

TASK AUTOMATION - File Organizer Tool

Project Objective

To build a lightweight, interactive tool that helps users:

- Automatically categorize files based on type/extension.
- Clean up messy directories by sorting files into organized subfolders.
- Delete empty folders after reorganization to reduce clutter.
- Provide a web interface for non-tech users to use the tool effortlessly.

How It Works

This project has two core components:

1. Backend Logic (logic.py)

- Categorizes files into groups like Images, Documents, Videos, etc.
- Moves them into appropriate folders.
- Deletes empty directories after sorting.

2. Frontend UI (app.py)

- Built using Streamlit, a Python framework for web apps.
- Lets users upload files, enter target directory, and trigger the organizer.
- Shows logs of operations performed (moved, deleted, skipped).

Technologies & Libraries Used

- Python: Core programming language
- os, shutil: File handling, path operations, and file movement
- Streamlit: Frontend web interface for ease of use

Setting Up the Environment

1. Install Python:

Download from: <https://www.python.org/downloads/>

2. Create a Virtual Environment (optional):

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```
python -m venv env
```

Activate:

- Windows: `env\Scripts\activate`
- macOS/Linux: `source env/bin/activate`

3. Install Libraries:

```
pip install streamlit
```

4. Run the Application:

```
streamlit run app.py
```

Features

- Directory Path Input
- Multi-file Upload Support
- One-click Auto Organize
- Log Viewer for Actions
- Deletes Empty Folders
- Stylish Streamlit UI

File Categories Used

- Images: `.jpg`, `.jpeg`, `.png`, `.gif`, `.bmp`, `.heic`
- Documents: `.pdf`, `.doc`, `.docx`, `.txt`, `.xls`, `.xlsx`, `.ppt`, `.pptx`
- Videos: `.mp4`, `.mkv`, `.avi`, `.mov`, `.hevc`
- Audio: `.mp3`, `.wav`, `.aac`
- Archives: `.zip`, `.rar`, `.7z`, `.tar`, `.gz`
- Executables: `.exe`, `.msi`
- Scripts: `.py`, `.js`, `.sh`, `.html`, `.css`
- Others: Anything uncategorized

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Project developed during internship at CodeTechIT Solutions.

External Links

[Download Python](#)

[Streamlit Documentation](#)

[GitHub Repository \(Placeholder\)](#)