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

Date	03 October 2022
Team ID	PNT2022TMID19454
Project Name	Project – Estimate crop yield using Data Analytics
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

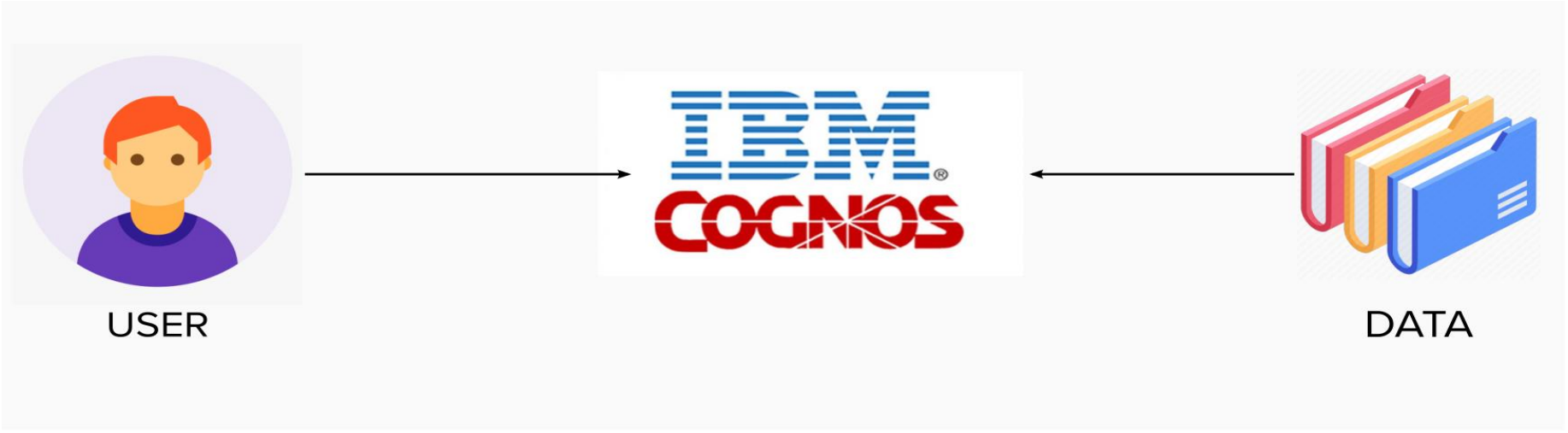

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with dashboard e.g. Filter, Graph, charts, predictive analysis etc.	IBM Cognos Analytics
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	IBM Cognos Analytics
4.	Database	Data Type, Configurations etc.	IBM
5.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
7.	Data Analytics Model	Purpose of Data Analytics Model	Predictive Analysis Recognition Model, etc.
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Cognos Analytics
2.	Security Implementations	Security in IBM Cognos Analytics is optional. Typically, anonymous users have limited read-only access.	Authentication providers, Authorization, Cognos namespace, IBM Cognos Application Firewall
3.	Scalable Architecture	You can enable or disable services run by the dispatcher on individual servers to balance the load for a given computer by request type	XML, SOAP, WSDL
4.	Availability	Web based data modelling, Interactive dashboards and enterprise reports, Data exploration and prediction	XML, SOAP, WSDL

S.No	Characteristics	Description	Technology
5.	Performance	User population grow, processing requests tend to increase in number and complexity and network capacity and other aspects of infrastructure may be modified. These changes can affect IBM Cognos BI performance.	XML, SOAP, WSDL