

## 5. Passport Automation

### a. SRS Document:

24 PAGE:  for areas and security vices and  ate ision  are, also	<p>8. Passport Automation system</p> <p>DATE: 1/10/24 PAGE:</p> <p>1. Introduction</p> <p>1.1 Purpose of this document.</p> <p>The system must automate process of passport application, verification, issuance, reducing manual workload and wait times along with previous times.</p> <p>1.2 Scope</p> <p>System must have detailed process video and documentation, applications upload all necessary documents and identity proof's, Schedule a mandatory appointment as well as track the progress in the process.</p> <p>1.3 Overview</p> <p>System must include modules for applicant registration, document verification, appointment scheduling and status tracking. It must provide secure and user-friendly web portal for applicants along with robust back-end system for government and staff.</p> <p>2. General Description</p> <p>Web-based Platform integrated with government databases to verify and validate documents. Also include payment gateway to collect fees and accept different payment modes.</p>
--	--

P.T.O.

3. Functional Requirements:

- User can register and create an account using personal information.
- System must allow users to upload required documents in PDF/PNG/JPEG format and verify accordingly.
- System shall support scheduling of offline verification (in-person) appointment and notify applicants of available slot.

7. Non-functional requirements:

4. Interface Requirements:

User Interface

A responsive web interface for applicants to access from any device and dedicated admin for government staff.

Hardware Interface

Integration with document scanners, biometric devices, printers.

8. Performance:

5. Performance Requirements:

The system must be able to handle 20,000 concurrent users. System shall have an average response time of less than 1 second for verification and process completion status. System must be available 24/7 with annual downtime of less than 0.1%.

6. Design Constraints:

System must comply with national security and data protection standards for storing and handling confidential data. It must integrate seamlessly with existing government IT infrastructure for identity check and printing physical off

## 7. Non-Functional Requirements:-

### Security.

System shall use encryption for all sensitive data and support secure login with multi-factor authentication.

### Reliability

System shall be highly reliable, with a fault tolerant architecture to minimize downtime.

### Maintainability

System shall be modular, allowing for easy maintenance and updates.

## 8. Preliminary Schedule and Budget.

Duration: 30 weeks.

### Budget

Software development	\$ 50 000
Hardware	\$ 30 000
licences	\$ 10 000
Testing	\$ 15 000
Project management	\$ 8 000
Documentation	\$ 7 000
Total	\$ 120 000

