

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

Date	7 th November 2023
Team ID	Team-592277
Project Name	End-To-End Deep Learning Project For Detecting Melanoma Diseases.
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

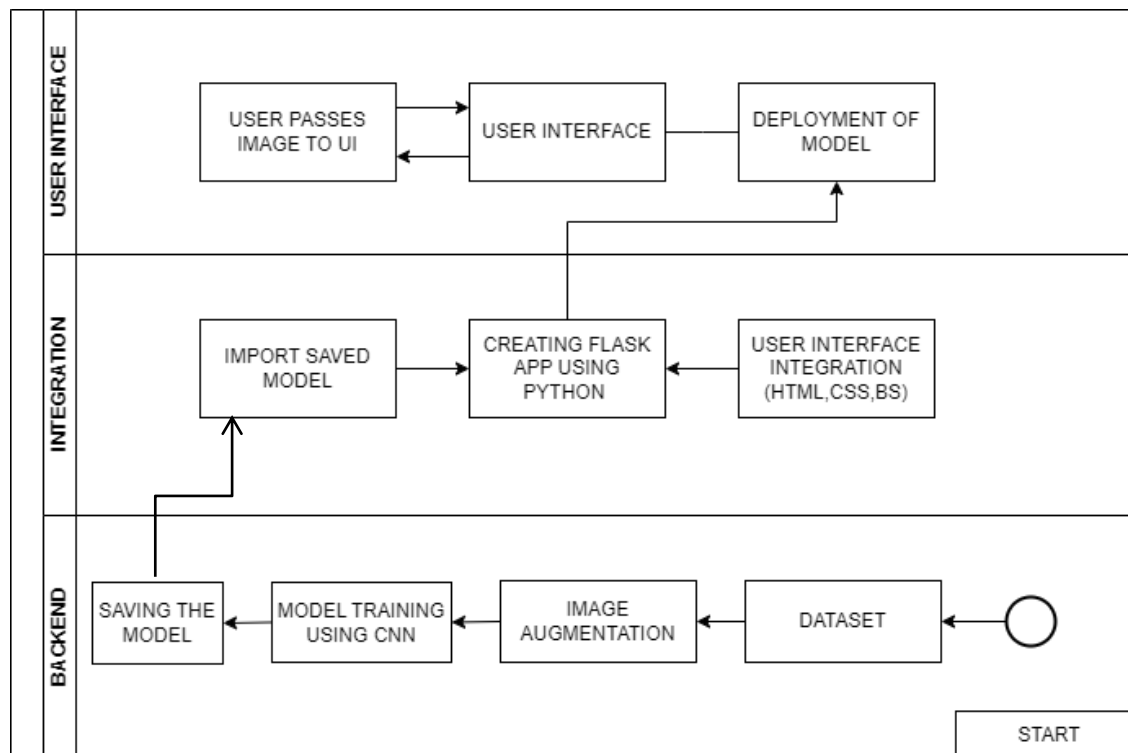


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g.Web UI	HTML, CSS, JavaScript / Angular Js /React Js
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Database	Collect the Dataset Based on the Problem Statement	File Manager,MySQL, NoSQL,
4.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant.
5.	File Storage	File storage is required for storing data	Google Drive,Local Filesystem,
6.	Frame Work	Used to Create a web Application, Integrating Frontend and Back End	Python Flask, Django.
7.	Deep Learning Model	Purpose of Model	Object Recognition Model,
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System / CloudLocal Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented,use of firewalls etc.	SHA-256, Encryptions, IAMControls, OWASP
3.	Scalable Architecture	Justify the scalability of architecture	Improving the dataset
4.	Availability	Justify the availability of application	Kaggle datasets and multiple papers available on the web
5.	Performance	Design consideration for the performance of the application	HTML, CSS, and PHP

References:

<https://www.kaggle.com/datasets/kmader/skin-cancer-mnist-ham10000>

<https://www.kaggle.com/datasets/fanconic/skin-cancer-malignant-vs-benign>