Report On

File Organizer

Submitted in partial fulfillment of the requirements of the Course project
in Semester IV of Second Year Computer Engineering

by
Bhupendra Yadav (Roll No. 62)
Sumit Yesade(Roll No. 63)
Sandesh Yesane(RollNo.64)

Supervisor

Prof. Sneha Mhatre

Vidyavardhini's College of Engineering & Technology

Department of Computer Engineering

(2023-24)

Vidyavardhini's College of Engineering & Technology

Department of Computer Engineering

CERTIFICATE

This is to certify that the project entitled “File Organizer” is a Bonafide work of Sumit Yesade (Roll No. 63) Bhupendra Yadav (Roll No. 62) Sandesh Yesane (Roll No.64) submitted to the University of Mumbai in partial fulfillment of the requirement for the Course project in semester IV of Second Year Computer Engineering.

Supervisor

Prof. Sneha Mhatre

Internal Examiner

External Examiner

Dr Megha Trivedi
Head of Department

Dr. H.V. Vankudre
Principal

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1.Abstract

The File Organizer project is a Python-based application designed to simplify the task of managing and organizing files on a computer's file system. With the ever-increasing volume of digital data, organizing files into a structured hierarchy based on their types and attributes has become essential for efficient data management. The File Organizer application offers a user-friendly graphical interface developed using Tkinter, a standard GUI toolkit in Python. The main objective of this application is to automate the process of file organization, thereby saving users time and effort in manually sorting and managing their files.

2.Problem Statement

In today's digital age, individuals and organizations deal with a vast amount of digital files ranging from documents and images to audio and video files. However, the lack of an organized file management system often leads to inefficiencies, wasted time in searching for specific files, and difficulties in maintaining a structured data hierarchy. The problem addressed by the File Organizer project is the need for a robust and automated solution to organize and manage files effectively on a computer's file system. The project aims to develop a Python-based application with a user-friendly graphical interface that simplifies the process of file organization by categorizing files into specific folders based on their types and attributes.

3. Module Description

1.Initialization and GUI Setup: The program initializes a Tkinter application window (Tk) to create a graphical user interface (GUI) for the file organizer. The GUI window is set to a size of 400x200 pixels and titled "File Organizer". A label is added to the GUI with the text "Select a folder:" to prompt the user.

2.Folder Selection: When the user clicks the "Browse" button, a file dialog is opened using filedialog.askdirectory(). The user can navigate and select a folder from their file system. If a folder is selected, the program proceeds to organize the files within that folder

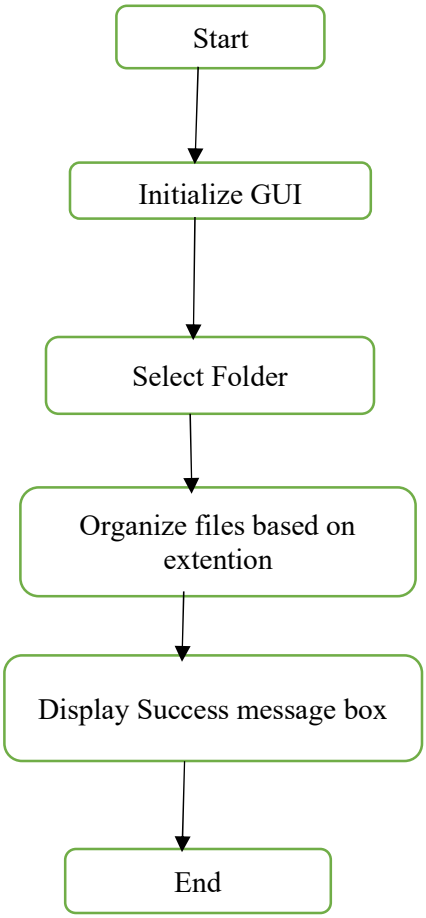
3. File Organization: The program defines a mapping (file_types) between file extensions and destination folder names. It iterates through each file in the selected folder using os.listdir(). For each file, it checks its file extension and looks up the corresponding destination folder in file_types. If a match is found, the file is moved from its current location to the designated destination folder using shutil.move().