See  
→ 1/10/24

## b. Advanced Class Diagram:

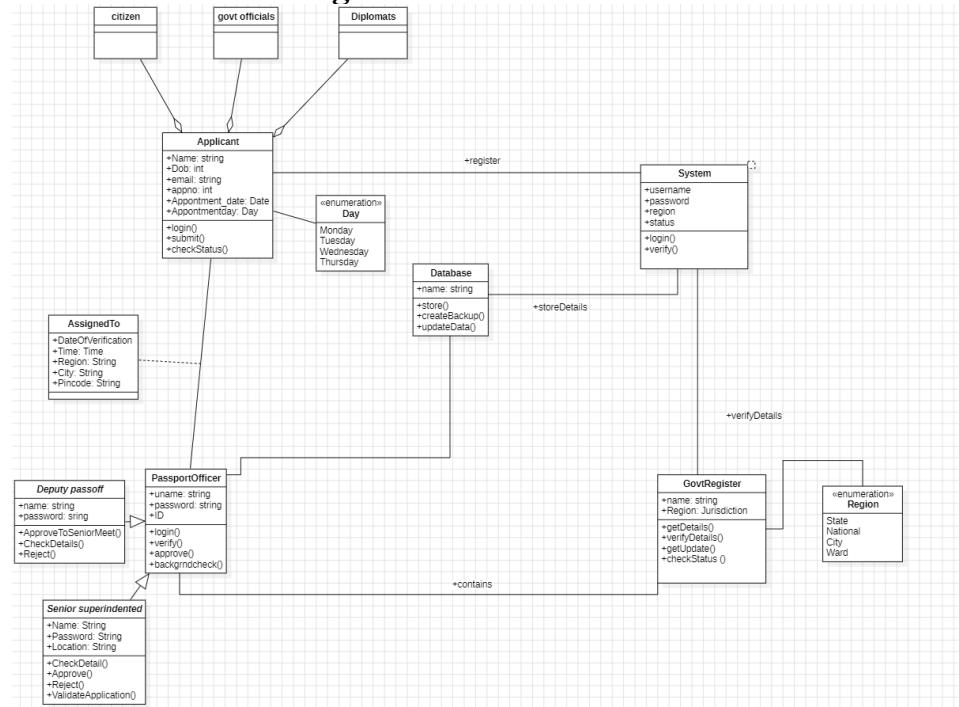


Fig 5.1

Passport management system that facilitates the process of applying for and managing passport applications. The key actors include applicants such as citizens, government officials, and diplomats, who interact with the system to submit their applications, book appointments, and track their status. Applicants provide essential details like their name, date of birth, and appointment information and can log in to the system to check updates on their application.

The system itself handles the core processes, such as user registration, login, and verification of details. All the information is stored and managed in a central database, which ensures that application data is securely stored, backed up, and updated as needed. Applications are assigned to specific Passport Officers based on the region, appointment schedule, and other factors. These officers are responsible for verifying documents, approving or rejecting applications, and updating the system with their decisions.

The process is overseen by Senior Superintendents, who validate and approve final decisions to ensure accuracy and compliance. Additionally, a Cover Register tracks applications based on their jurisdiction, categorizing them by state, city, or ward, and ensuring they are routed to the correct authorities.

This system organizes tasks efficiently by linking the roles of applicants, officials, and system components. It simplifies the workflow, ensures data security, and provides transparency for applicants to monitor their application progress.

## 5. Passport Automation System

DATE: PAGE:

Applicant
Name: String
Fathername: String
DOB: String
Address: String
EmailID: String
Phone no: String
Password: String
login()
SubmitDetails()
AssignedTo date: Date time: time region: string city: string
checkStatus()

PassportOfficer
Name: String
pwd: String
Login()
Verify()
Approve()

Application
application_id: String
document_id: String
Status: Boolean
VerifyDocument()

System
Name: String
Region: String
Status: Boolean
newest_application()
send_to_Advisor()
reviewDetails()
sendDetails()
newestPayments
store

Database
Name: String
Store()
CreateBackup()

(Govt. Document Register)
Name: String
Region: String
getDetails()
Verify()
Update()
transmitters()

- Association names
- <Bag> < Sequences>
- Association end names
- Multiplicity
- Generalization
- Association class

CentralReg	StateGov
NationalNo: String	StateId: int
Region: String	Region: String
update()	approveDetails()
ApproveDetails()	update()
creditRecords()	checkApproval()

<Enumeration>	
Region	State
National	National
City	City
Ward	Ward

DeputyProprietor
Name: String
password: String
approveToSeniorOfficer()
checkDetails()
reject()

Senior-SI
Name: String
password: String
location: String
checkDetail()
Approve()
Reject()
validateAppn()

