

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

Date	18 October 2023
Team ID	NM2023TMID09431
Project Name	AQUATIC INSIGHTS: COGNOS POWERED WATER PORTABILITY ANALYSIS
Maximum Marks	4 Marks

Technical Architecture:

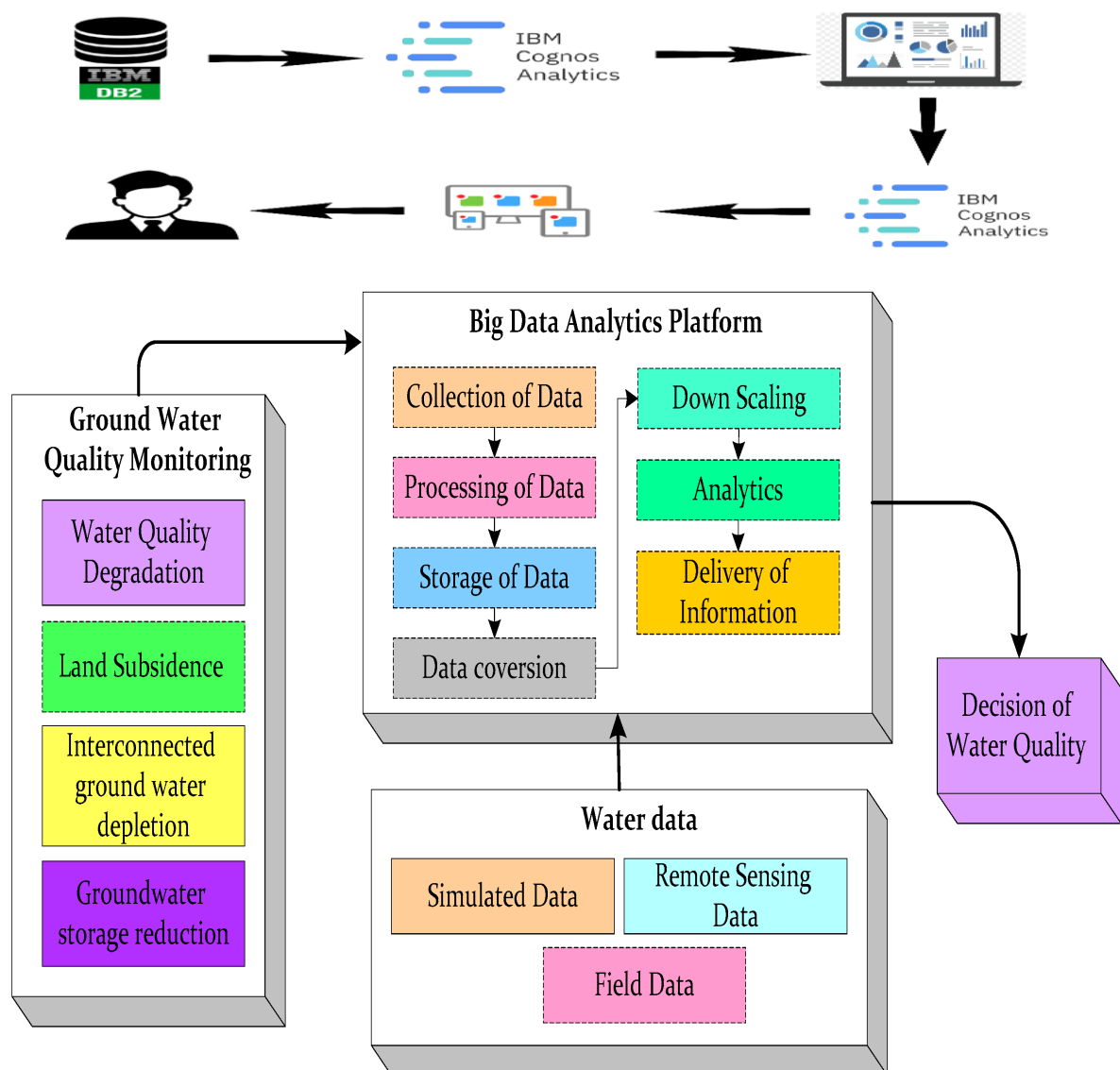


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web Application	HTML,CSS,JAVA Script
2.	Application Logic-1	Enable features	IBM Cognos Analytics
3.	Application Logic-2	Load datasets	IBM Cognos Analytics
4.	Application Logic-3	Update information	IBM Cognos Analytics
5.	Database	Configurations	IBM
6.	Cloud Database	Database Service on Cloud	IBM Cloud
7.	File Storage	Dataset and file Storage	IBM Cognos
8.	External API-1	Enable Geo Location	IBM Geo location API
9.	External API-2	Application Interface	Java API
10.	Machine Learning Model	Regression	Cognos Analytics
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	IBM Cognos Analytics

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	The frameworks promote collaboration, innovation, and community-driven development.	IBM Cognos, JavaScript,
2.	Security Implementations	Robust security implementations are essential to safeguard sensitive information and ensure the integrity and confidentiality of data.	Django, Flask
3.	Scalable Architecture	Scalability can be achieved through techniques such as load balancing, horizontal or vertical scaling, and cloud-based solutions.	IBM Cloud
4.	Availability	High availability ensures that users can access applications and data without interruptions.	MySQL
5.	Performance	High-performance systems can process tasks quickly, handle concurrent user requests efficiently, and deliver optimal response times.	IBM Cognos