

Project Design Phase-II

Technology Stack (Architecture & Stack)

Team ID	PNT2022TMID21021
Project Name	Emerging Methods for Early Detection of Forest Fires
Maximum Marks	4 Marks

Technical Architecture

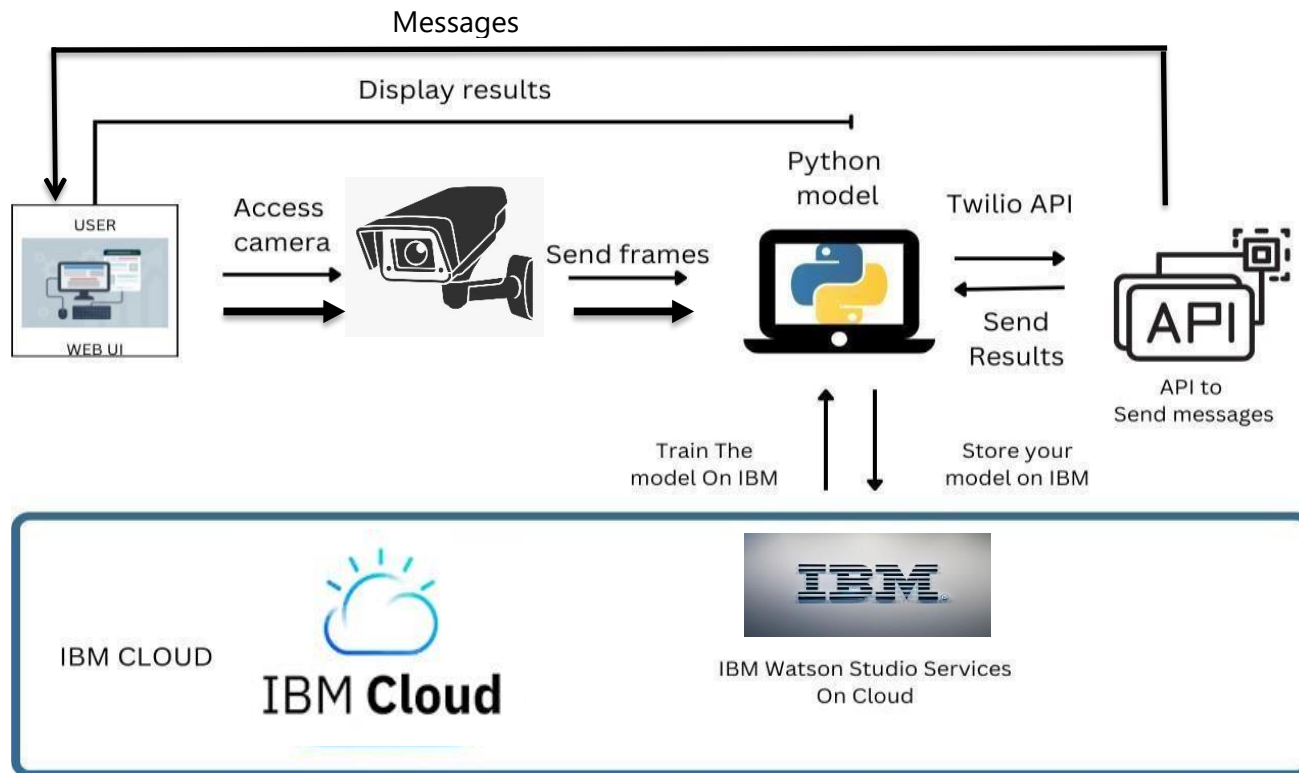


Table-1:**Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. sensor based system,application based system	Python/HTML ,CSS , Java script and react Js
2.	Input	Video Feed	Web Camera/Video on a site
3.	Application Logic-1	Logic for a process in the application e.g: registration process.	Python
4.	Application Logic-2	Logic for a process in the application e.g registration process successful then go to login process	Python
5.	Dataset	Using Test set and Train set, train the model	Data set from Cloud Storage, Database
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	Infrastructure (Server / Cloud), API	Application Deployment on Local System /Cloud Local,Cloud Server Configuration.	Local, Cloud Foundry, Kubernetes, etc.

Table-2:

Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	open-source frameworks used.	Technology of Opensource framework
2.	Security Implementations	Mandatory Access Control (MAC) and Preventative Security Control is used	e g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	scalability of architecture e g: early alarm in real time when the forest occurs.	Technology used
4.	Availability	availability of application (e g. customer service and support to the mobile)	Technology used
5.	Performance	Enhance the performance by using IBM CDN	IBM Content Delivery Network