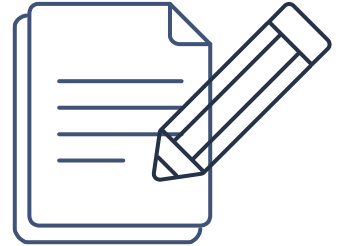# Handwritten Essay Marking Software

Group 10

OUR TEAM

Haritha Gunarathna
E/18/118

Shehan Madhusanka
E/18/203

Madhushan Prasanna
E/18/264

Are you tired of grading handwritten essays?

PROBLEM IDENTIFICATION

- Marking numerous handwritten essays manually can be a daunting task

- Time-consuming manual process

- Inconsistent essay marking

- Bias and Human Error

" Design and develop a web interface to automate the process of grading handwritten essays by leveraging machine learning algorithms while ensuring fairness and consistency in evaluations.
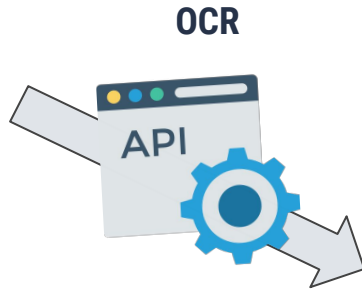
OBJECTIVES

- Develop a user friendly web interface to display the results

- Develop a ML model to auto grade the essays considering the following criteria

  - ▷ Grammer
  - ▷ Spelling
  - ▷ Relevance
  - ▷ Typography
  - ▷ Duplication

- Predict the grade with acceptable accuracy
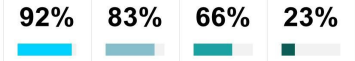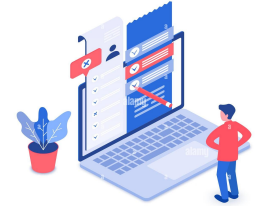
- Maintain an up-to-date database

