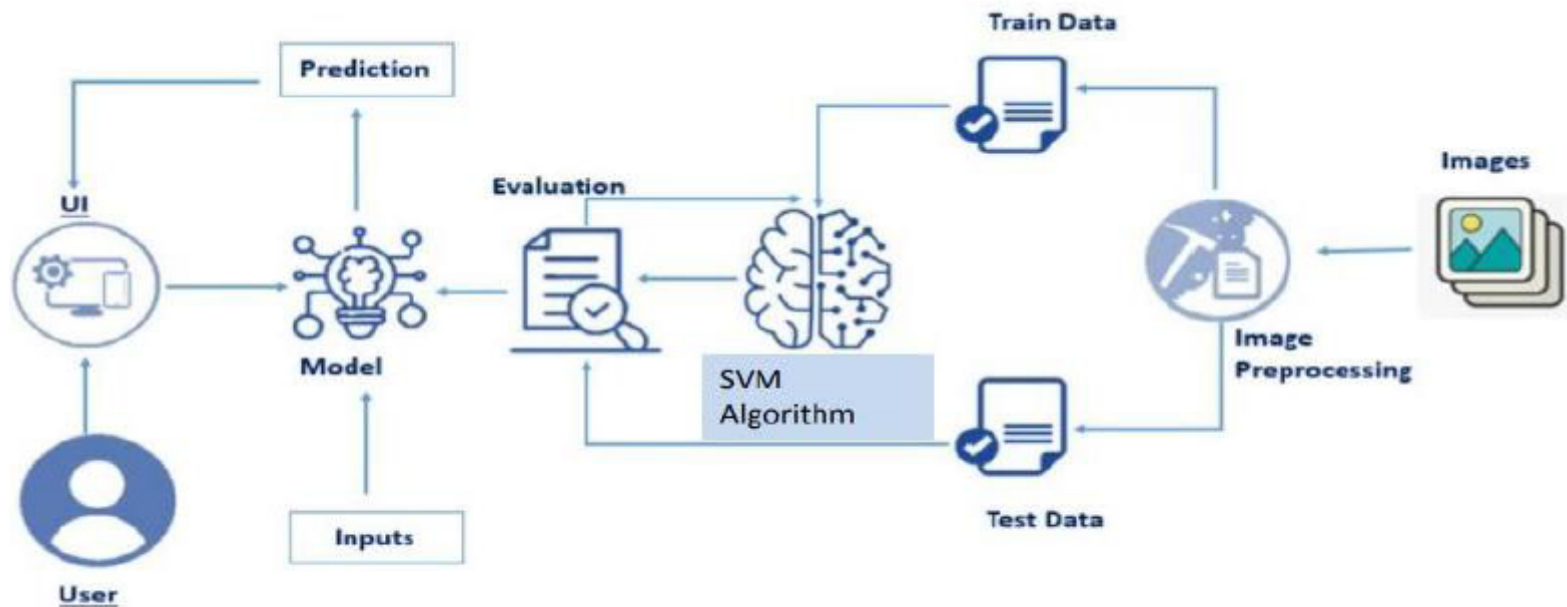


Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	25 October 2022
Team ID	PNT2022TMID12393
Project Name	Fertilizer Recommendation System for Disease Prediction
Maximum Marks	4 Marks

Technical Architecture:



Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application to depict the human - computer interaction and communication	HTML, CSS, JSP, Javascript
2.	Application Logic-1	A page to upload images as input	Python
3.	Application Logic-2	To use the Machine Learning model to predict the result	Python
4.	Database	Structured Data - Images	MySQL
5.	Cloud Database	Database that typically runs on a cloud computing platform and access to the database that is provided as a service	IBM Cloud database for MySQL
6.	File Storage	To store data in a hierarchical structure	Local File System
7.	Machine Learning Model	Here we use Support Vector Machine Algorithm that is used widely in classification and regression problems.	Random Forest, XG Boost

Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask Micro Web Framework	Written in Python. It is classified as a micro framework because it does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where pre existing third-party libraries provide common functions
2.	Security Implementations	With all aspects of the job, including detecting malicious attacks, analyzing the network, endpoint protection and vulnerability assessment, Sign in encryption	IBM Cloud App ID services
3.	Availability	Available for all data sizes	
4.	Performance	Can extend the storage according to our need	Python, Angular JS