

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

Date	13 October 2022
Team ID	PNT2022TMID07696
Project Name	Estimate the Crop Yield Using Data Analytics
Maximum Marks	4 Marks

Technical Architecture :

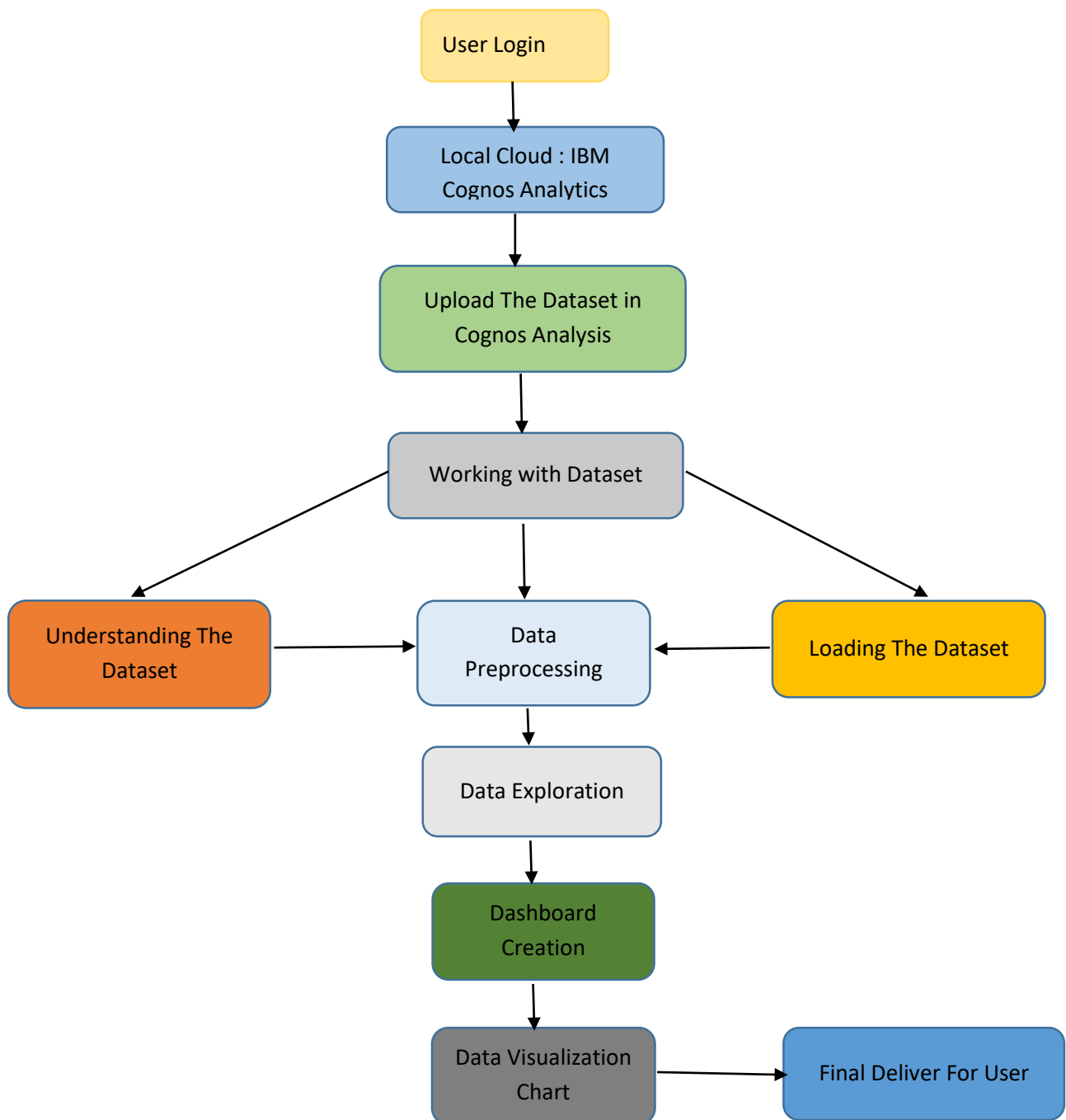


Table-1 : Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI	Data Analytics by Using IBM Cognos
2.	Application Logic-1	Logic for a process in the Web Page	Python
3.	Application Logic-2	Logic for a process in the Web Page	Cognos Assistant
4.	Database	Data Type, Configurations etc.	SQL Database
5.	Cloud Database	Database Service on Cloud	Cognos Analysis
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 Web Page	IBM Cognos Analytics REST API
8.	External API-2	Purpose of External API used in the Web Page	-
9.	Infrastructure (Server / Cloud)	Web Page 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, Microservices)	Business Intelligent architecture
4.	Availability	Justify the availability of Web Site (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 Web Site (number of requests per sec, use of Cache, use of CDN's) etc.	Highly available and fast processing