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SDEV220

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Overview:

This program is designed to manage a stock of propellers. It allows the user to add or remove propellers from the stock, as well as view the current stock levels.

The program has two main frames:

1. RemovePropFrame: This frame allows the user to remove propellers from the stock.
2. ViewStockFrame: This frame allows the user to view the current stock levels.

Dependencies:

* Python 3
* tkinter module
* urllib module
* PIL (Python Imaging Library) module
* io module
* pickle module

Classes and Methods:

1. RemovePropFrame:

* remove\_prop(): This method is called when the "Remove Propeller" button is clicked. It retrieves the values entered by the user for the propeller size and propeller type, and removes one instance of the propeller from the stock. It also updates the total propeller count and saves the updated stock to a pickle file.
* add\_prop(): This method is called when the "Add Propeller" button is clicked. It retrieves the values entered by the user for the propeller size and propeller type, and adds one instance of the propeller to the stock. It also updates the total propeller count.
* init(): This method initializes the RemovePropFrame and creates the GUI elements, including labels, entry fields, and buttons.

1. ViewStockFrame:

* view\_stock(): This method is called when the "View Stock" button is clicked. It retrieves the current stock levels for all propeller sizes and types and displays them in a label.
* init(): This method initializes the ViewStockFrame and creates the GUI elements, including a label, a button, and an image.

1. Other classes and methods:

* The program also uses the following classes and methods from external modules:
  + tkinter Frame: This class is used to create the GUI frames.
  + tkinter Label: This class is used to create text labels.
  + tkinter Entry: This class is used to create text entry fields.
  + tkinter Button: This class is used to create buttons.
  + tkinter StringVar: This class is used to store the values entered by the user in the entry fields.
  + urllib.request.urlopen(): This method is used to open the URL of the image of the propeller.
  + io.BytesIO(): This method is used to convert the image data into bytes.
  + Image.open(): This method is used to open the image file.
  + Image.resize(): This method is used to resize the image.
  + ImageTk.PhotoImage(): This method is used to create a PhotoImage object from the resized image.

Usage:

* To run the program, simply execute the Python file.
* To remove a propeller from the stock, enter the propeller size and type in the entry fields and click the "Remove Propeller" button.
* To add a propeller to the stock, enter the propeller size and type in the entry fields and click the "Add Propeller" button.
* To view the current stock levels, click the "View Stock" button.