

Insect Identification System

Team Tropicana

(Ashwin Rajasankar)



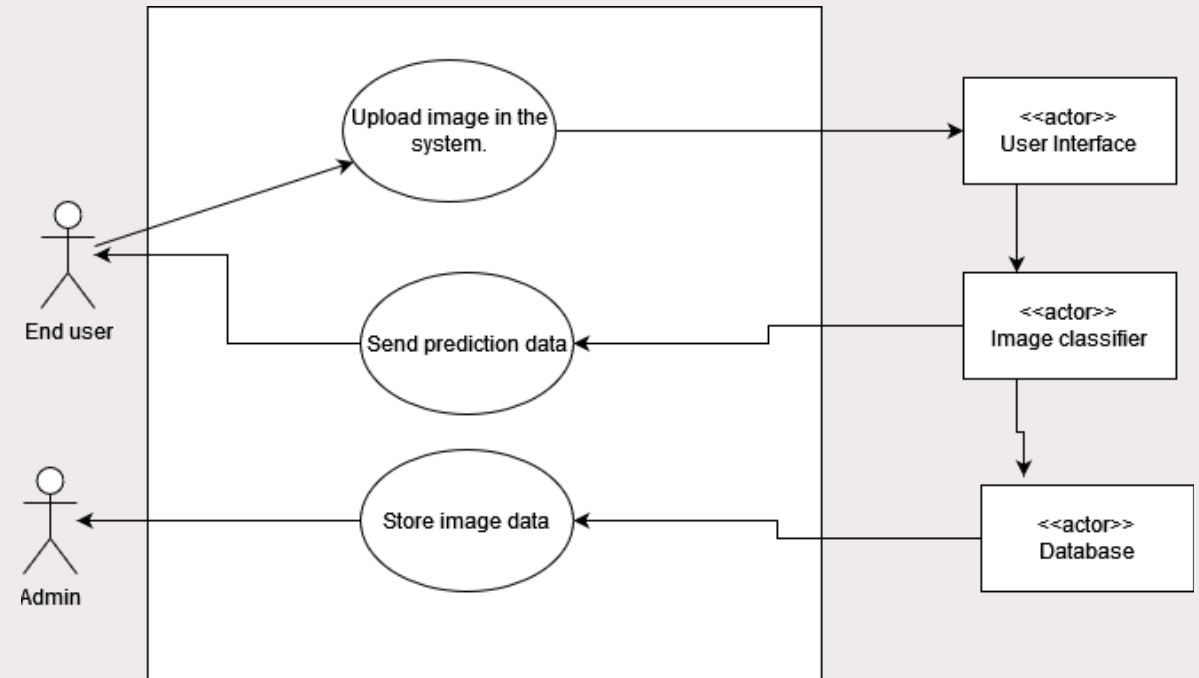
Introduction



An application to identify insects using image processing.



Created using Python and React.



Why?

- There are around 900,000 species of insects in the world (80% of world's species).
- Identifying them manually is not an easy task for a person who is not an entomologist or doesn't have prior knowledge about insects.
- Some insects could destroy entire gardens and fields, if left unchecked.