### c. Advanced State Diagram:

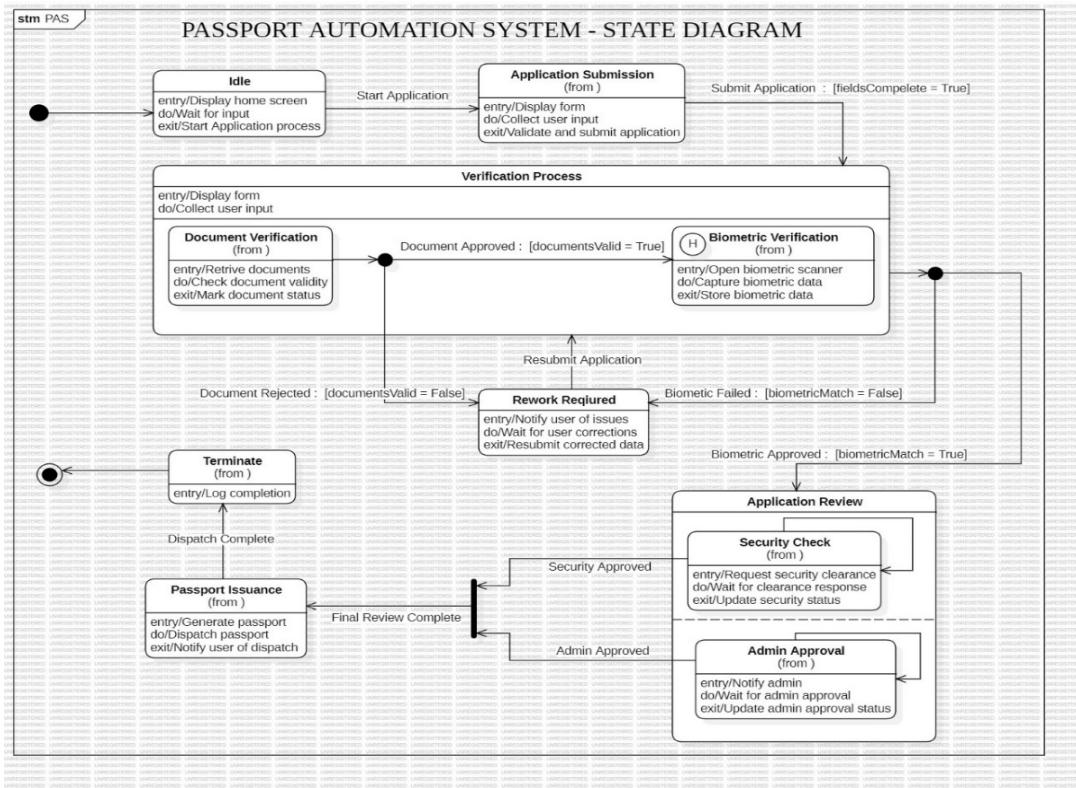
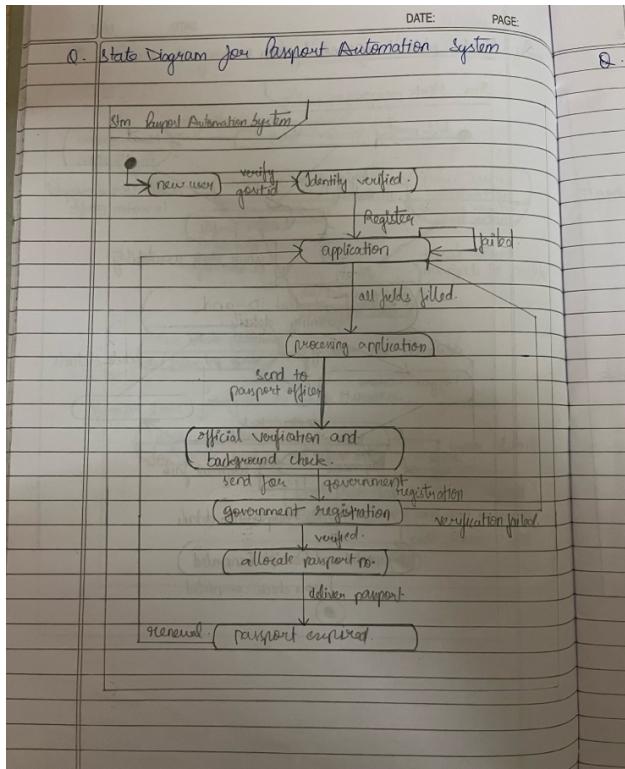


