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

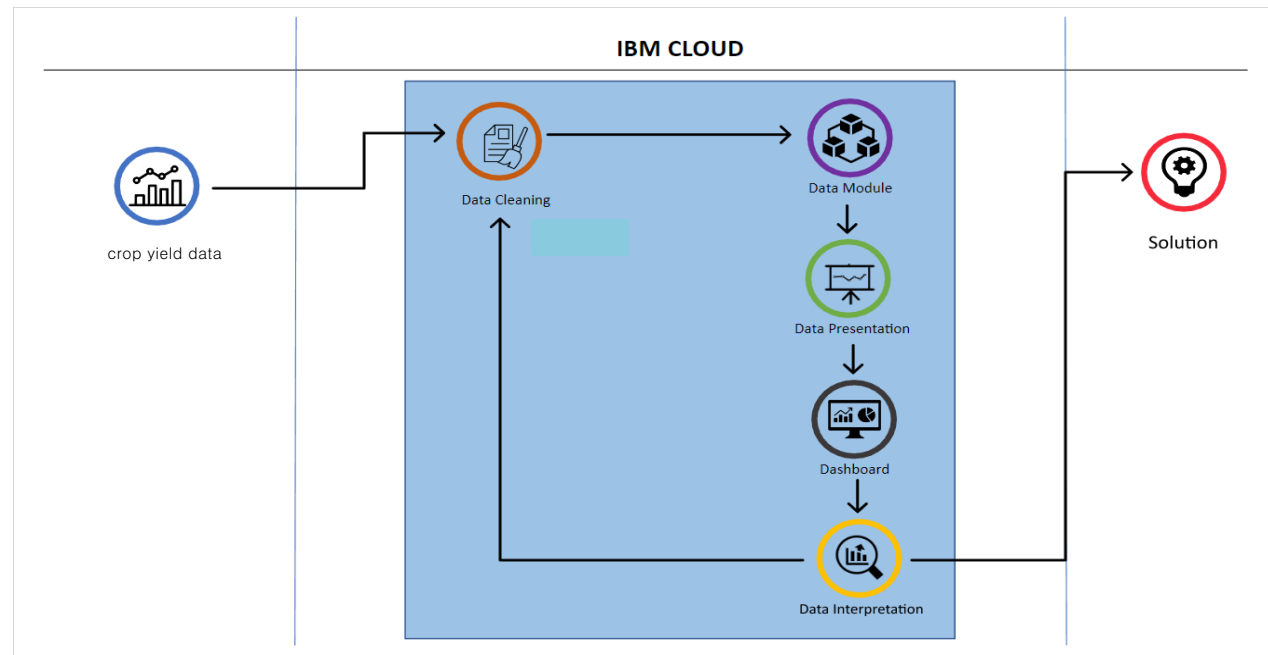| Date	16 October 2022
Team ID	PNT2022TMID37430
Project Name	Estimate the crop yield using data analytics
Maximum Marks	4 Marks

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, Chatbot etc.	IBM Cognos Analytics with Watson
2.	Storage Infrastructure (Cloud)	Customer sales data is uploaded in cloud through interface	IBM Cloud
3.	Working with Dataset	Uploading, Cleaning and Processing dataset	IBM Cognos + IBM Cloud
4.	Data Exploration	Upload data is explored to identify trends	IBM Cognos
5.	Data Visualization	Multiple types of graphs are shown according to customer data and requirements	IBM Cognos Dashboard
6.	Cloud Database	Database Services on Cloud	IBM DB2, IBM Cloudant etc.
7.	Viewing Data	User logins to application to view visualizations for uploaded data	IBM Cognos Dashboard

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Cognos, IBM Cloud ,IBM Watson
2.	Security Implementations	Secure user information and data	Active Directory
3.	Scalable Architecture	Supports various data sizes	Web 3.0 IBM Cloud
4.	Availability	Multi page layout providing various visualizations of data and provide full support irrespective of platform and device specifications	Cognos Business Intelligence Server
5.	Performance	Withstand huge data and and process them without crashing	IBM Cognos , Performance Management Hub