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

Date	26 October 2022
Team ID	PNT2022TMID40341
Project Name	Estimate The Crop Yield Using Data Analytics
Maximum Marks	4 Marks

Technical Architecture:

The Technical Architecture describes the infrastructure required to support application, operations, and requirement

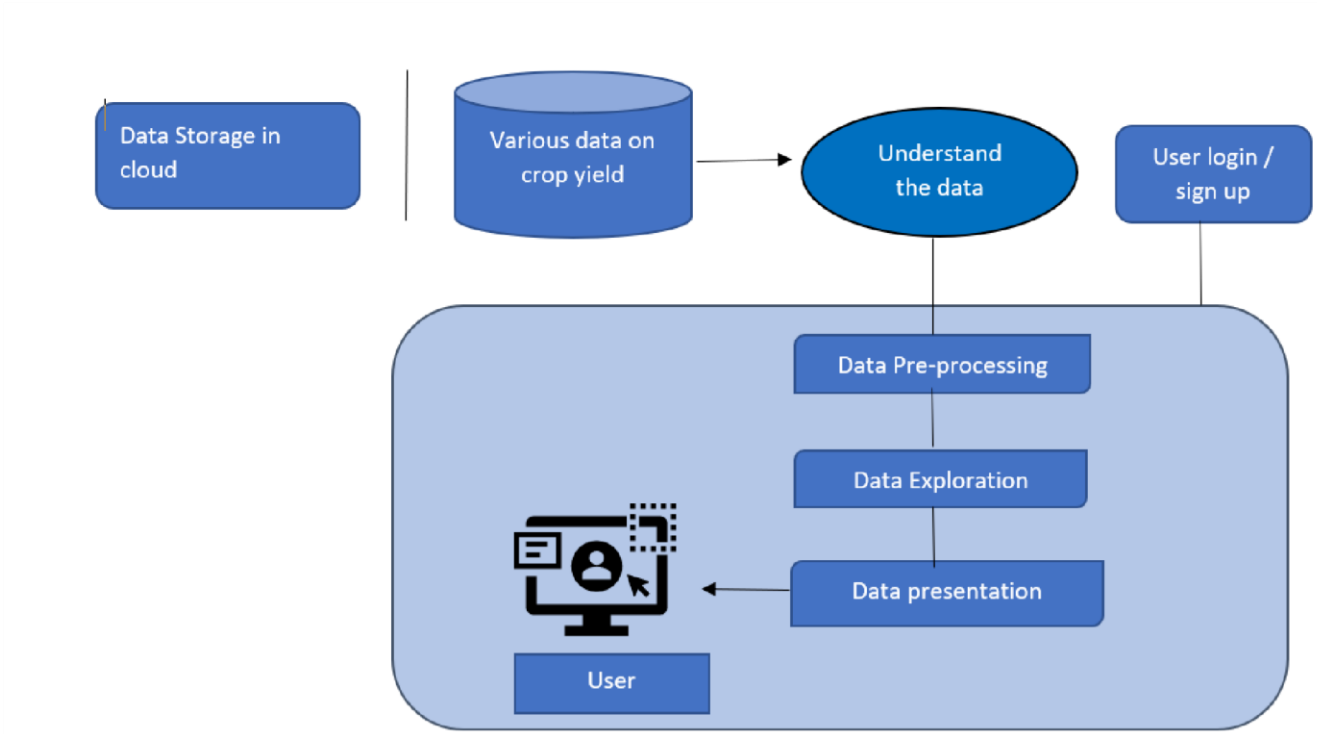

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chat bot etc.	IBM Cognos
2.	Application Logic-1	Logic for a process in the application	Java
3.	Application Logic-2	Logic for a process in the application	Cognos Assistant
4.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.

5.	Cloud Database	Database Service on Cloud	CONGOSCS
6.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
7.	External API-1	Purpose of External API used in the application	IBM Cognos Analytics REST API
8.	External API-2	Purpose of External API used in the application	-
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	IBM Cloud – IBM Cognos Analytics

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	IBM Cognos Framework Manager
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Security architecture present with the help of SHA
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Business Intelligent architecture
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Present on cloud and is present on demand
S.No	**Characteristics**	**Description**	**Technology**
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Highly available and fast processing