4.Feedback to User: After organizing the files, the program displays an information message using messagebox.showinfo(). This message confirms that the file organization process was successful.

5.Main Program Execution: The program entry point (__main__) creates an instance of the FileOrganizer class, which initializes the GUI and sets up event handling. The mainloop() method is called to start the Tkinter event loop, allowing the GUI to interact with the user and respond to events like button clicks.

In essence, the program provides a user-friendly interface for selecting a folder and automatically organizing files within that folder based on their types into separate destination folders. It utilizes Tkinter for GUI development, os and shutil for file operations, and provides feedback to the user upon successful completion of the file organization task.

4.Block Diagram

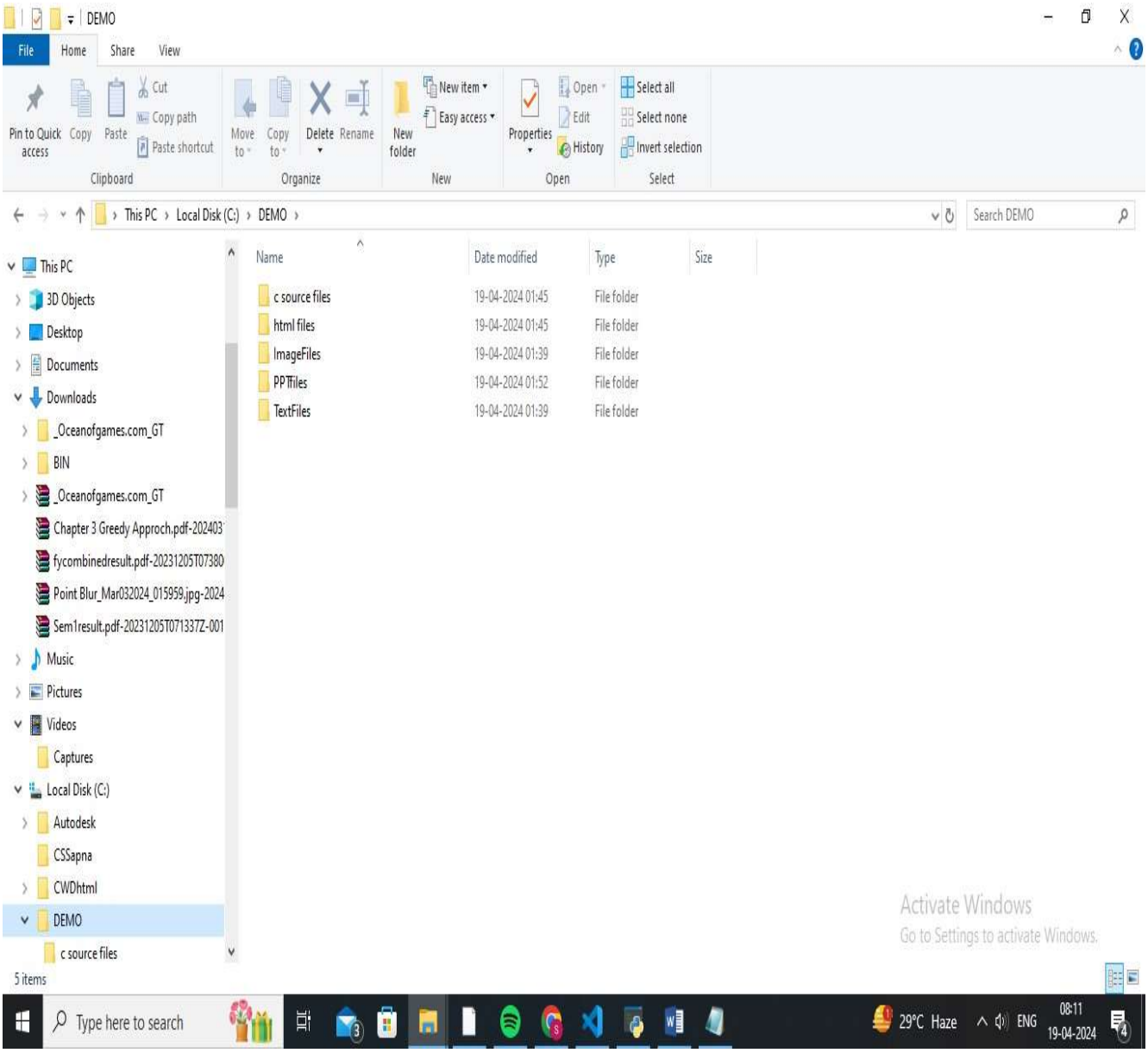


5. Code

```
from tkinter import *
from tkinter import filedialog
import os
import shutil


class FileOrganizer(Tk):
    def __init__(self):
        super().__init__()
        self.geometry('400x200')
        self.title("File Organizer")

        self.folder_label = Label(self, text="Select a folder:")
        self.folder_label.pack(pady=10)

        self.browse_button = Button(self, text="Browse", command=self.getFolderPath)
        self.browse_button.pack(pady=5)

    def getFolderPath(self):
        self.folder_path = filedialog.askdirectory()
        if self.folder_path:
            self.organizeFiles()

    def organizeFiles(self):
        file_types = {
            ".txt": "TextFiles",
            ".png": "ImageFiles",
            ".jpg": "ImageFiles",
            ".mp3": "AudioFiles",
            ".pdf": "PDFFiles",
            ".docx": "DocumentFiles",
            ".xlsx": "DocumentFiles",
            ".html":"htmlfiles",
```

```
            ".cpp":"c source files",
             ".CPP":"c source files",
            ".pptx":"PPTfiles",
            ".svg":"html files",

        }

        for file in os.listdir(self.folder_path):
