

Project presentation

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Advantages of our fruit detection app



Enhanced Productivity: Automates the process of identifying different types of fruits, speeding up tasks like sorting and quality control in agricultural operations.



- Educational Tool: Can serve as an educational tool for students and individuals to learn about different fruit varieties and their characteristics, promoting healthier eating habits.



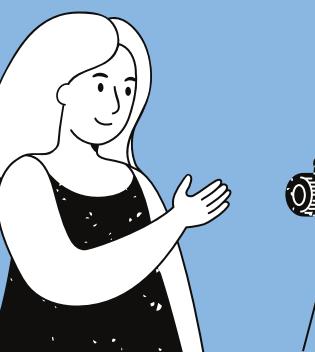
Accuracy and Consistency: Provides consistent and accurate identification of fruits, reducing human error in manual checks and ensuring quality standards are met.



Cost Efficiency: Reduces labor costs associated with manual sorting and identification processes, optimizing resources and potentially leading to financial savings.



- Data Collection and Analysis: Enables detailed data collection about fruit types, quantities, and quality, which can be used for inventory management, trend analysis, and forecasting in supply chains.



Scalability: Easily scalable across different locations and volumes, suitable for use in everything from small farm operations to large agricultural enterprises.

Our program goal and real life examples

The primary goal of the fruit detection app is to utilize image recognition technologies to identify and classify different types of fruits from images automatically. This technology aims to enhance operational efficiency, improve accuracy in fruit sorting and classification, and assist in quality control processes by providing rapid, consistent, and objective assessments.

REAL LIFE EXAMPLES

01.

Agricultural Quality Control: In agricultural production and packing facilities, a fruit detection app can be used to automatically sort fruits based on their type and quality

02.

Supermarket Inventory Management: Supermarkets can use fruit detection apps to manage their fruit inventories more efficiently.

03.

Educational and Consumer Apps: For educational purposes or consumer use, a fruit detection app can help individuals learn about various fruit types, their nutritional values, and best consumption practices.

Instructions to run the program

To run the program, please follow these steps:

- 1)Open Visual Studio Code or your preference compiler.
- 2)Open the Whole file 'Image_Analysis_program' on Visual Studio/preference compiler.
- 3)Navigate to 'gui.py'
- 3)Open a new terminal within Visual Studio Code/your compiler.
- 4)Enter the command 'streamlit run gui.py'
- 5)Executing this command will launch our application in your web browser, where you can upload images by inputting them and view the analysis results.

Examples of inputs:

