Insect Identification System

Team Tropicana

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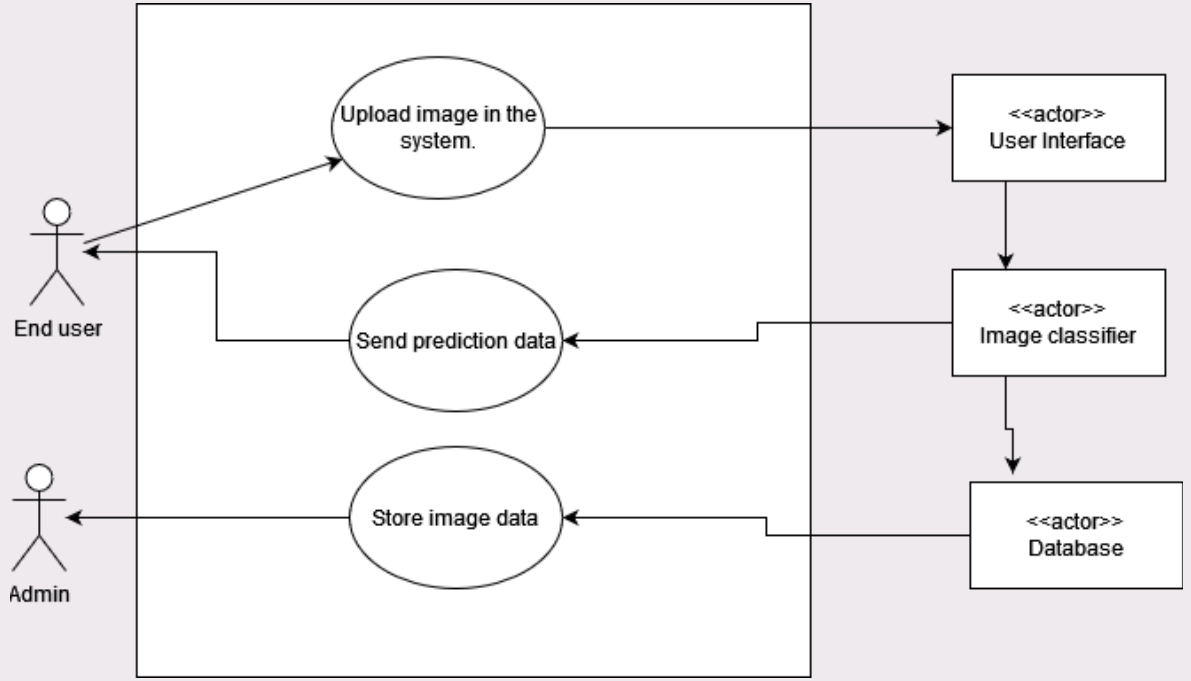
Overview

- Introduction
- Gantt Chart
- Why?
- Who?
- How?
- Use Case Diagram
- Activity Diagram

Introduction

An application to identify insects using image processing.

Created using Python.



Gantt Chart

Gantt chart

Ashwin | October 19, 2021

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Research projects of similar nature										
Setting up Development Environment										
Gathering Data										
Create basic image classifier										
Create Back-end										
Create Front-end										
Improve image classifier										
Implement Login and Database(Optional)										
Fine-Tuning										
Testing and debugging										

Legend: Ashwin Rajasankar

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.

Why?

