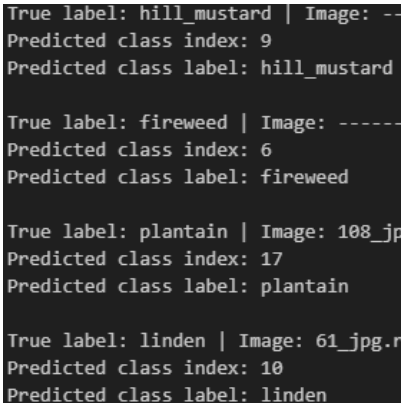
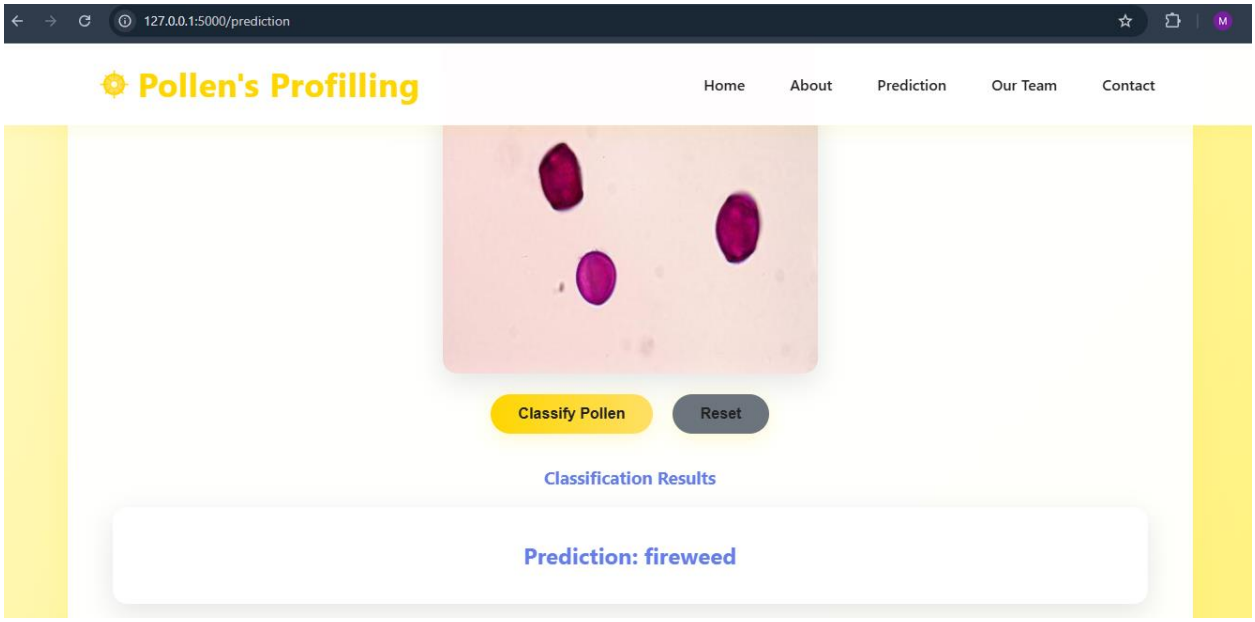
# Project Report Format

1. **INTRODUCTION**
   - 1.1 Project Overview
   - 1.2 Purpose
2. **IDEATION PHASE**
   - 2.1 Problem Statement
   - 2.2 Empathy Map Canvas
   - 2.3 Brainstorming
3. **REQUIREMENT ANALYSIS**
   - 3.1 Customer Journey map
   - 3.2 Solution Requirement
   - 3.3 Data Flow Diagram
   - 3.4 Technology Stack
4. **PROJECT DESIGN**
   - 4.1 Problem Solution Fit
   - 4.2 Proposed Solution
   - 4.3 Solution Architecture
5. **PROJECT PLANNING & SCHEDULING**
   - 5.1 Project Planning
6. **FUNCTIONAL AND PERFORMANCE TESTING**
   - 6.1 Performance Testing
7. **RESULTS**
   - 7.1 Output Screenshots






## 8. ADVANTAGES & DISADVANTAGES

### ✔ Advantages:

- Saves time
- Accurate predictions
- Easy to use

### ✔ Disadvantages:

- Depends on dataset quality
- Needs internet if deployed online
- Misclassification if image quality is poor

## 9. CONCLUSION

Pollen's Profiling is a deep learning-based project that automatically identifies and classifies pollen grains from images. It replaces manual identification, which is slow and requires expert knowledge. The system uses a CNN model to predict the type of pollen quickly and accurately. It also includes a simple web interface where users can upload images and get instant results. This

solution saves time, improves accuracy, and helps researchers, students, and farmers in their work.

10. **FUTURE SCOPE**

- Add more pollen types
- Convert to a mobile app
- Use advanced AI models
- Deploy globally with cloud hosting

11. **11. APPENDIX**

Source Code(if any)

Dataset Link

https://www.kaggle.com/datasets/nataliakhanzhina/pollen20ldet?utm_source=chatgpt.com

GitHub & Project Demo Link

https://github.com/EduriMaryJones/Pollen-s-Profiling-Automated-Classification-of-Pollen-Grains.git