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

Team ID	PNT2022TMID06270
Project Name	Natural Disaster Intensity Analysis and Classification Using Artificial Intelligence
Maximum Marks	4 Marks

Technical Architecture:

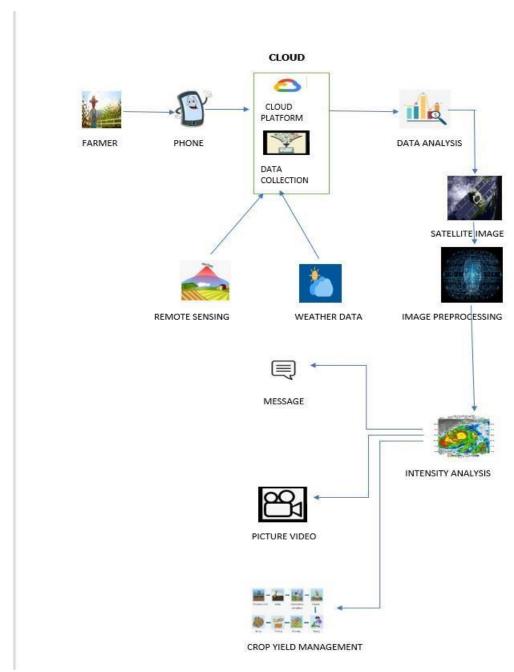


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1	Website	Customer can proceed the website and interact with the chatbot to get the desire product	HTML, CSS, JavaScript, chatbot
2	Docker	Service for storing the private container images	Container
3	IBM Object Storage	Bucket are used to upload the images and files	Bucket
4	Kubernetes	Manage the complete process in the stable state If any software crash it automatically restart the work	Kubernetes
5	DB2	Data types are String, Numeric, Date, time, and timestamp distinct types. Act_ sortmem_ limit, auto_ del_ rec _ obj, auto_ maint Configuration.	•
6	Cloud DB2	A fully managed cloud database with Al capabilities that keep our website running 24*7.	IBM DB2
7	Watson chatbot	Customers can search the product easily by human-like interaction with bot.	IBM Watson Assistant
8	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Anaconda Cloud Sever Configuration: IBM cloud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1	Open-Source	Cloud Stack Eucalyptus.	Docker
	Framework	Open Nebula, App Scale, Docker.	
2	Security	Authentication and password management	Encryptions, Secured
	Implementations	Accountability to authorize and monitor the use	Authorization.
		anonymous accounts and to remove	
3	Scalable	To expand our server capacity, memory, or disc	DB2, Watson chatbot
	Architecture	space so that more people may transact on your	
		website. Chat bots to provide scalable customer	
		support.	
4	Availability	The administrator needs to look up the stock	Docker
		availability in the database	
5	Performance	Speed up the webpage	Kubernetes
		Site optimization based on data analysis.	