alexis.jpg

corn.jpg

onion.jpg

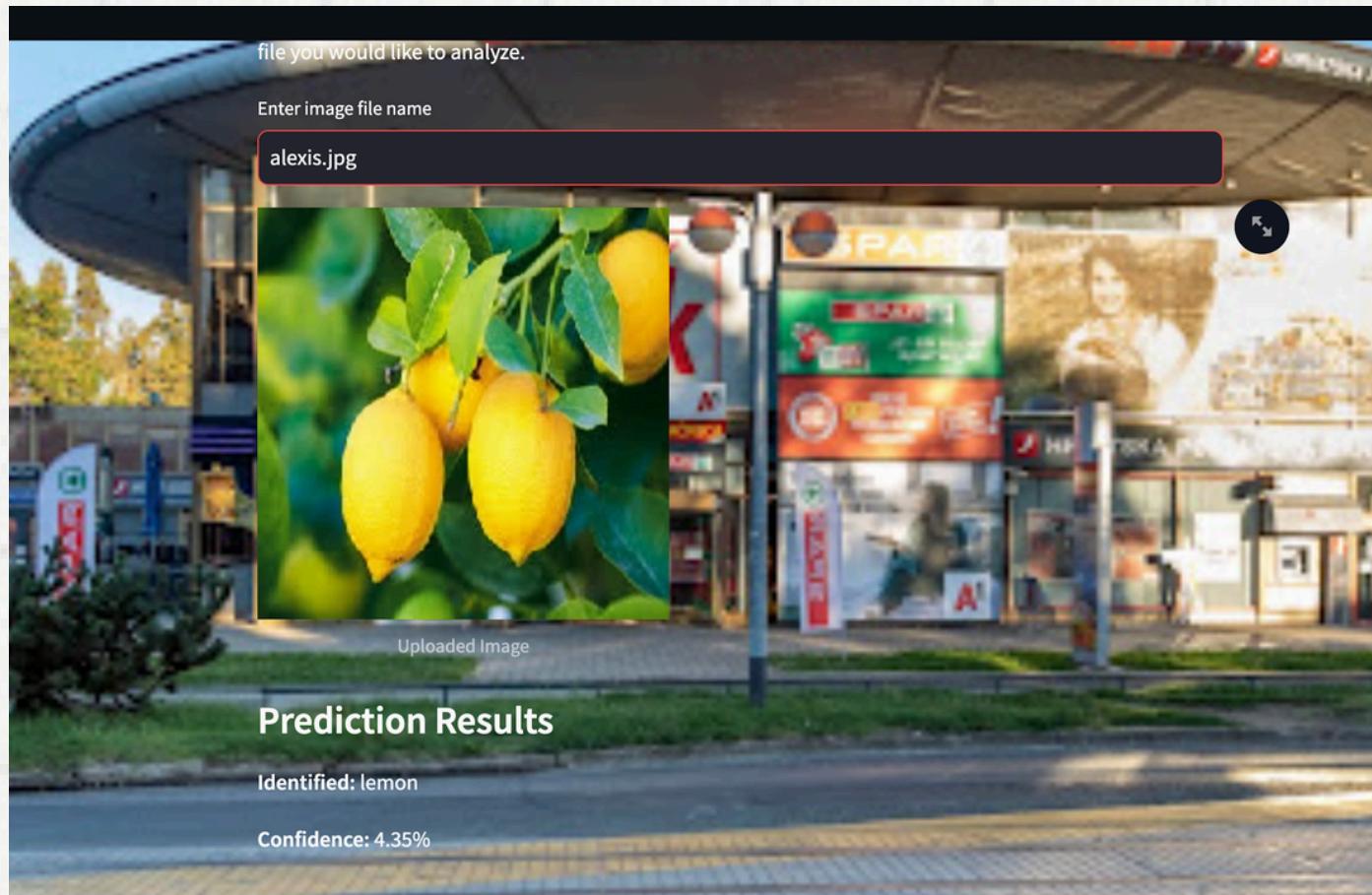
Banana.jpg



RESULTS

This tool helps you identify various fruits and vegetables from images. Please enter the name of the image file you would like to analyze.

