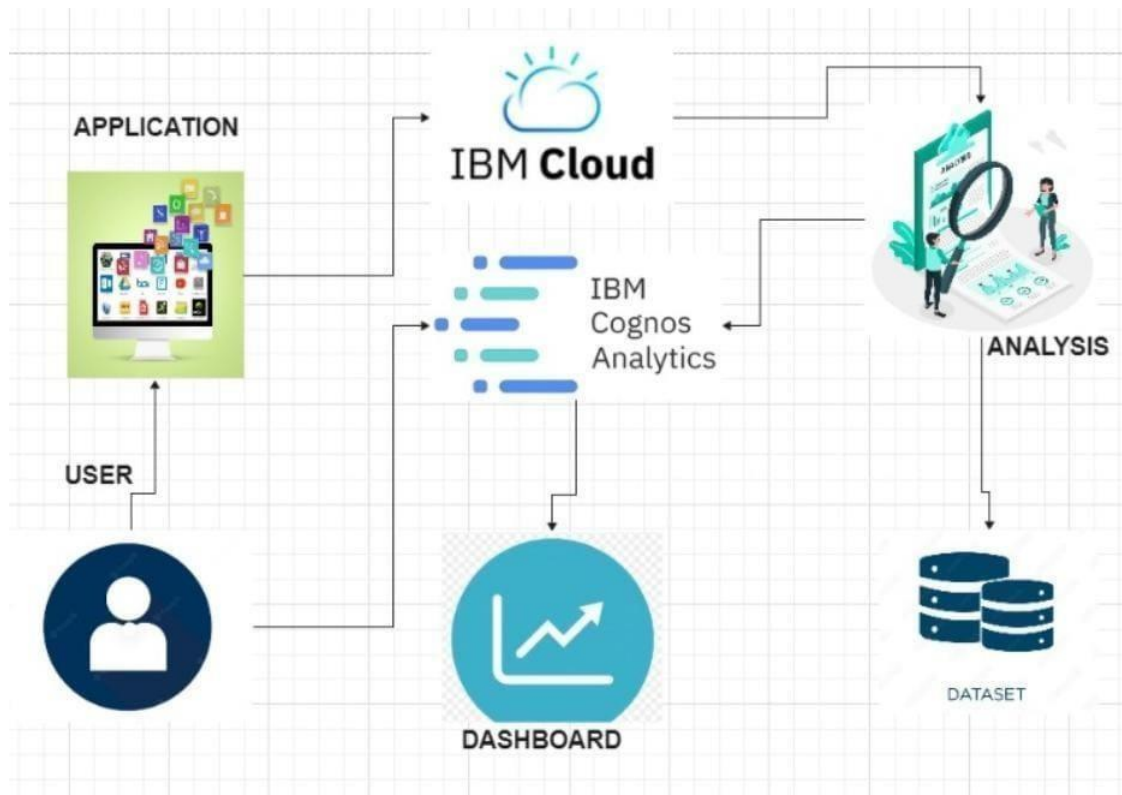| Date	20 Oct 2023
Team ID	NM2023TMID01820
Project Name	Unleashing the Potential of Our Youth. A Student Performance Analysis

Technical Architecture:

Table-1 :

Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application	IBM Cognos Analytics
2.	Working with the dataset	Cleaning, extracting process of dataset is done	IBM Cognos Analytics with Watson
3.	Data Exploration	Information in the dataset is identified	IBM Cognos Analytics with Watson
4.	Data Visualization	Data is represented in form of chart, table and graph in an interactive way	IBM Cognos Analytics with Watson
5.	Outcome of analysis process	The user will see the visualization through dashboards, report and story	IBM Cognos Analytics with Watson
6.	Cloud Database	Uploaded data are stored in the cloud database (Database Service on Cloud)	IBM DB2, IBM Cloud and etc.
7.	Flask	Dashboard, report, story is embedded with Flask	Cloud Flask

Table-2 :

Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM COGNOS With Watson, IBM CLOUD
2.	Security Implementations	Secure storage and access of information	LDAP or Active Directory
3.	Scalable Architecture	Supports data in different size	IBM Cloud
4.	Availability	Ability to create complex, multi-page layouts using different data sources. High performance data access across all sources. Complete connectivity regardless of environment.	WebSphere Application Server, Cognos® Business Intelligence server
5.	Performance	Large amount of information can be processed	31BM Cognos Performance Management Hub (PMHub)