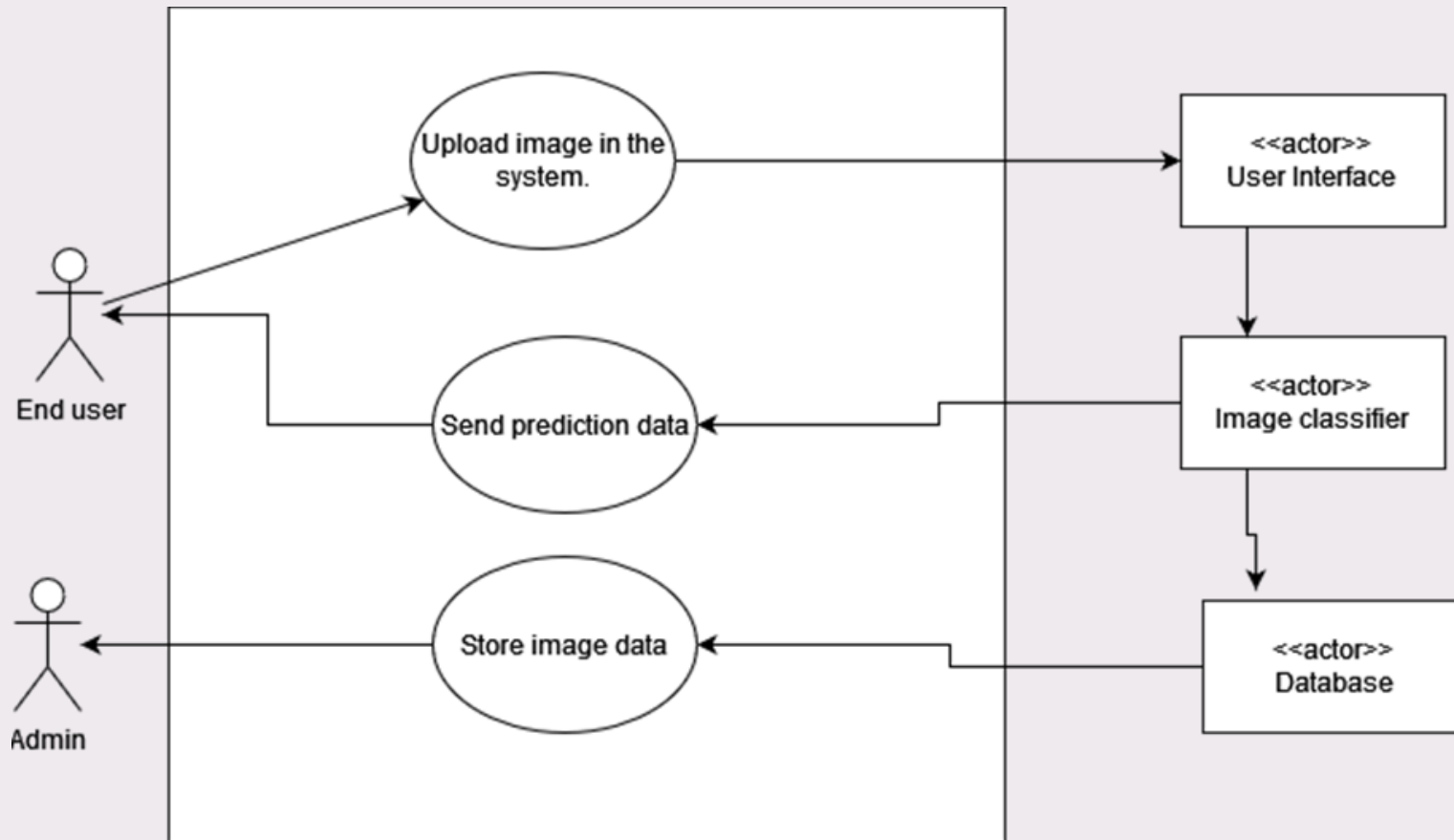


Who?

- The project aims to assist farmers, gardeners, bug enthusiasts and nature lovers who want to find the ID of a bug.



