PROJECT WORKSPACE - 2

TECHNOLOGY STACK AND ARCHITECTURE

Team ID	PNT2022TMID03372
Project Name	Estimate the 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

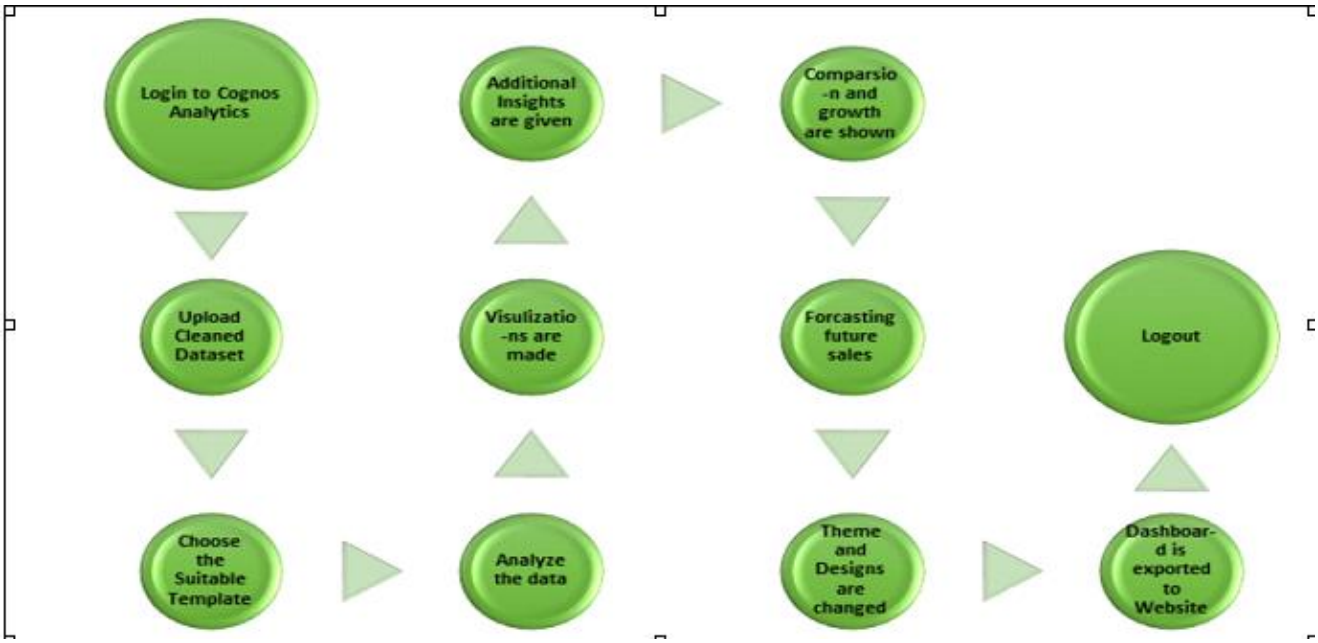

TABLE 1: COMPONENT AND TECHNOLOGIES

S. NO	COMPONENT	DESCRIPTION	TECHNOLOGY
1.	USER INTERFACE	How user interacts with website e.g., Web UI	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	IBM Cognos	Data analytics platform and to create a database.	IBM Assistant, Python
3.	Cloud Database	Database Service on Cloud.	IBM DB2, IBM Cognos etc.
4.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
5.	Support vector machine	To choose the right crop to the area and climatic condition	IBM Assistant, Python
6.	Application Logic-1	Logic for a process in the application	Java / Python
7.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
8.	Application Logic-3	Logic for a process in the application	IBM Cognos Watson
9.	External API-1	Purpose of External API used in the website	IBM Weather API, etc
10.	External API-2	Purpose of External API used in the website	Aadhar API, etc.
11.	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	Technology of Open-source framework Bootstrap, React etc.,
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g., SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Microservices)	Support vector machine
4.	Availability	Justify the availability of website	Python- Anaconda
5.	Performance	Multiple technologies and services that will improve the usability in agricultural activitie	Python and other languages