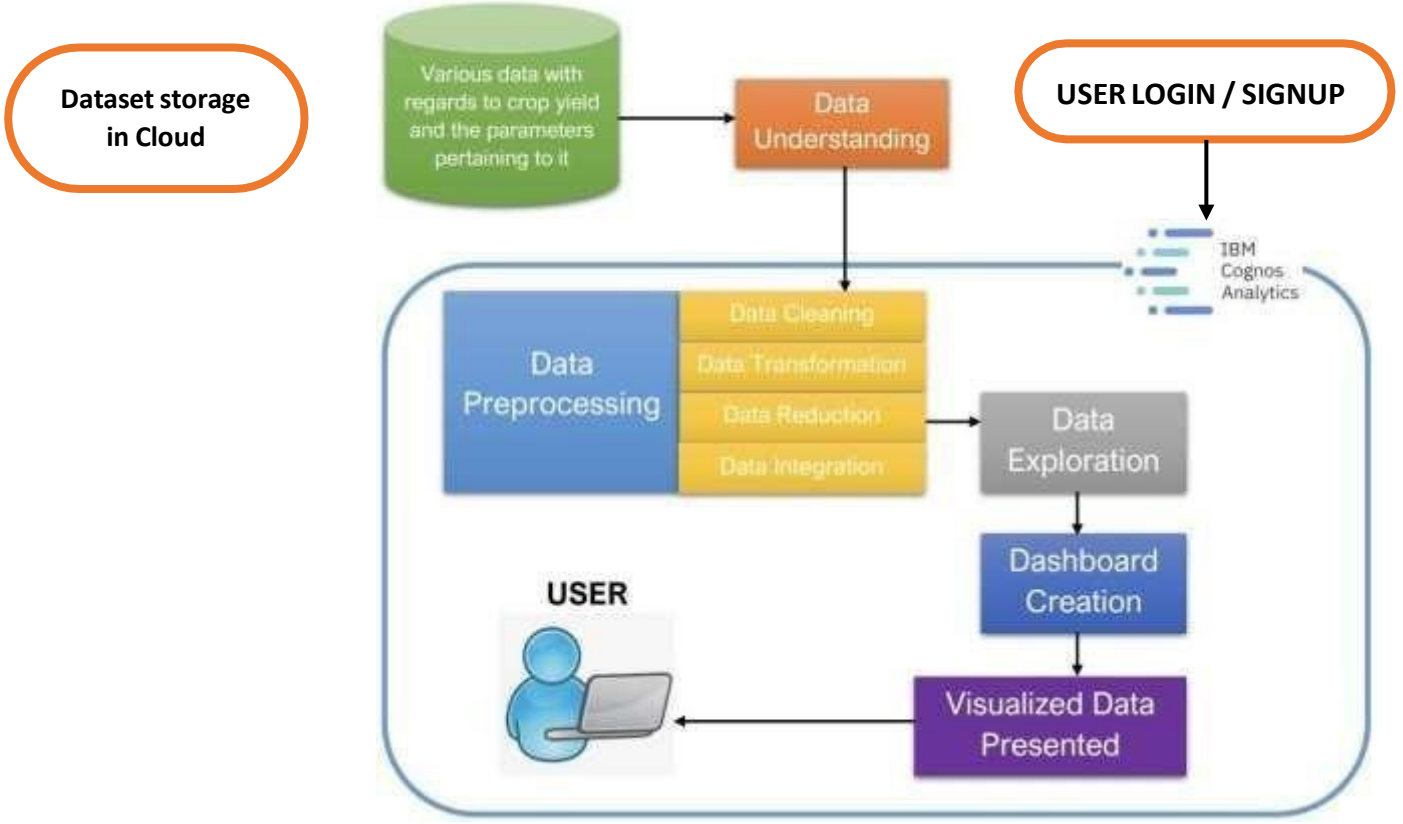
Estimate the Crop Yield using Data Analytics

Project Design Phase-II

Technology Stack (Architecture & Stack)

Technical

Architecture :



IBM COGNOS

USER

&

ADMIN

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
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	COGNOSCS.
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
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
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