Fig 5.2



#### d. Use Case Diagram:

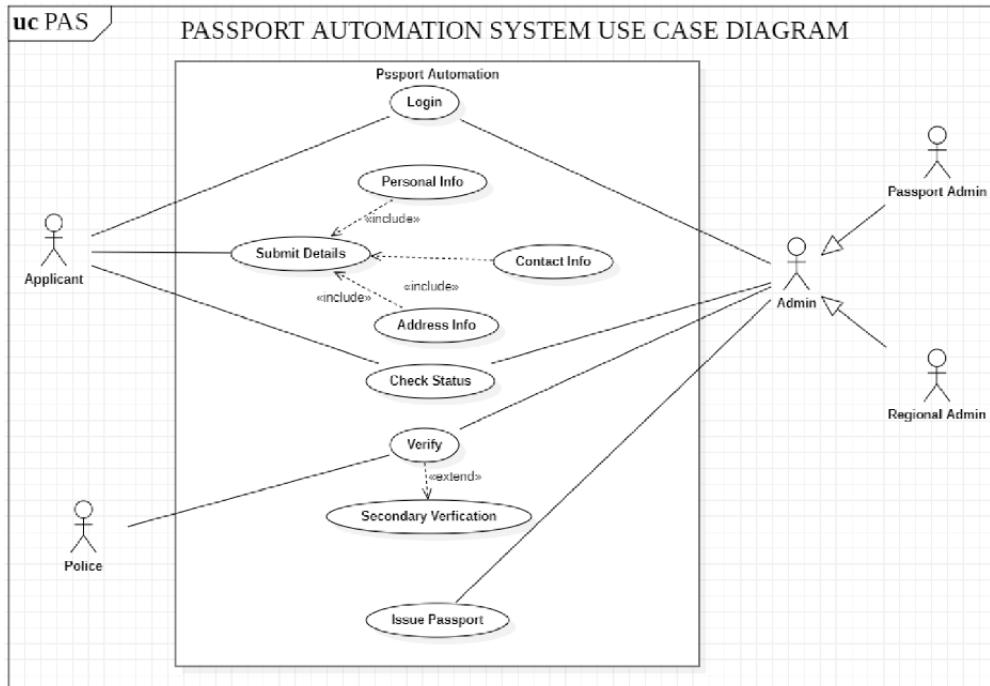
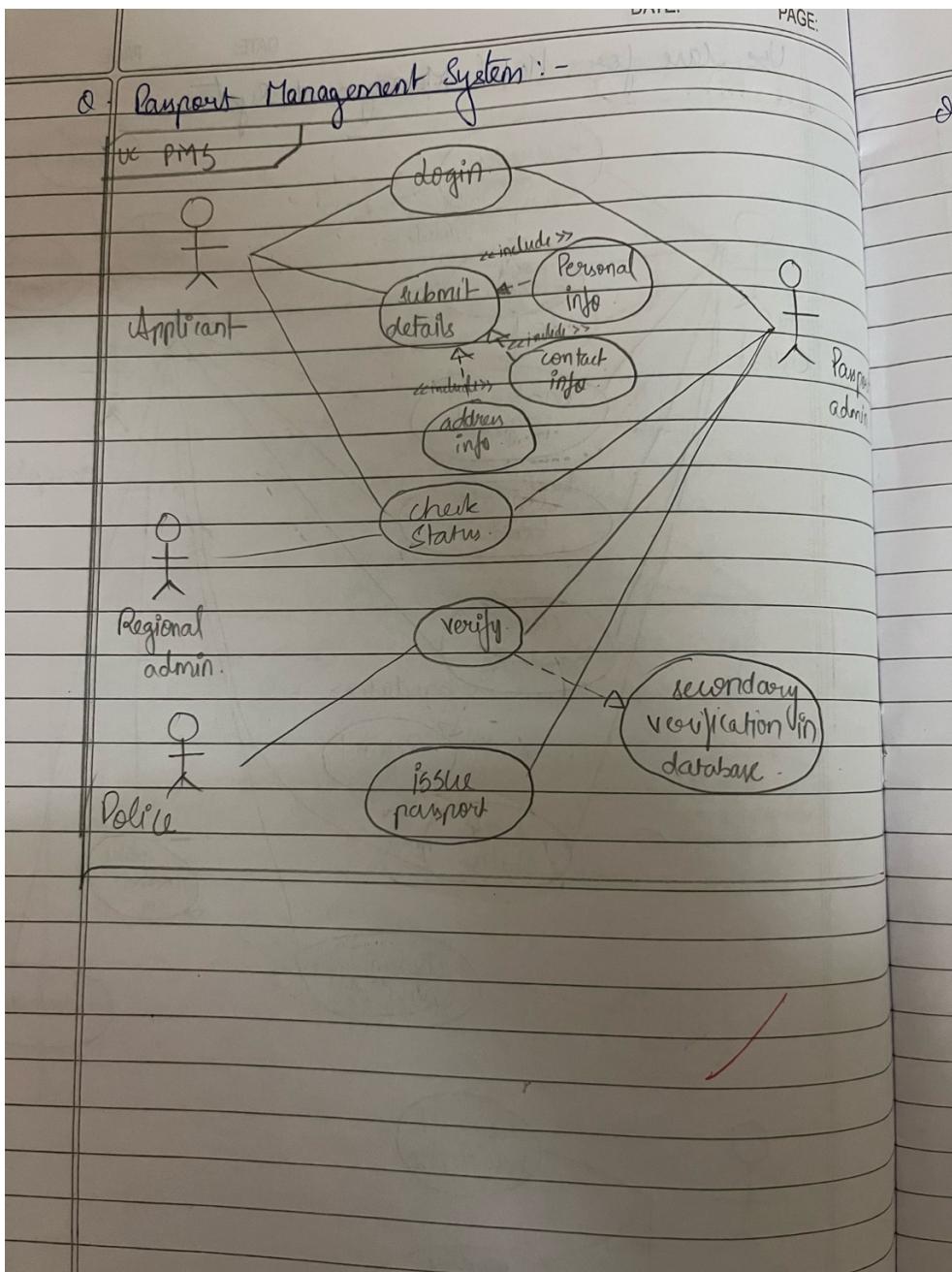