- Spot the difference

Western conifer seed bug

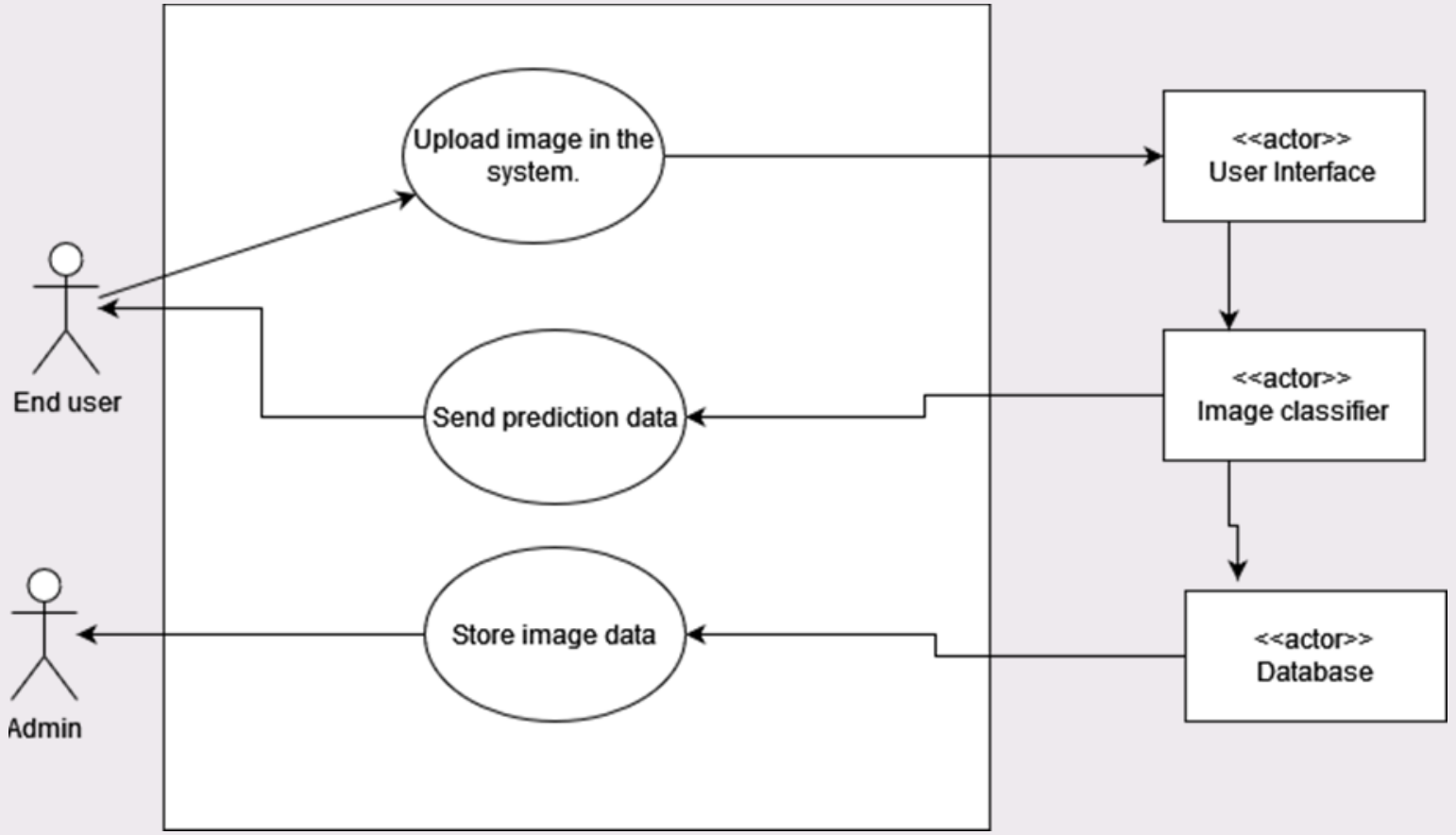
Kissing bug

Leptoglossus zonatus

Who?

