

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

Date	29 October 2023
Team ID	Team-592681
Project Name	Early Diagnosis Of Diseases Using Image processing Of Human Nails
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table2

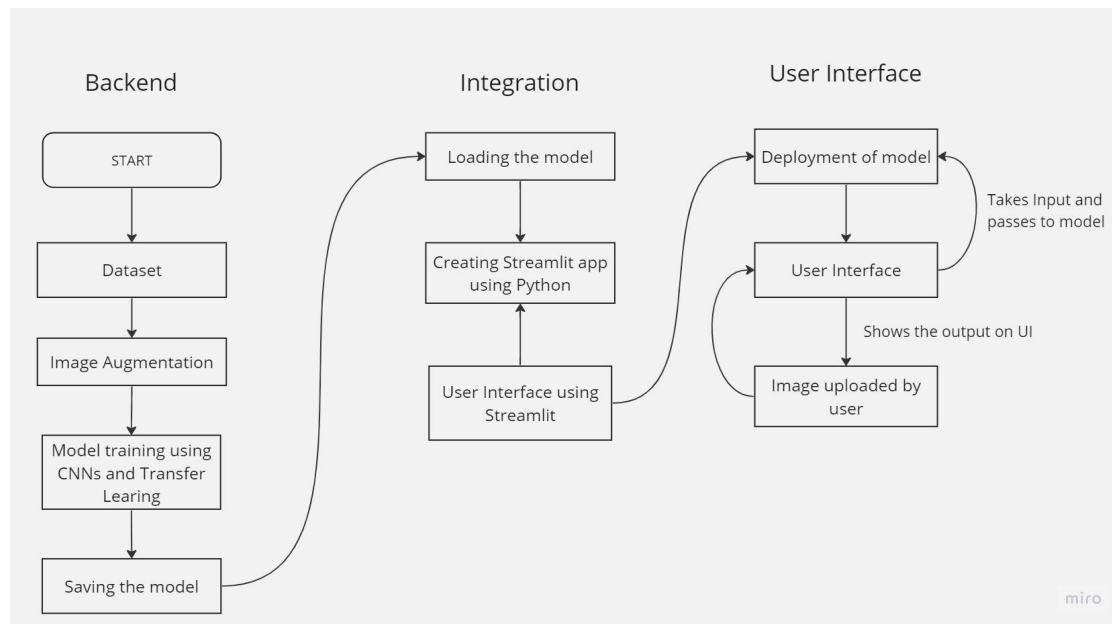


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application	Streamlit
2.	Application Logic-1	Used to make augment images and train out model	Python
3.	Database	Collecting Dataset based on the problem statement	File Manager
4.	File Storage /Data	File storage requirement for storing data	Local system, Google Drive
5.	Framework	Used to Create a web Application, Integrating Frontend and Back End	Streamlit
6.	Deep Learning Model	Purpose of Deep Learning Model	Object classification using CNNs and Transfer Learning
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Streamlit
2.	Security Implementations	List all the security / access controls	e.g. SHA-256, Encryptions,

		implemented, use of firewalls etc.	IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used

S.No	Characteristics	Description	Technology
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used

References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>