PASSPORT AUTOMATION SYSTEM

PROBLEM STATEMENT:

The current manual process of issuing passports is time-consuming, prone to errors, and lacks efficiency. The system requires applicants to physically visit the passport office, submit their documents, and wait in long queues. This not only causes inconvenience to the applicants but also results in delays and backlogs in the passport issuance process. To address these issues, a passport automation system is required that will enable online passport application submission, automated document verification, and online payment. The system should also facilitate the scheduling of appointments and enable the tracking of application status. The objective is to make the passport issuance process faster, more efficient, and convenient for applicants while ensuring the security and integrity of the passport issuance process.

Software Requirement Specification(SRS)

1 **Introduction**:

1.1 **Purpose of this Document:** If the entire process of 'Issue of Passport' is done in a manual manner then it would takes several months for the passport to reach the applicant. Considering the fact that the number of applicants for passport is increasing every year, an Automated System becomes essential to meet the demand. So this system uses several programming and database techniques to elucidate the work involved in this process. As this is a matter of National Security, the system has been carefully verified and validated in order to satisfy it.

1.2 **Scope of this document** – The System provides an online interface to the user where they can fill in their personal details and submit the necessary documents (may be by scanning). The authority concerned with the issue of passport can use this system to reduce his workload and process the application in a speedy manner. Provide a communication platform between the applicant and the administrator. Transfer of data between the Passport Issuing Authority and the Local Police for verification of applicant's information. Users/Applicants will come to know their status of application and the date in which they must subject themselves for manual document verification.

1.3 **Overview** –SRS includes two sections overall description and specific requirements Overall Description will describe major role of the system components and interconnections. Specific Requirements will describe roles & functions of the actors.

1.4 **General description:** In this, general functions of product which includes objective of user, a user characteristic, features, benefits, about why its importance is mentioned. It also describes features of user community.

2 **Functional Requirements:**

User Registration: The system should allow users to register by providing their personal information, including name, date of birth, address, and contact information.

Application Processing: The system should allow users to submit their passport application, along with all required documentation, and provide real-time status updates throughout the application process.

Appointment Scheduling: The system should allow users to schedule an appointment for an interview or to submit additional documentation.

Payment Processing: The system should allow users to pay fees associated with the passport application using a secure payment gateway.

Document Verification: The system should verify the authenticity of all submitted documents and notify users if any documents are missing or need to be resubmitted.

Passport Issuance: The system should generate and issue passports to users who have successfully completed the application process and have met all requirements.

Passport Renewal: The system should allow users to renew their passport and provide real-time status updates throughout the renewal process.

Passport Tracking: The system should allow users to track the status of their passport application and receive real-time updates via email or SMS.

Data Management: The system should securely store all user information and data, including personal information, passport application data, and payment details.

Reporting: The system should generate reports and analytics on passport application processing times, user demographics, and other key metrics to help improve overall efficiency and effectiveness of the system.

Integration: The system should be capable of integrating with other government systems, such as immigration and border control, to provide seamless passport processing and data sharing.

Security: The system should have appropriate security measures in place to protect user data, prevent fraud and identity theft, and comply with applicable data privacy and security regulations.

3 **Interface Requirements:**

User interface for passport applicants: The system should have a user-friendly interface that allows passport applicants to enter their personal information, upload

necessary documents, and track their application status. The interface should be accessible via a web portal or mobile application.

Interface with external databases: The passport automation system may need to interface with external databases, such as those maintained by immigration departments or law enforcement agencies, to verify the authenticity of passport applicants' information.

Biometric interface: The system may require a biometric interface, such as a fingerprint scanner or facial recognition software, to verify the identity of passport applicants.

Payment interface: The system should have a payment interface to allow applicants to pay fees for passport processing.

Backend interface: The passport automation system may require a backend interface to enable administrators to manage the system, including adding or updating application requirements, approving or rejecting applications, and generating reports on application statistics.

Interface with passport delivery services: The system may need to interface with passport delivery services to track the delivery status of passports to applicants.

4 **Performance Requirements:**

Processing Time: The time taken to process a passport application from submission to approval. This can be measured in minutes, hours, or days.

Accuracy: The percentage of passport applications processed without errors or mistakes. This can be measured by the number of applications with errors divided by the total number of applications processed.

Throughput: The number of passport applications processed per unit of time. This can be measured in applications per minute, hour, or day.

System Uptime: The percentage of time the system is operational and available for use. This can be measured by the number of hours the system is available divided by the total number of hours in a given period.

Error Rate: The percentage of passport applications that result in errors or failures within the system. This can be measured by the number of errors divided by the total number of applications processed.

Cost Savings: The cost savings achieved through the use of the automation system compared to the manual system. This can be measured by comparing the cost per application processed in the automation system versus the manual system.

5 **Design Constraints:**

1.The applicants require a computer to submit their information.

2. Although the security is given high importance, there is always a chance of intrusion in the web world which requires constant monitoring.

3. The user has to be careful while submitting the information. Much care is required.

6 **Non-Functional Attributes:**

Security: The system should ensure that user data and information is secure and protected against unauthorized access, data breaches, and cyber-attacks.

Scalability: The system should be scalable and able to handle increased demand during peak periods, such as holidays or summer travel season.

Usability: The system should be easy to use and navigate, with clear and concise instructions to guide users through the passport application process.

Accessibility: The system should be accessible to users with disabilities and comply with accessibility standards.

Interoperability: The system should be interoperable with other government systems and databases to ensure smooth data exchange and processing.

Compliance: The system should comply with all relevant laws, regulations, and standards, including data privacy and security regulations.

Maintainability: The system should be easy to maintain and upgrade, with minimal disruption to users.

Availability: The system should have a high level of availability, with minimum downtime for maintenance and upgrades.

Performance Efficiency: The system should efficiently process and handle passport applications, providing a smooth and fast experience for users.

7 **Preliminary Schedule and Budget:**

Schedule:

Requirements gathering……. 2 weeks
System design…… 5 weeks
Implementation…….. 4 weeks
Unit testing…… 2 weeks
Final testing…….. 3 weeks

Budget:

The budget for whole project is : Rs.40,000.