Enter image file name
alexis.jpg



Uploaded Image

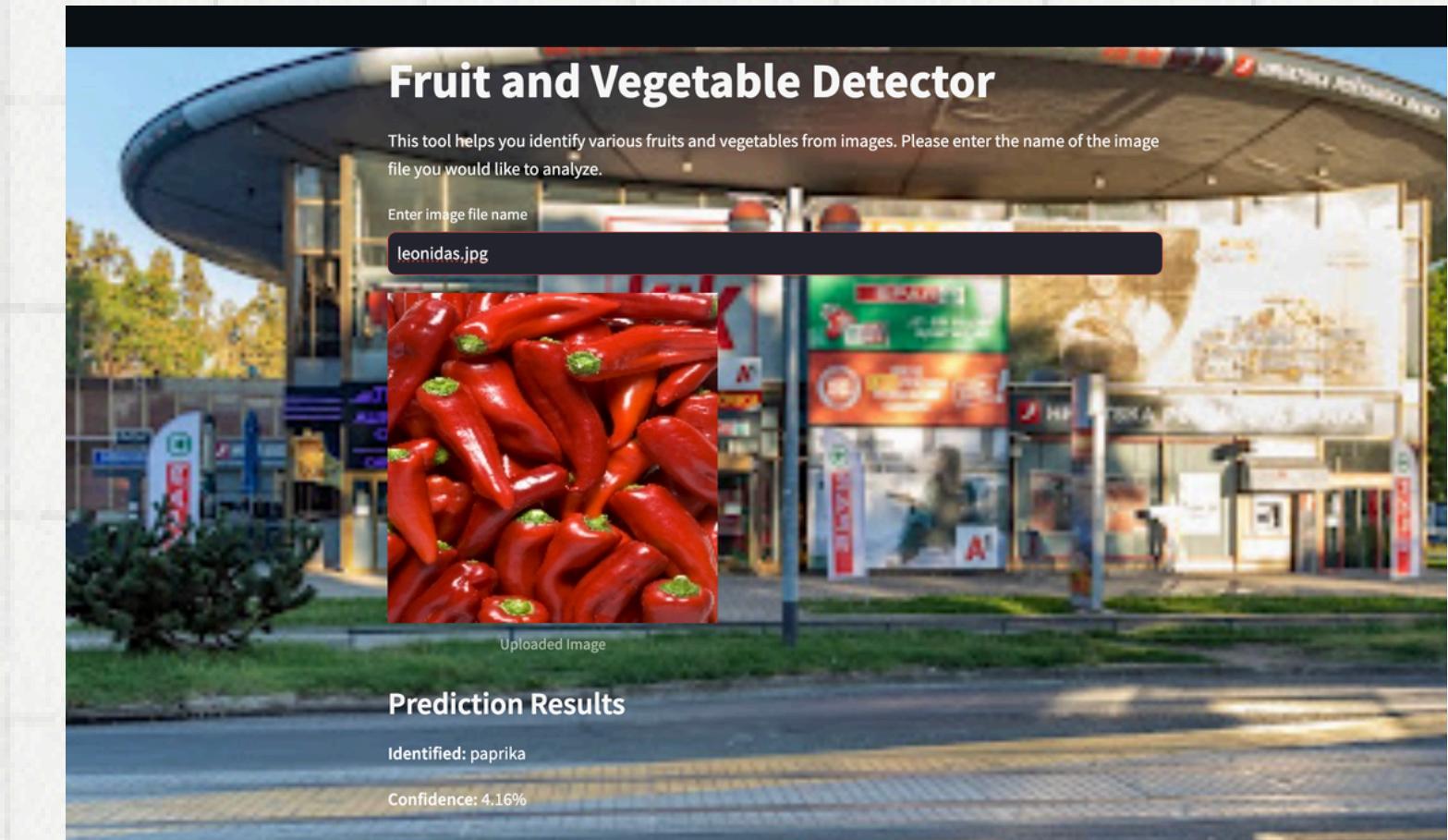
Prediction Results

Identified: lemon

Confidence: 4.35%

This tool helps you identify various fruits and vegetables from images. Please enter the name of the image file you would like to analyze.

