PROJECT DESIGN BASE-2
TECHNOIOGY STOCK

Team ID	PNT2022TMID17708
Project Name	Project - A Novel Method For Handwritten Digit Recognition System
Maximum Marks	4 Marks

Prediction

UI

Evaluation

Image Data

Train Data

Model

DL Algorithm

Inputs

Data
Preprocessing

Test Data
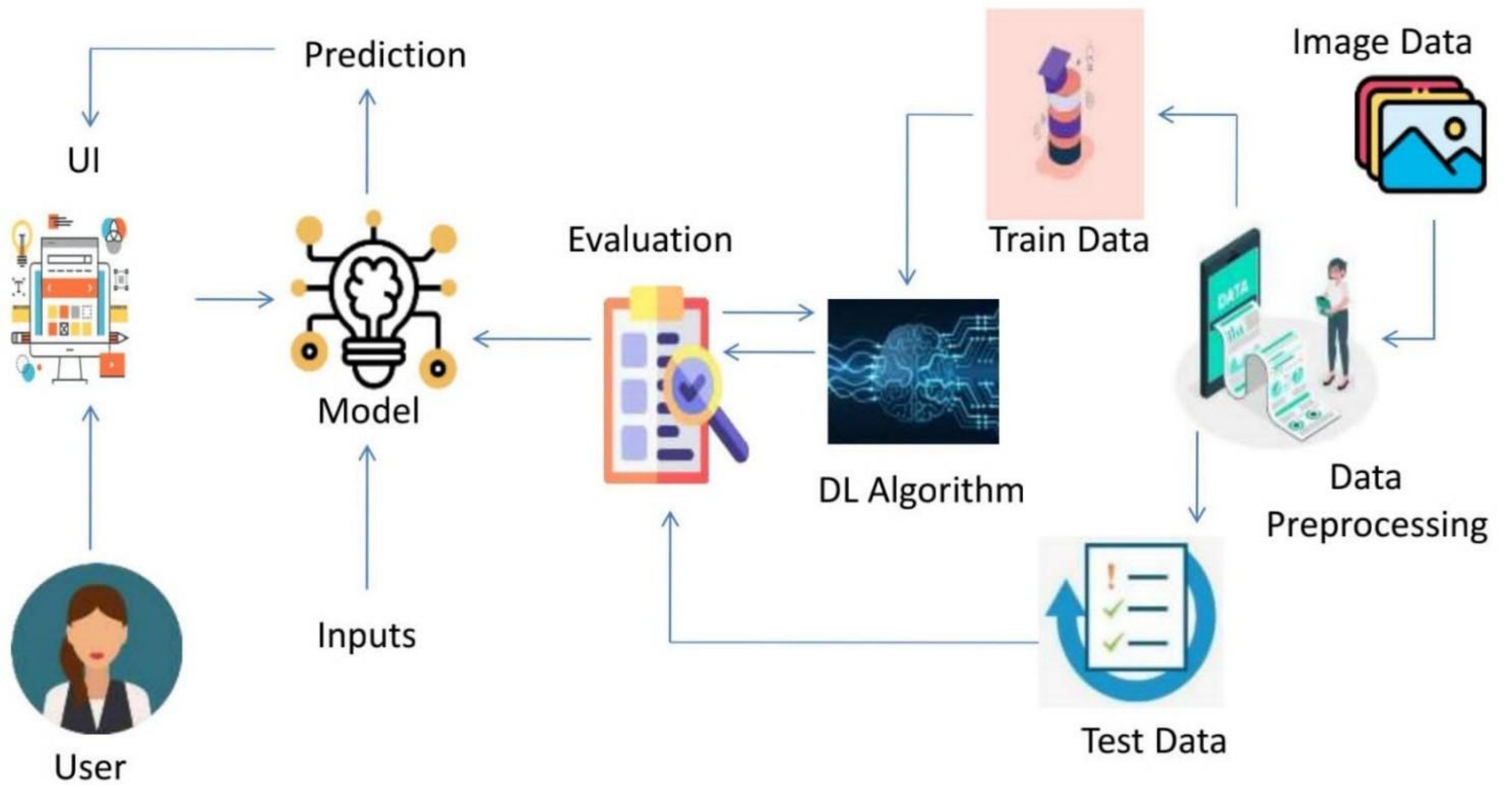
User

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	user interfaces with application for the recognition of the handwritten digits	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Java / Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	digits dataset will be stored	MINIST dataset
6.	Cloud Database	Database Service on Cloud	IBM watson cloud.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API
10.	Machine Learning Model	image processing ,data visualisation and evaluation	CNN, ANN ,RNN.
11.	Infrastructure (Server / Cloud)	cloud base web application:	cloud application

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Notification and redistribution	linux,python
2.	Security Implementations	request for authentication using encryption	encryption algorithm
3.	Scalable Architecture	the behaviour of the application must be correct and predictable	HTML,IBM CLOUD
4.	Availability	The web dashboard must be available to users	IBM CLOUD HOSTING
5.	Performance	To support 10,000 visits at the sametime while maintaining optimal performance	IBM load balancing