# 1. Project Overview

**Project Description:** "docflow" is a Windows application designed for document management and processing. The application allows users to log in, select, scan, and review documents, as well as automatically detect them in a specified directory.

#### 2. Installation and Launch

#### **System Requirements:**

- Operating System: Windows 10 or newer.
- .NET SDK, version 5 or higher.

#### Installation:

- Download the source code from the GitHub repository.
- Open the solution in Visual Studio.
- Build and run the application through Visual Studio.

#### 3. Application Architecture

# **Application Components:**

- User Login: User authentication page.
- Document Scanning: Functionality for scanning documents.
- Folder Monitoring: Automatically detects new documents in the designated folder.
- Local Storage: Locally stores detected documents.
- OCR Services: Integrates with OCR services for text extraction.

#### **4. Detailed Component Descriptions**

#### **User Login**

- Function: Allows users to enter their username.
- Technology: WinUI, C#.

#### **Document Scanning**

- Function: Scans documents using a camera or from a directory.
- Technology: OpenCvSharp for image processing.

# **Folder Monitoring**

- Function: Monitors a specific folder for new documents.
- Technology: FileSystemWatcher for automatic detection.

#### 5. User Guide

## Logging In:

- Launch the application.
- Enter your username.
- Press "Login".

## **Adding Documents:**

• Place documents in the predefined folder or scan them using a camera.

#### 6. API Documentation

#### **Endpoints:**

- /receive-document: Receives a document on the server.
- /document-types: Fetches document types.

## 7. Security Practices

## **Description of Security Measures:**

- User authentication.
- Secure handling of documents.

## 8. Error Handling

## **Common Questions and Problems:**

- What to do if the camera fails to open.
- How to respond to errors in document detection.

#### 9. Conclusion

## **Maintenance and Support:**

- Regular updates of the application.
- Technical support available via email.

## **Appendices**

- **Diagrams:** Component and data flow diagrams.
- Code Examples: Code snippets that illustrate key functionalities.