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

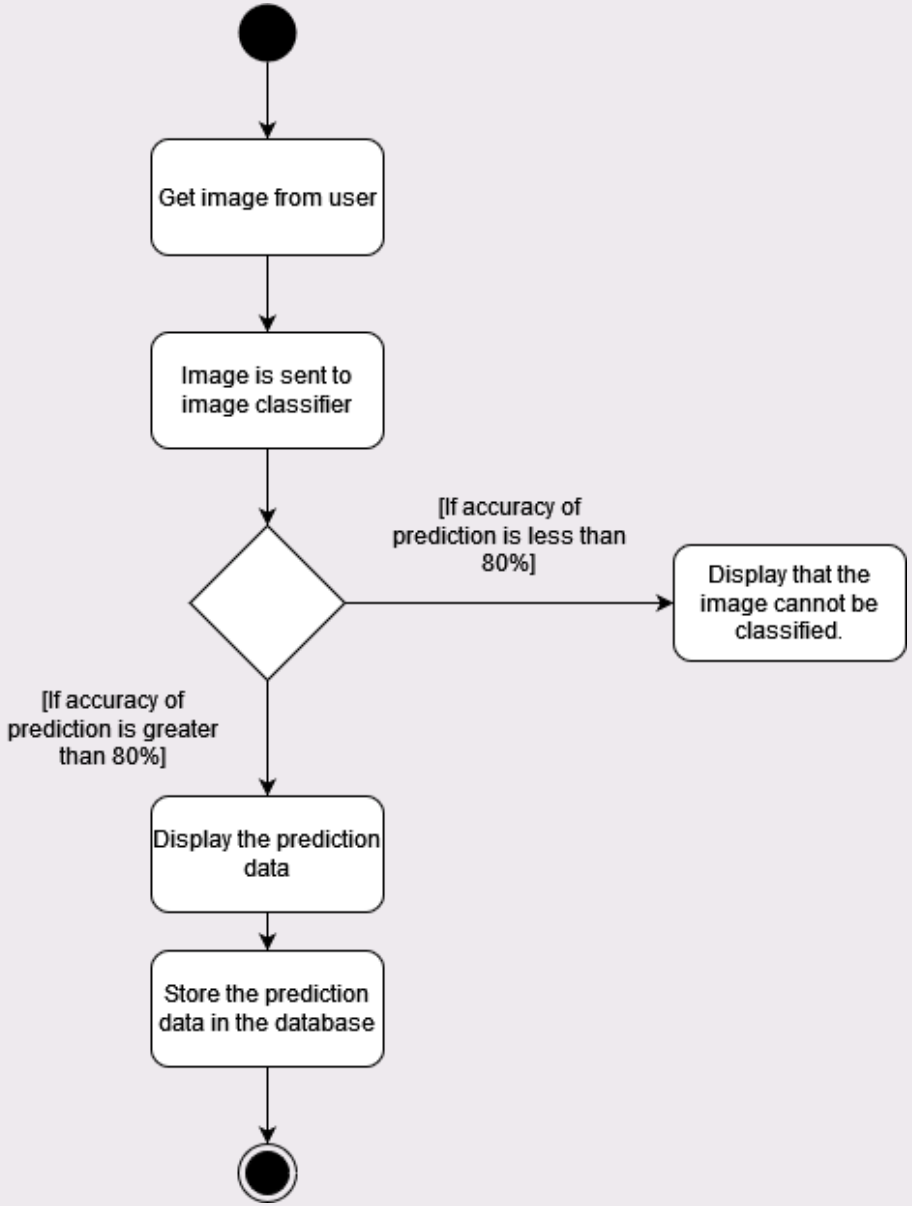
Use Case Diagram



Use Case Description

Name: Send Prediction	ID:1	Importance Level: High
Primary Actor: End User	Use Case Type: Essential	
Stake Holders and Interests: End User: Wants the result of the prediction User interface: Wants the image from the user Image Classifier: Wants the image from the user interface Database: Wants prediction data from the classifier Admin: Wants data from the database		
Brief Description:	This use case describes the process of uploading the image and getting back the results	
Trigger: End User uploads an image Type: External		
Relations: Association: End User, Upload Image, Receive prediction data Include: Extend: Generalization:		
Normal Flow of Events: 1. The end user uploads an image to the user interface. 2. The user interface sends the image to the classifier. 3. The classifier sends the prediction data to the user and also stores it in the database.		
Subflows:		
Alternate/Exceptional Flows		

Activity Diagram




THANK
YOU!!