

# Automated System File Organizer

## Overview:

This project involves creating a Python-based system that organizes files into folders based on their extensions. The application automatically sorts files into categories like Images, Documents, etc., making it easy to manage cluttered directories. It leverages core Python libraries such as `os`, `shutil`, and `winreg`, and also integrates with the Windows right-click context menu for quick execution.

## Aim:

To develop a lightweight Python utility that enhances file management by automatically sorting files in a given folder into subfolders based on file extensions, improving organization and productivity.

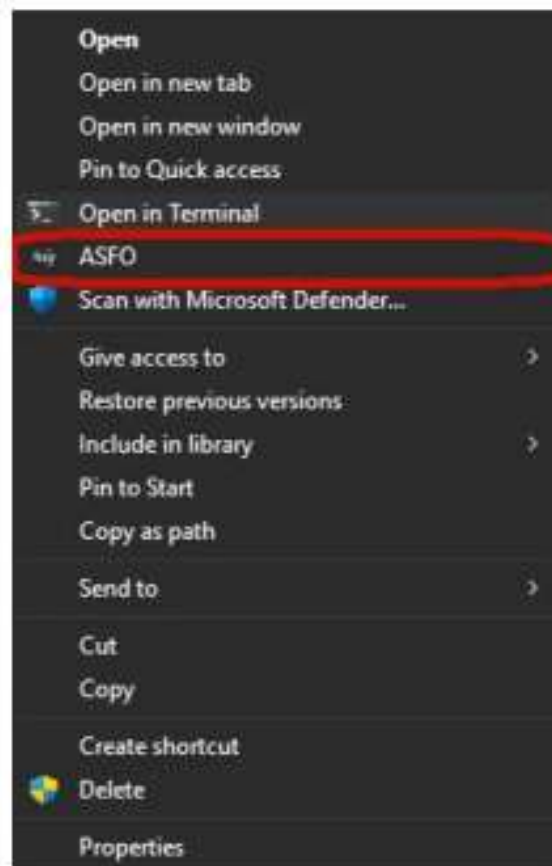
## Key Features:

- ❖ Dynamic folder path input
- ❖ Extension-based sorting (.jpg, .pdf, etc.)
- ❖ Automatic subfolder creation
- ❖ Windows context menu integration
- ❖ Efficient background execution
- ❖ Robust error handling and feedback



### Procedure for Developing :

[illegible][illegible]



### 1. Planning :

The first step was identifying user needs—specifically the challenge of managing cluttered folders. Sorting criteria were based on file extensions, which allowed reliable categorization.

### 2. Interface Design :

To keep the tool lightweight and easy to use, no GUI was built. Instead, the application integrates with the Windows right-click context menu. This allows users to trigger file organization with just a single click on any folder.

### 3. Interface Design :

Using Python's `os` and `shutil` libraries, the program scans the selected directory, creates subfolders based on file types (e.g., PDFs, Images), and moves each file into its corresponding folder automatically.



## **Actual Implementation on Windows Desktop:**

- Python script created with robust sorting logic
- Added to Windows context menu for one-click file organization
- Verified on folders with mixed file types
- Successfully handles empty folders and repeats without crashes

## **Conclusion:**

The ASFO project successfully delivers a working utility that automates file organization on Windows systems. Its simplicity, reliability, and context menu integration make it a valuable tool for users looking to keep their digital space tidy. Future enhancements can include GUI addition and user-defined sorting rules.