

⑤ Passport Automation System

1. Introduction:

1.1 Purpose:

The purpose of the document is to provide the requirements for a Passport Automation System which is used in effective dispatch of passport to all of the applicants.

1.2 Scope:

- 1.2.1 The system can provide an online interface to the user where they shall fill in their personal details.
- 1.2.2 The authority concerned with issue of passport can use this system to reduce the workload and process the application quickly.
- 1.2.3 The system provides a communication platform between applicant and administrator.
- 1.2.4 Transfer of data between passport issuing authority and local Police for verification of applicant's information.

1.3 Overview:

- 1.3.1 The core of the system is to get an online registration form, filled by the applicant whose testament is verified for its genuineness by Passport Automation System with respect to already existing systems.

2. General description

- 2.1 The Passport Automation system acts as an interface between applicant and administrator. The system tries to make the interface as simple as possible and at the same time not making the security of data stored in, hence minimizing the duration in which user receives passport.

2.2 It aims at improving the efficiency in the issue of passport and reduces the complexities involved in it to maximum extent possible.

3. Functional Requirements

3.1 Passport Information: This module is helpful for the people to move to other states or countries for their needs.

3.2 Applying for Passport: This module is used for how to apply for the passport and which certificates are needed to submit for the particular type of passport.

3.3 Payment: This module is used to pay fees in different ways.

3.4 Document Uploading: To submit the documents.

3.5 Verification Module: To verify all certifications online and change the status.

3.6 Authentication Module: This module is used to check whether user is valid or not.

3.7 Status verification and feedback: To check status of verification process and delivery of passport.

4. Interface Requirements: The interface should be easy to use and user-friendly. It should have

→ User Input Form fields

→ Status Dashboard

→ Notifications

→ File Upload

→ File Size and Format Validation

→ Payment Gateway

→ Profile Management

→ FAQ section

5. Performance Requirements:

- 5.1 Should be able to process 500 applications / hour
- 5.2 Should support upto 200 users simultaneously.
- 5.3 Should Response under 2 seconds
- 5.4 Should be scalable for peak application period:

6. Design Constraints:

6.1 Software Interface

- 6.1.1 Front End: Microsoft Visual Basic 6.0
- 6.1.2 Back End: MS Access database

6.2 Hardware Interface

- The server is directly connected to client systems.
- The client systems should have access to database in server.

7. Non-Functional Attributes

- 7.1 Reliability: Should be able to continue operating in event of hardware or software failure as well as quick restoration.
- 7.2 Performance: Quick response time
- 7.3 Security: Implementation of strong encryption and secure protocols to protect sensitive information.

8. Preliminary Schedule and Budget:

8.1 Preliminary Schedule:

- 8.1.1 Planning and Requirement gathering should take 1-2 months
- 8.1.2 System design should take two months
- 8.1.3 Development should take 6 months
- 8.1.4 Testing should take 2 months
- 8.1.5 Deployment should take 1 month

Ans 8.1.2

- 8.2. Preliminary Budget: Estimated LOC = 50,000 lines
 Cost per LOC = 10 Rs
 Total LOC cost = ₹ 5,00,000