Fig 5.3

## Q. Passport Management System :-



### e. Sequence Diagram:

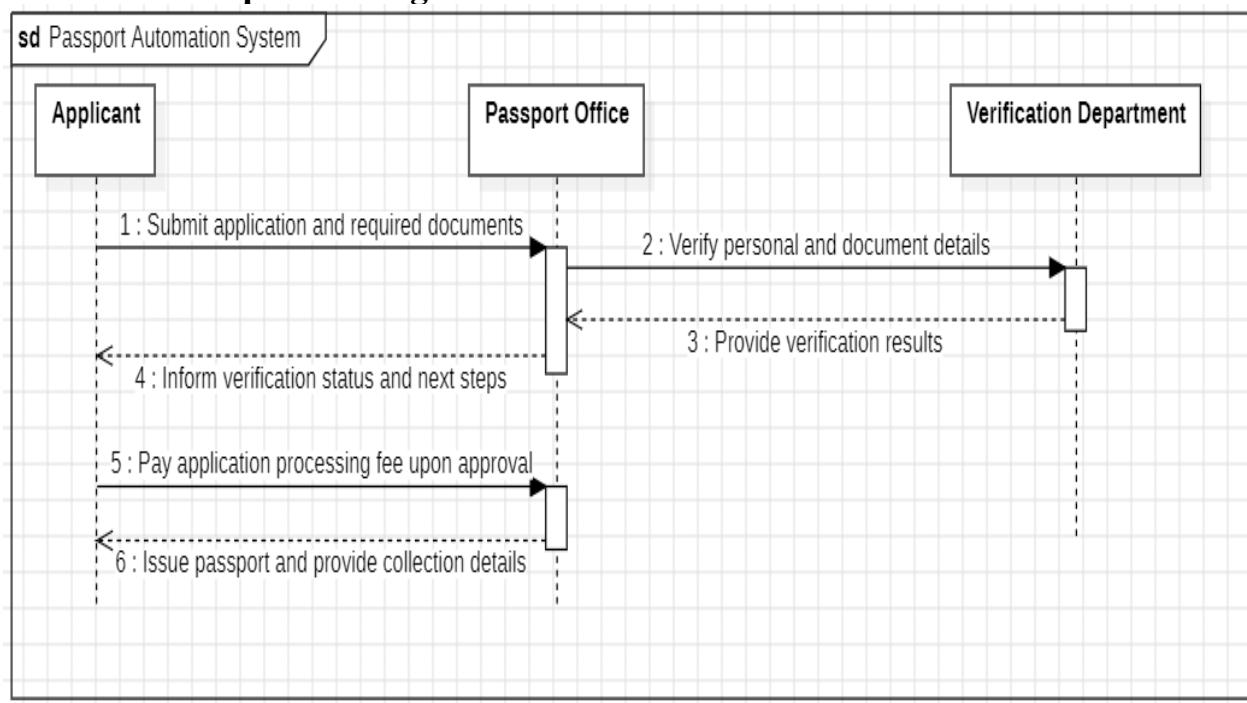
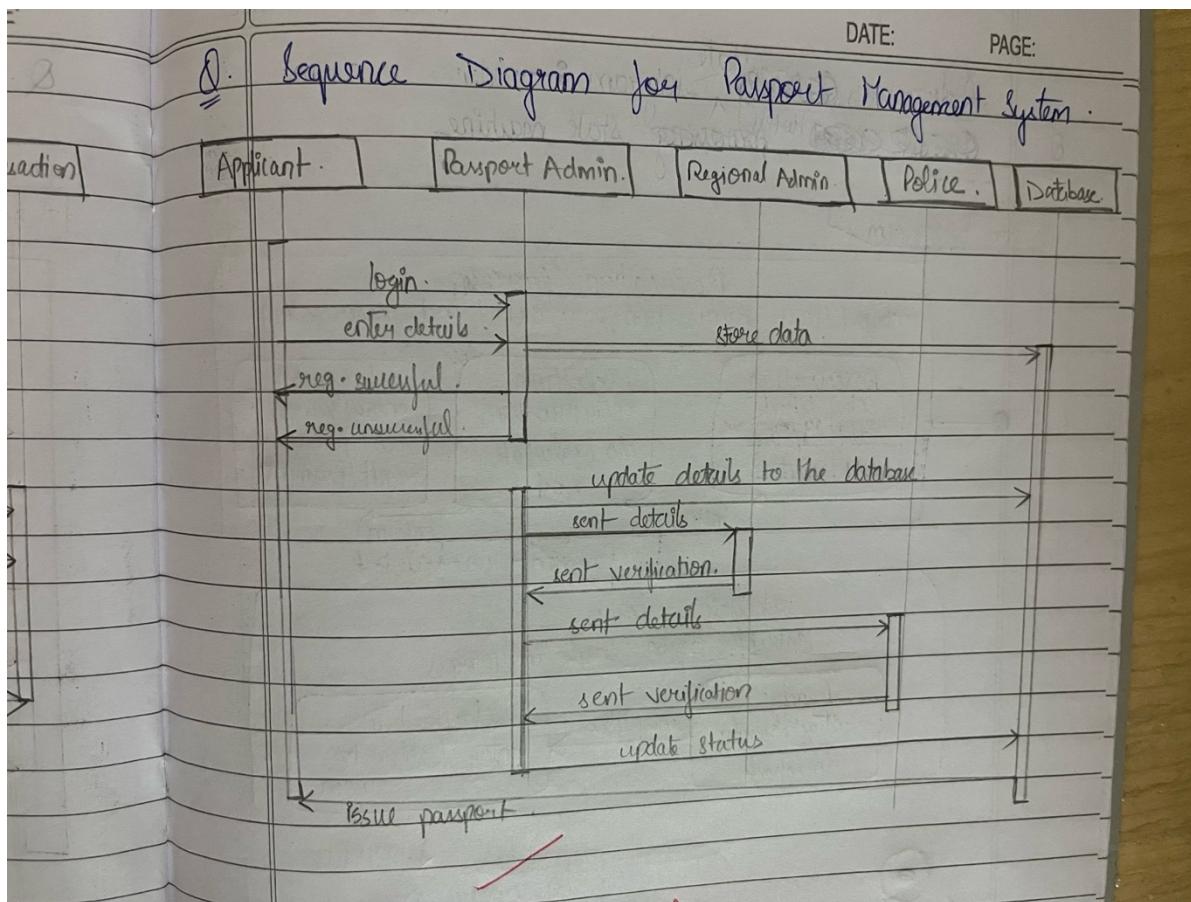


