Task Title: Develop a Utility for File Upload and Storage

Task Description:
Implement a standalone file upload utility for the application that allows users to securely upload files, which are then stored in a designated local directory or a cloud storage service. The utility should be designed for flexibility, security, and ease of integration into existing systems.

Task Objectives:

1. **File Upload API**:
   o Create an API endpoint for uploading files.
   o Restrict allowed file types (e.g., `.jpg`, `.png`, `.pdf`) and set a maximum file size limit (e.g., 5MB).
2. **Storage Handling**:
   o Save files to a predefined directory in the application or use a local file system.
   o Use unique filenames to prevent conflicts and ensure traceability.
3. **Security**:
   o Sanitize file names to prevent directory traversal attacks.
   o Validate file content type to avoid malicious uploads.
4. **Response Format**:
   o Return appropriate HTTP response codes (`200 OK`, `400 Bad Request`, `500 Internal Server Error`) based on the success or failure of the upload.
   o Include file metadata (e.g., path, size, and type) in the success response.
5. **Error Handling**:
   o Implement robust error handling to provide descriptive error messages for invalid uploads.
6. **Testing**:
   o Write unit and integration tests for the upload functionality.
   o Test with various file types and sizes to ensure compliance with restrictions.
7. **Documentation**:
   o Provide API documentation detailing request format, headers, and responses.
   o Include examples for uploading files using popular HTTP clients like Postman or cURL.

Deadline: 4th December 2024

This task requires no additional inputs or requirements from the company and can be completed using standard practices.