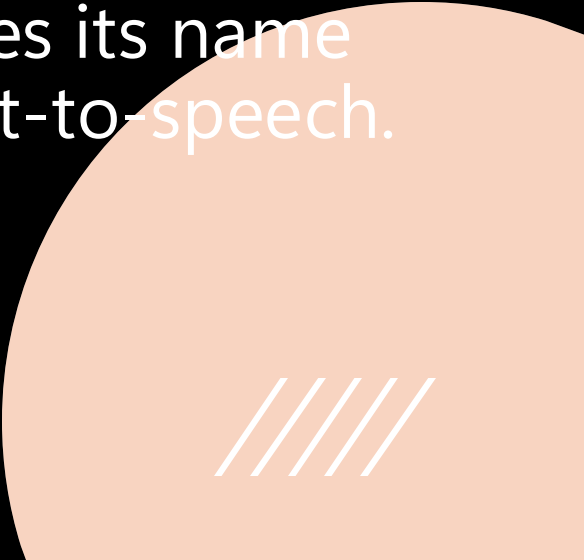# FRUIT CLASSIFIER

A Python application that identifies fruits (apple, banana, cherry, dragon fruit) randomly from a dataset, displays the image, labels it, and announces its name using text-to-speech.

Key Features

Randomly selects images from the dataset.

Displays the selected fruit image in a GUI.

Uses text-to-speech (TTS) to announce the name of the fruit.

Labels the image with the fruit name.

Installation Instructions

•**Prerequisites**:

  •Python 3.6+.

  •Libraries:

   Pillow,

   pyttsx3,

   tkinter.

Steps:

1.Clone the repository:

bash

git clone

 https://github.com/Shariksofi23/fruit-classifier.git

2.Install the dependencies:

bash

pip install -r requirements.txt

3.Run the script:

bash

python app.py

Project Structure

- **File Organization**:
- bash
- fruit-classifier/
- |— app.py # Main application script
- |— dataset/ # Folder containing fruit images
- |— README.md # Project documentation
- Description of key files and folders.

How to Use

- Upon running the application (python app.py), the GUI will display:
  - A random fruit image.
  - The name of the fruit below the image.
  - The name will be announced via text-to-speech.
- Click the "Show Random Fruit" button to see a new fruit.

Future Improvements

- Add machine learning for image classification.

- Enhance the GUI with modern design and features.

- Add support for additional fruit types.

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