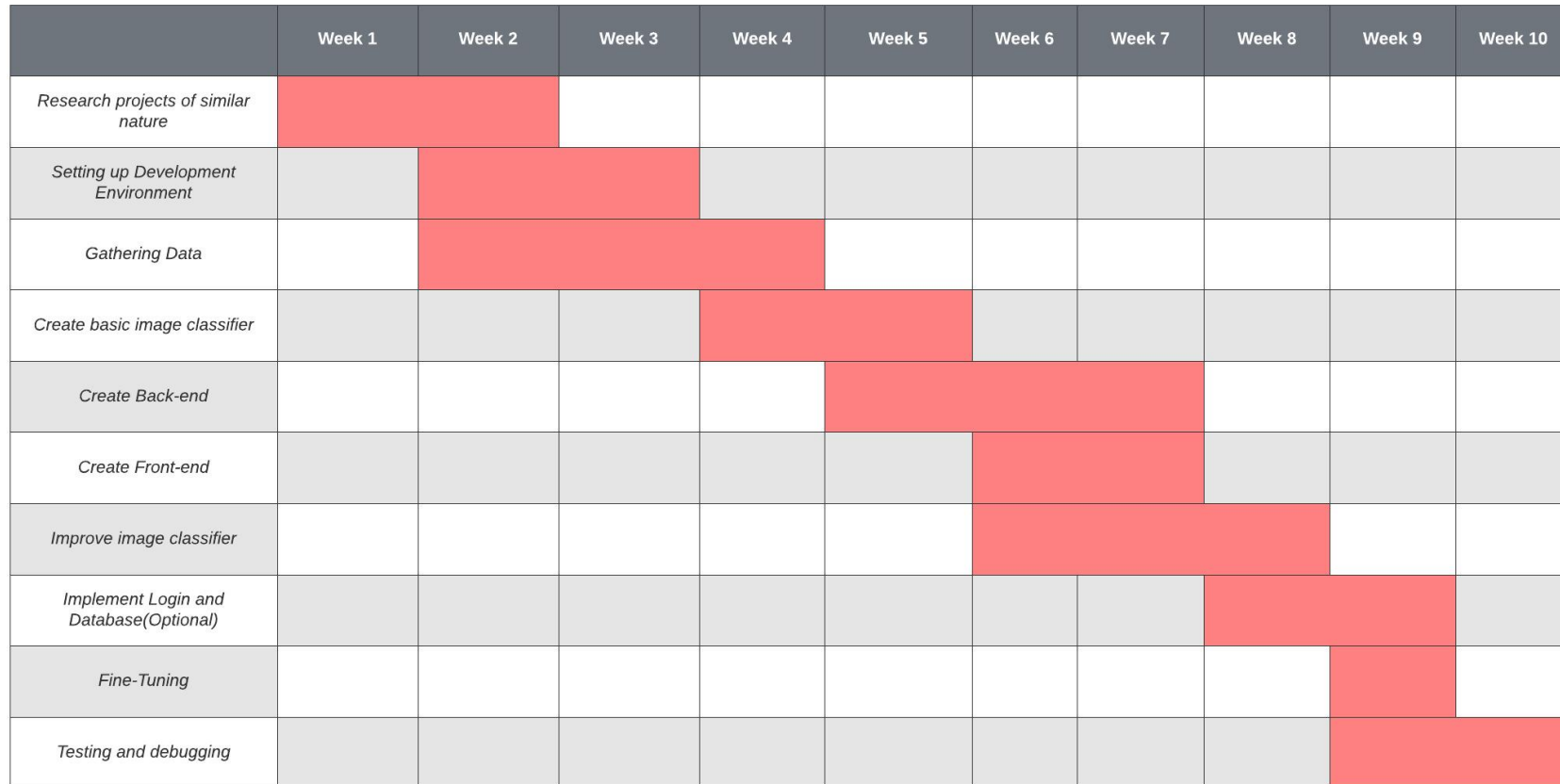
Use case diagram



Gantt chart

Gantt chart

Ashwin | October 19, 2021



Legend: Ashwin
Rajasankar

Updates since midterm



Django backend completed.



React frontend completed.



Additional species of insects added to the classifier.



Feature to save image data to the database.

Change management plan

Training

- Demo
- Q&A session
- Hands-on training

Integration

- Portable and easy to deploy
- Easy to use
- Q&A on deployment

Issue Resolution

- User feedback portal
- Frequent bug fixes

DEMO



Future updates



1

Improving
accuracy of the
image classifier.

2

Improving
frontend design.

3

Implementing
user login.

4

Adding more
domain/region
specific datasets.

5

Fix bugs.

Running the application

Prerequisites

- Node.js
- Python

To start the React frontend

- `npm start`

To start the Django backend

- `python manage.py runserver`

Detailed information at [README.md](#)

A close-up photograph of a field of tall, golden-brown grasses, likely rice or wheat, during a sunset. The sun is a bright, glowing orb in the upper right corner, casting a warm, golden light across the scene. The sky is filled with soft, wispy clouds in shades of orange, pink, and blue. A faint rainbow is visible in the sky, arching from the sun towards the left. The grasses in the foreground are in sharp focus, showing their intricate textures and colors. The overall mood is peaceful and romantic.

THANK
YOU!!