SOLUTION ARCHITECTURE

Essay Image

OCR

Digital Document
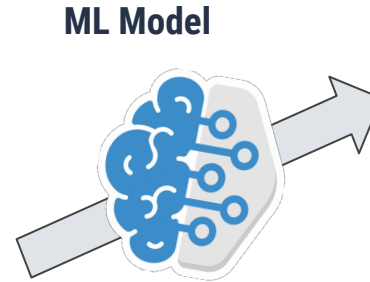
ML Model

Results On Web Interface

92% 83% 66% 23%

Handwritten Essay Marking Application

Register

Authorize accessing

<<include>>

<<include>>

<<extend>>

<<extend>>

Login

Display Authorization Errors

Upload Essay Image

View Grades

View logs

Teacher

Student

Developer

USER FRIENDLY
WEB INTERFACE

AUTOMATIC
GRADING

FEATURES

LOGGING
MECHANISM FOR
DEBUGGING

SECURE LOGIN
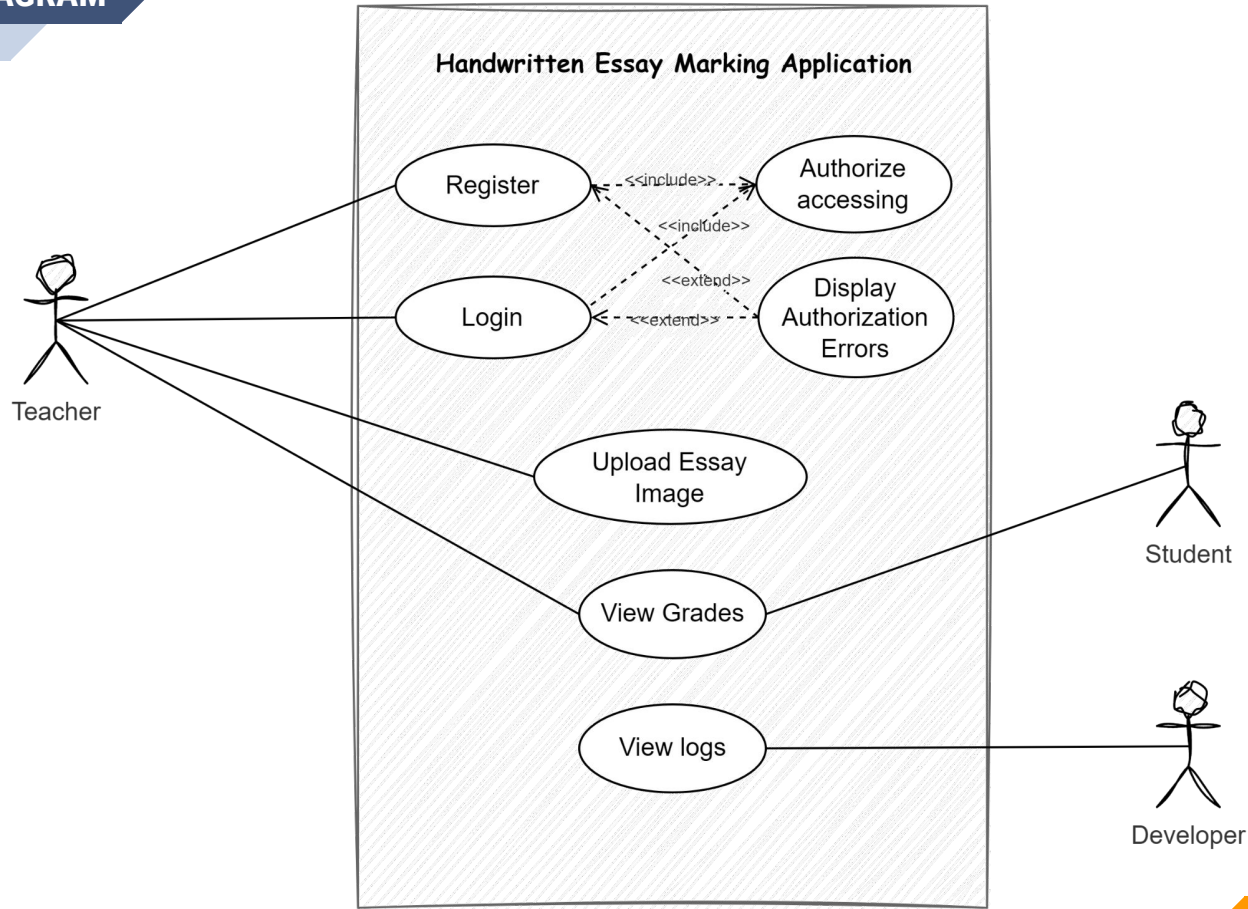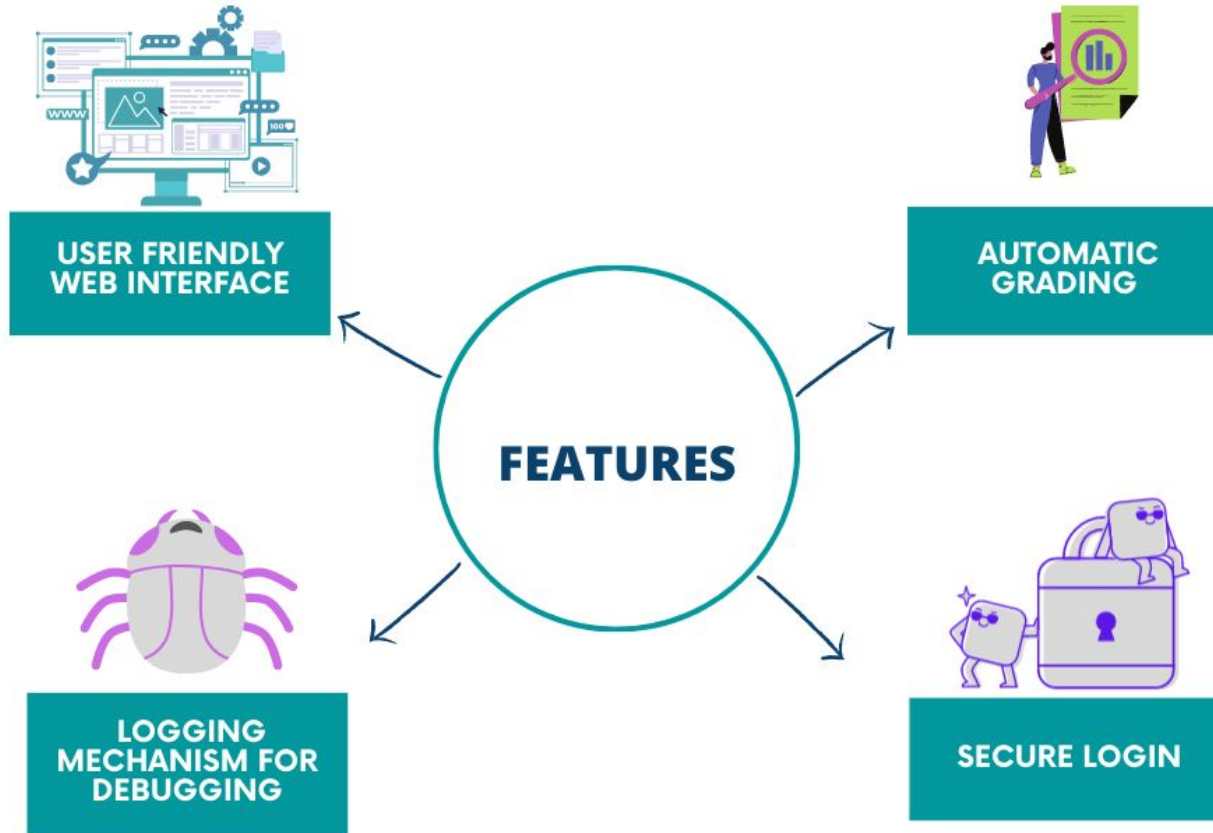
📌 TOOLS & TECHNOLOGIES

Runtime Environment

Frontend Framework

Cloud Service

ML Model Development

Backend Framework

Database

Optical Character Recognition

Libraries

TIMELINE

WEEK	7	8	9	10	11	12	13	14
Research related to similar work	■							
Collect data to train ML Model		■						
Choosing Technology Stack		■						
Building the ML model		■	■	■	■	■		
Developing front end of the web UI			■	■				
Testing			■	■	■	■		■
Training the ML model with test data				■	■	■		
Developing the back end of the web UI				■	■	■	■	
Validating the ML model							■	
Deployment of web app in cloud							■	
Completion of the project								■

FURTHER DEVELOPMENTS

- Incremental learning while providing services

- Providing feedback alongside the grades

- Plagiarism Checker

STRENGTHS & SKILLS

- UX/UI Designing

- Web Development

- Cloud Deployment

- Machine Learning

- Project Management

THANK YOU !

ANY QUESTIONS ?