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

Date	06 May 2023
Team ID	NM2023TMID17565
Project Name	Project - Intelligent Garbage Classification Using Deep Learning

Technical Architecture:

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

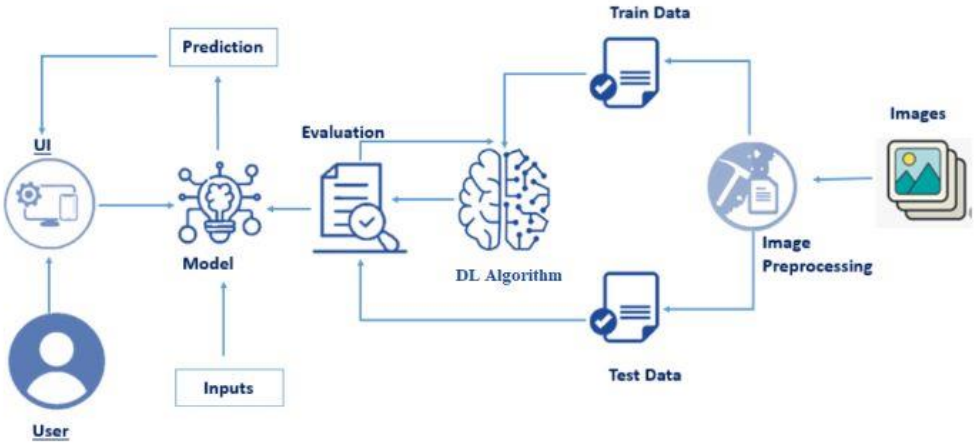

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The web page allows us to choose between file locations and the predictor	HTML, CSS, Bootstrap
2.	Webpage Logic	The App.py file	Python
3.	File Storage	File storage requirements	Local Filesystem
4.	Deep Learning Model	Classification of garbage using AI	Convolutional Neural Network algorithm
5.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: PyCharm Cloud Server Configuration :	FLASK

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	FLASK, TensorFlow, NumPy, keras, pandas, scikit image	Technology of Opensource framework
2.	Performance	Fast running implementation	Technology used

References:

https://c4model.com/

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

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

https://www.w3schools.com/js/DEFAULT.asp

https://www.youtube.com/watch?v=5mDYijMfSzs

https://thesmartbridge.com/documents/spsaimldocs/CNNprep.pdf