Fig 5.4



**f. Activity Diagram:**

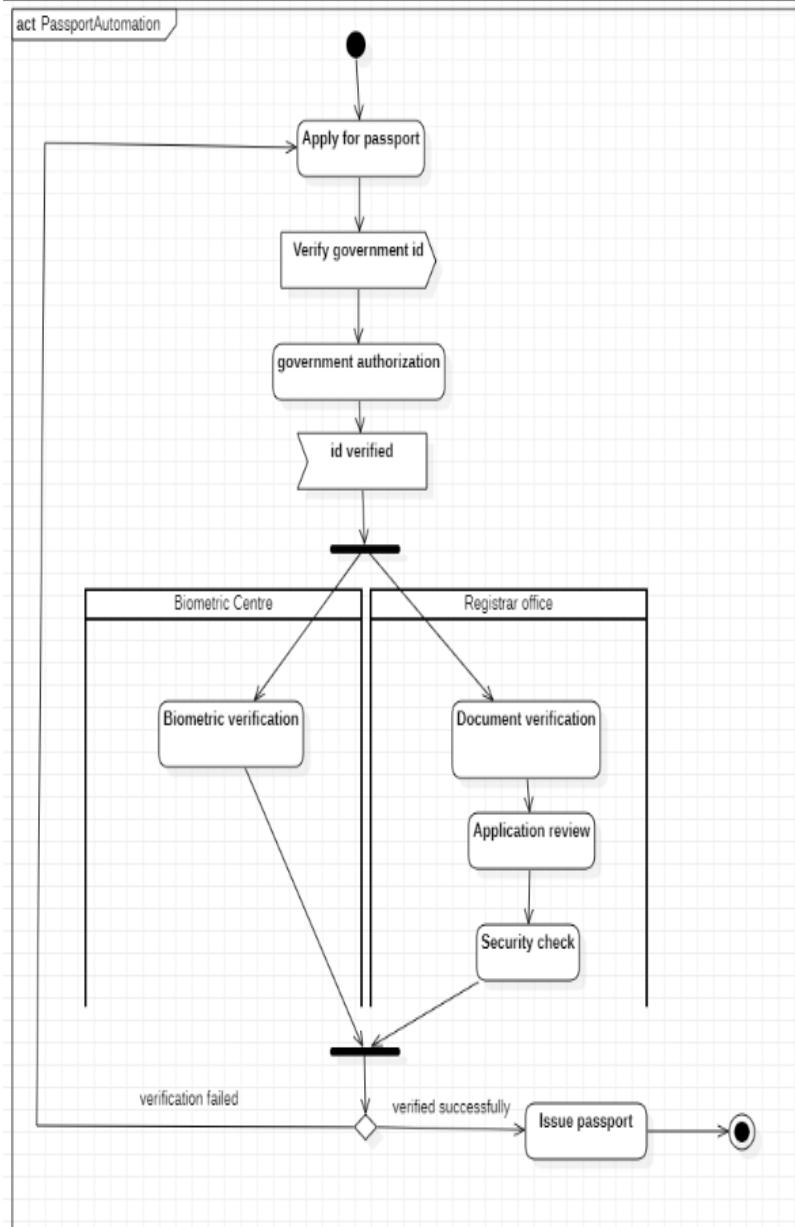


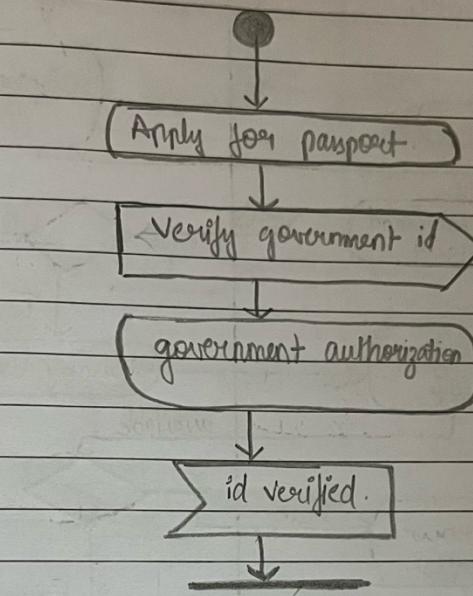
Fig 5.5

Q. Passport Automation Activity Diagram

DATE:

PAGE:

act: Passport Automation



Biometric Centre

Registration Office

Biometric  
Verification

Document  
Verification

Application review

Security check.

