

Document Scan and Upload

Software Requirements Specification

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Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

Signature	Printed Name	Title	Date

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1. Introduction

1.1 Purpose

Since the beginning of the digital age, scanning and uploading documents have been two separate processes which usually are done sequentially but we aim to combine them into one single process. The project aims to create a portal to make the upload and sending the scanned documents convenient. It also provides hardware interface with the scanner so that documents can be scanned and uploaded to the portal on the click of a mouse button.

1.2 Scope

- The portal will provide interface for the uploader to enter the name of the person

- the document is addressed to and some details about the documents pre-scanning the document.
- There will be authentication system for the users. All recent documents addressed to the user will be accessible through his dashboard.
 - Our software will provide interface with the scanner so that uploader won't need to scan and upload in multiple different steps, it would all be done in one.
 - The project is intended to be used in IIT Indore.

1.3 Definitions, Acronyms, and Abbreviations

JavaScript : often abbreviated as **JS**, is a high-level, dynamic, weakly typed, prototypebased, multi-paradigm, and interpreted programming language.

Flask : is a lightweight WSGI web application framework. It is designed to make getting started quick and easy, with the ability to scale up to complex applications. It began as a simple wrapper around Werkzeug and Jinja and has become one of the most popular Python web application frameworks.

MySQL : It is an open-source relational database management system.

1.4 References

IEEE Software Engineering Standards Committee, "IEEE Std. 830-1998, IEEE Recommended Practice for Software Requirements Specifications", October 20, 1998.

2. General Description

2.1 Product Perspective

This project will be built using a couple of javascript and python based technologies. The server side application will be written using Python. MySQL will be used as the database engine.

2.2 Product Functions

- Scanning and uploading of documents from web browser itself.
- Send an Email to the receiver containing the scanned document.
- Search of documents based on sender, document title and time of upload.
- Display all documents that have been addressed to the user.
- Maintaining a history of uploaded documents on the cloud.

2.3 User Characteristics

The user base mainly consists professors, students and administrative officials.

2.4 General Constraints

2.5 Assumptions and Dependencies

- Server-side: The following are the requirements from the server:
 - Linux based system(preferred)
 - MySQL database engine installed

- Client-Side: The website will work on any system with browser later than IE 7.
- It is assumed that the operating system and other underlying pieces of software on the user side are free from any error which may affect the functioning of this system.

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

The web-portal will have a login page for users.

The user will then be redirected to a dashboard where they can scan and upload the documents and send them to someone using their Email address.

The receiver of the document will receive an email containing the scanned document, also the receiver can login on the web portal and see the documents there too.

3.1.2 Hardware Interfaces

The Web portal requires users to have a machine connected to a scanner and having internet access.

3.1.3 Software Interfaces

The software consists of a website where the users will login, send and receive scanned documents. Also, users can see the history of sent/received documents stored in the database.

3.1.4 Communications Interfaces

All the documents scanned by the user will be stored in the server database and can be accessed when required.

To upload the documents, an internet connection is required.

3.2 Functional Requirements

To send a document, the user will first login on the website. Then the user will use the scan button to scan the documents he/she wants to send and then enter the email address of the receiver.

Then the server will store the document in the database, send an email to the receiver containing the documents and send the documents to the receiver's account on the website. The receiver can then login on the website and see the documents he/she received.

3.4 Non-Functional Requirements

3.4.1 Performance

Since the system is web based, the server/servers should be capable of handling large number of simultaneous requests (say 100). Thus the Internet bandwidth should be as high as possible (200mbps recommended) to handle the large number of requests. It is recommended that the server hardware have at least 2GHz processing speed and 4GB RAM.

3.4.2 Reliability

The system should be able to process all the information for analytics and store them permanently as any loss of data will render the whole portal useless for the user.

3.4.3 Availability

3.4.4 Security

The operating system being used on the server should be updated so that it is free of common vulnerabilities. The application should also have security features to protect it from basic vulnerabilities. The administrator shall also be able to timely inspection of database to ensure safety.

3.4.5 Maintainability

The database should be accessible to the administrators so as to carry out maintenance.

3.4.6 Portability

The platforms on which the system runs should be generic enough to allow substantial amount of portability.

3.6 Logical Database Requirements

- The names,email addresses should be in valid standard format to maximize correctness of information.
- Atleast 20 GB storage is recommended for database storage requirements