            file_name, file_ext = os.path.splitext(file)
            if file_ext in file_types:
                destination_folder = os.path.join(self.folder_path, file_types[file_ext])
                if not os.path.exists(destination_folder):
                    os.mkdir(destination_folder)
                shutil.move(os.path.join(self.folder_path, file), destination_folder)

        messagebox.showinfo("File Organizer", "Files organized successfully!")

if __name__ == "__main__":
    app = FileOrganizer()
    app.mainloop()
```

6.Results


DEMO
File
Home
Share
View
Pin to Quick access
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New item
Easy access
New folder
New
Properties
Open
Edit
History
Open
Select all
Select none
Invert selection
Select
This PC › Local Disk (C:) › DEMO ›
Search DEMO
This PC
3D Objects
Desktop
Documents
Downloads
_Oceanofgames.com_GT
BIN
_Oceanofgames.com_GT
Chapter 3 Greedy Approch.pdf-202403
fycombinedresult.pdf-20231205T07380
Point Blur_Mar032024_015959.jpg-2024
Sem1result.pdf-20231205T071337Z-001
Music
Pictures
Videos
Captures
Local Disk (C:)
Autodesk
CSSapna
CWDhtml
DEMO
c source files
Name
Date modified
Type
Size
c source files 19-04-2024 01:45 File folder
html files 19-04-2024 01:45 File folder
ImageFiles 19-04-2024 01:39 File folder
PPTfiles 19-04-2024 01:52 File folder
TextFiles 19-04-2024 01:39 File folder
Activate Windows
Go to Settings to activate Windows.
5 items
Type here to search
29°C Haze
ENG
08:11
19-04-2024

7.Conclusion

The File Organizer project is a Python application developed with Tkinter for creating a user-friendly file management tool. It simplifies file organization by categorizing files into separate folders based on their types. The application provides an intuitive graphical interface, customizable settings for defining file types and destination folders, and feedback on task completion. It showcases Python's versatility for desktop applications and improves efficiency in file management tasks.

8.References

Stackoverflow,

tutorialpoints ,

github,

Openai