

Team Details:

Imadh Ajaz Banday - 1BM20CS059

Jayam Mouneash - 1BM20CS063

Kotturu Amarnath - 1BM20CS074

Mukesh Kumar N V - 1BM20CS088

Class - 6B

Batch - B1

Passport Automation System

Problem Statement:

Design and implement a software system that automates the process of issuing passports to citizens. The system should provide a secure and efficient way to handle the entire process of passport issuance, including application submission, verification, approval, printing and delivery.

The system should be able to integrate with existing government databases, such as the National ID database, to streamline the verification process. It should also allow citizens to track the status of their passport application and receive real-time updates. The system forwards the necessary details to the police for its separate verification whose report is then presented to the administrator. The administrator will be provided with an option to display the current status of the application to the applicant, which they can view in their online interface. After all the necessary criteria have been met, the original information is added to the database and the passport is sent to the applicant.

Software Requirement Specification(SRS)

1 Introduction

1.1 Purpose of this document

The purpose of this Software Requirements Specification (SRS) document is to provide a detailed description of the requirements for the development of a passport Automation system. This document will serve as a reference guide for the development team to design and implement the system.

1.2 Scope of this document

This document outlines the functional and non-functional requirements of the Passport Automation System. It covers the entire process of passport issuance, including application submission, verification, approval, printing, and delivery. The scope of the system is to provide a secure and efficient way to handle the passport issuance process, while ensuring privacy and security of personal information.

1.3 Overview

The Passport Automation System is a software system that automates the process of issuing passports to citizens. It provides a user-friendly interface that allows citizens to submit their passport application, track the status of their application, and receive real-time updates. The system will integrate with existing government databases to streamline the verification process.

2 General Description

The Passport Automation System will be a web-based application that can be accessed from anywhere with an internet connection. The system will be built on a secure and scalable architecture that can handle a large volume of passport applications. The Passport Automation System will integrate with other government systems to automate the verification process and ensure the accuracy of the information provided.

3 Functional Requirements

3.1 User Management

- The system should have a user management module that allows citizens to register and create an account.
- The system should have an admin module that allows authorized personnel to manage user accounts.

3.2 Application Submission

- The system should allow citizens to submit their passport application online.
- The system should provide citizens with a user-friendly interface for completing their application.
- The system should validate the information provided by the citizen to ensure accuracy.

3.3 Application Verification

- The system should integrate with the National ID database to verify the identity of the citizen.
- The system should perform a background check on the citizen to ensure they are eligible for a passport.

3.4 Application Approval

- The system should allow authorized personnel to approve or reject passport applications.
- The system should notify the citizen of the status of their application.

3.5 Passport Printing and Delivery

- The system should generate passport documents based on the approved application.
- The system should deliver the passport to the citizen through a secure and reliable delivery service.

4 Interface Requirements

4.1 User Interface

The system should have a user-friendly interface for citizens to complete their passport application and also an admin interface for authorized personnel to manage passport applications.

4.2 API Integration

The system should integrate with the National ID database to verify the identity of the citizen.

5 Performance Requirements

- The system should be able to handle a large volume of passport applications.
- The system should have a response time of less than 3 seconds for user requests.
- The system shall be available 24/7, with a minimum uptime of 99.9%.

6 Design Constraints

- The system should be designed to comply with all relevant regulations and standards, such as data protection laws.
- The system shall be designed using a modern, scalable architecture, with a focus on performance and security. The system should use encryption mechanisms to protect sensitive data.

7 Non-Functional Attributes

- **Usability:** The system shall be easy to use and intuitive for merchants of all skill levels.
- **Security:** The system shall be secure and compliant with industry standards for handling sensitive financial information.
- **Reliability:** The system shall be reliable and perform consistently under high traffic and load conditions.
- **Performance:** The system should have a response time of less than 3 seconds for most functions, and be able to handle a large volume of requests and transactions without performance degradation.
- **Scalability:** The system should be scalable and able to handle increases in traffic and demand.
- **Maintainability:** The system should be easy to maintain and update, with clear documentation and modular architecture.
- **Compatibility:** The system should be compatible with different browsers, operating systems, and hardware configurations.

8 Preliminary Schedule and Budget

The development of the Passport Automation System is estimated to take approximately 12 months. The schedule and budget may be adjusted based on project requirements and constraints.

Requirements Gathering:

Timeline: 2-4 weeks

Cost: \$20,000-\$40,000

Design and Architecture:

Timeline: 3-5 weeks

Cost: \$40,000-\$80,000

Development:

Timeline: 5-7 weeks

Cost: \$20,000-\$40,000

Testing and Quality Assurance:

Timeline: 8-12 weeks

Cost: \$10,000-\$30,000