Object-Oriented Analysis and Design with Java Laboratory

UE19CS353

6th Semester, Academic Year 2021-22

Assignment: 3

Name: Adithya M

SRN: PES2UG19CS015

Section: A

Date: 17/02/2022

Identify the use cases and actors and their relationships for Passport Automation System and depict it with a use case diagram:

Passport Automation System (PAS): To simplify the process of applying for a passport, a software system must be created. Initially, the applicant will login to the passport automation system and submit his details. These details are stored in the database and the verification process is done by the passport administrator, the regional administrator, and the police, then the passport is issued to the applicant.

1) Passport Automation System is used in the effective dispatch of passport to all of the applicants. This system adopts a comprehensive approach to minimize the manual work and schedule resources, time in a cogent manner.

2) The core of the system is to get the online registration form (with details such as name, address, etc.) filled by the applicant whose testament is verified for its genuineness by the Passport Automation System with respect to the already existing information in the database.

3) This forms the first and foremost step in the processing of passport application. After the first round of verification is done by the system, the information is in turn forwarded to the regional administrator's (Ministry of External Affairs) office.

4) The applicant can optionally seek ECNR status enabled by providing Graduation Certificates and Employment details.

5) The application is then processed manually based on the report given by the system, and any forfeiting identified can make the applicant liable to penalty as per the law.

6) The system forwards the necessary details to the police for its separate verification whose report is then presented to the administrator. After all the necessary criteria have been met, the original information is added to the database and the passport is sent to the applicant.

Actors:

1. Database
2. Applicant
3. Passport Administrator
4. Regional Administrator
5. Police

Use Case Specification:

1. Use case name: Registration

   Summary: Accepts details from the applicant using a form

   Description: Name, Address, Age, Date of birth

   Pre-condition: Fetch form

   Post-condition: Verify the genuineness of the data using the existing database

2. Use case name: Login to PAS

   Summary: Allows the user to login into the account

   Description: User ID and password

   Pre-condition: Access the database consisting of existing account details

   Exception: Invalid account details

3. Use case name: Verification by Passport admin

   Summary: Checks whether the details entered by the user are correct

   Pre-condition: Connect to the database

   Exception: Details entered are incorrect

4. Use case name: Seek ECNR Status

   Summary: Allows the user to check if they are eligible for passport in the ECNR category

   Description: Requires documents like 10th and 12th grade cards, birth certificate, identity

   certificate, employment details, etc.

5. Use case name: Verification by Police

   Summary: Additional check is performed on the application submitted by the user

   Pre-condition: Must be manually verified before

Post-condition: Send report to passport administrator, update information in the database
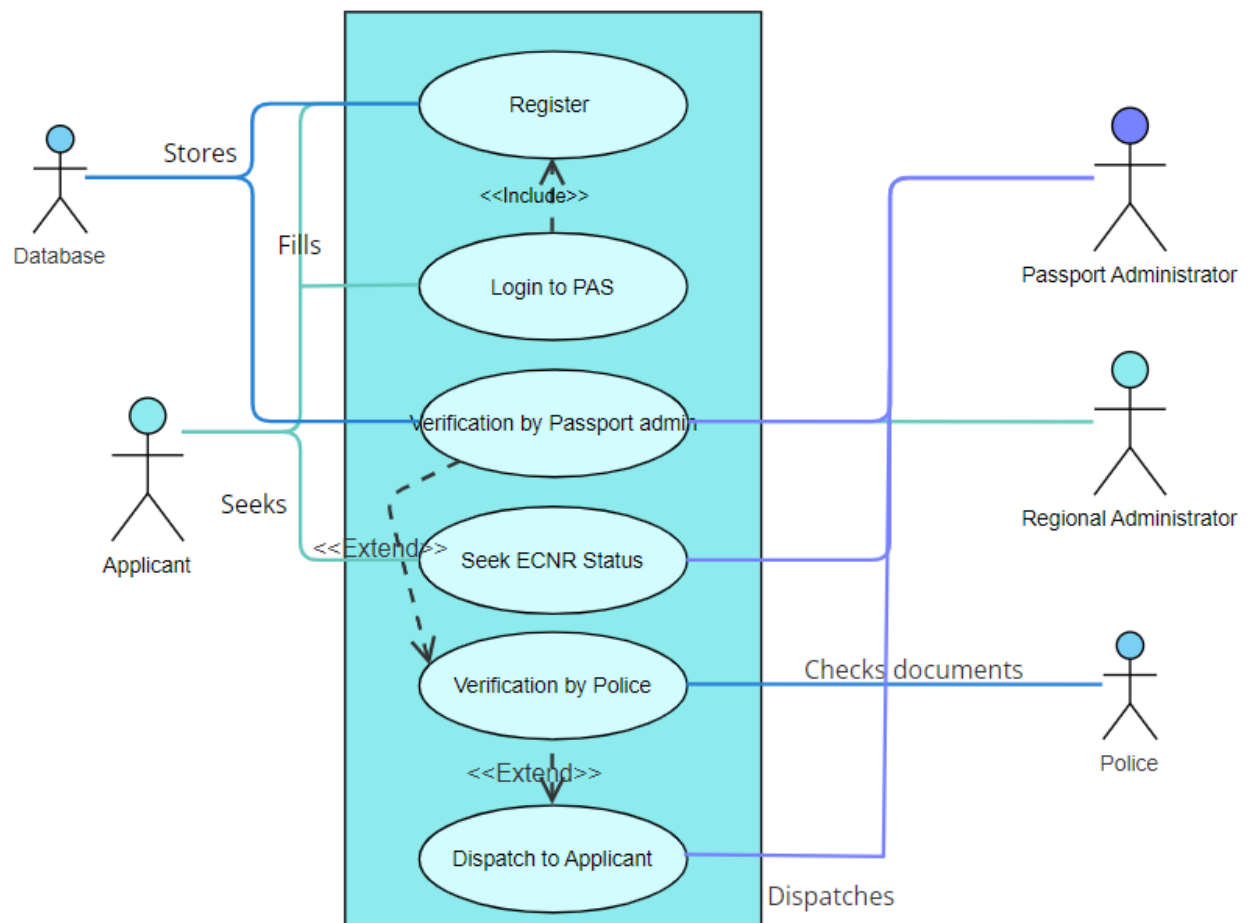
Exception: Invalid details may lead to penalties

6. Use case name: Dispatch to Applicant

   Summary: Dispatches the passport to the applicant if all the verifications are complete without any problems

   Description: Address, Name of recipient

UML Diagram:

Tool used: https://online.visual-paradigm.com/diagrams/solutions/free-uml-drawing-software/