

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

Date	03 October 2023
Team ID	NM2023TMID07259
Project Name	Analytics Tool for Placements
Maximum Marks	4 Marks

Technical Architecture:

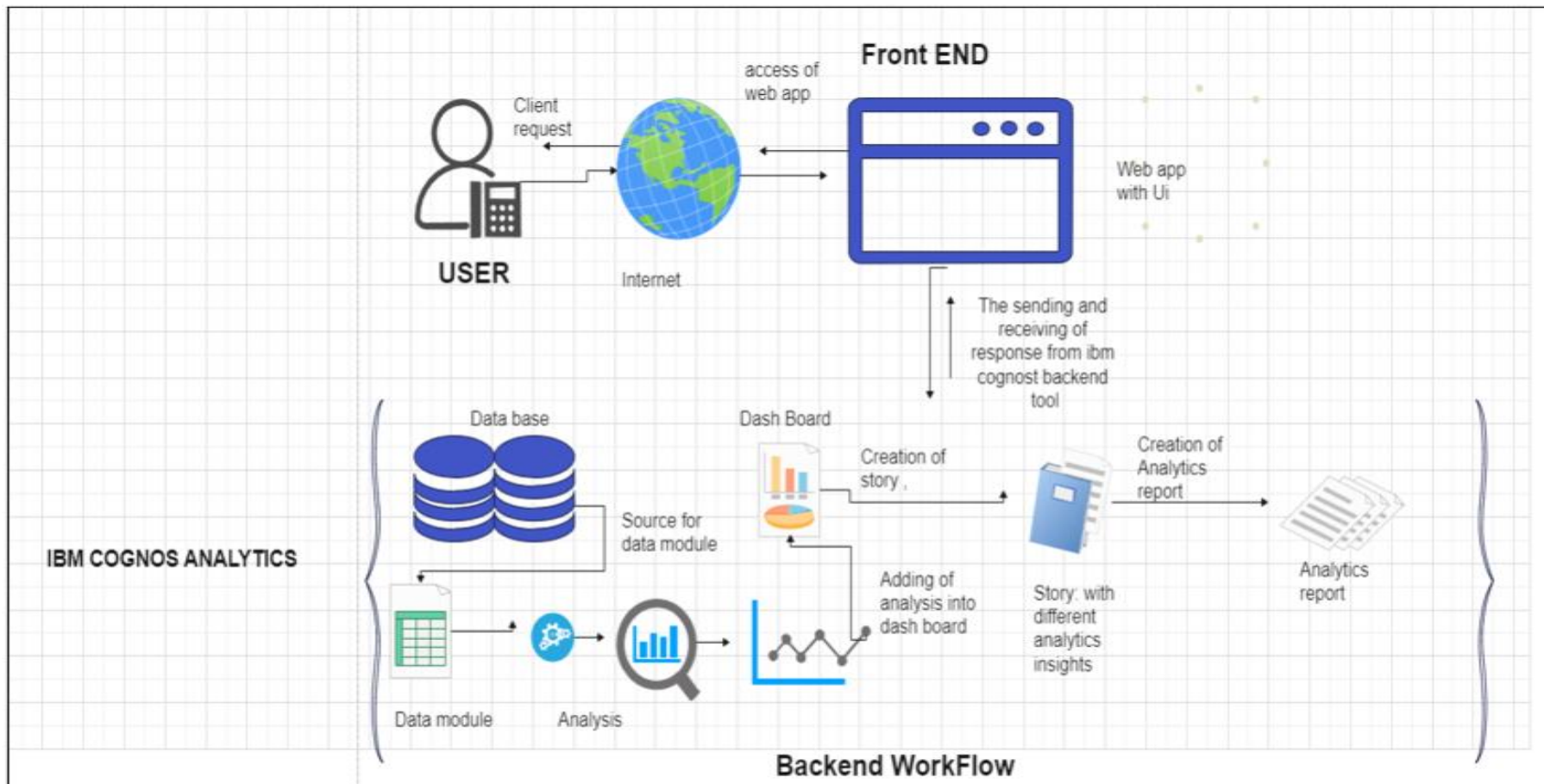


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web Dynamic UI	HTML, CSS, Flask
2.	Application Logic-1	Creation of application in web	Python
3.	Application Logic-2	Performing Analytics from the data module	IBM Cognos Analytics
4.	Application Logic-3	Data base handled	IBM Watson Assistant
5.	Database	Data Type, Configurations	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage
8.	External API-1	To produce different visualization in the form of different insights from the data module	IBM Cognos Analytics API, etc.
9.	External API-2	Purpose of External API used in the application	NIL
10.	Machine Learning Model	built-in machine learning models for data analytics.	Dats Analytics from IBM Cognos Analytics
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: A flask web Application Cloud Server Configuration : Ibm db2	Cloud Foundry,

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask micro frame work	python
2.	Security Implementations	Authentication of the user	SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Architecture is Scalable as the dashboards are dynamic in nature	Flask frame work, ibm analytics tool, html, css

S.No	Characteristics	Description	Technology
4.	Availability	Availability is efficient as the use of distributed servers in cloud	IBM Cloud
5.	Performance	Scalability, integration Capabilities, Security measures	