Enter image file name
leonidas.jpg



Uploaded Image

Prediction Results

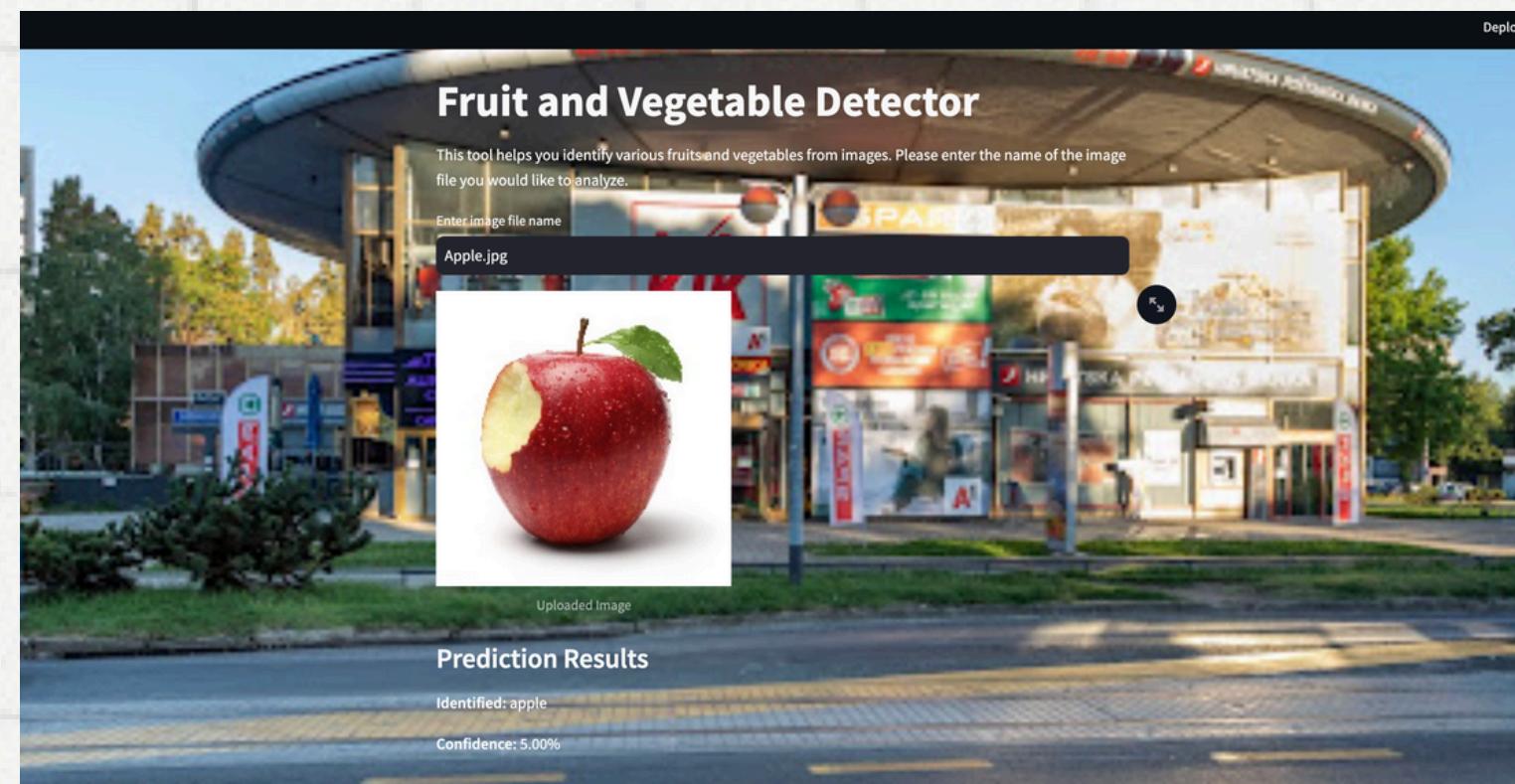
Identified: paprika

Confidence: 4.16%

Fruit and Vegetable Detector

This tool helps you identify various fruits and vegetables from images. Please enter the name of the image file you would like to analyze.

Enter image file name
Apple.jpg



Uploaded Image

Prediction Results

Identified: apple

Confidence: 5.00%

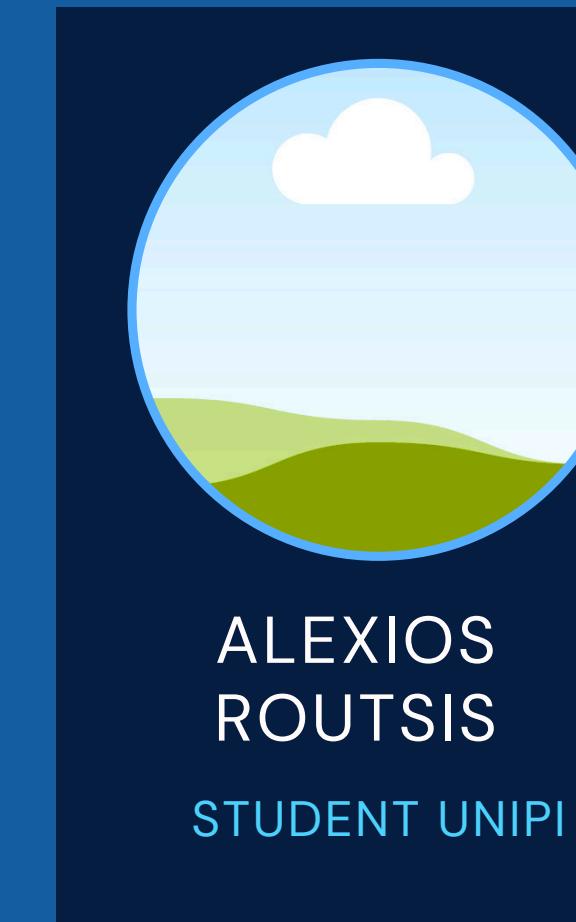
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**Thank you
very much!**