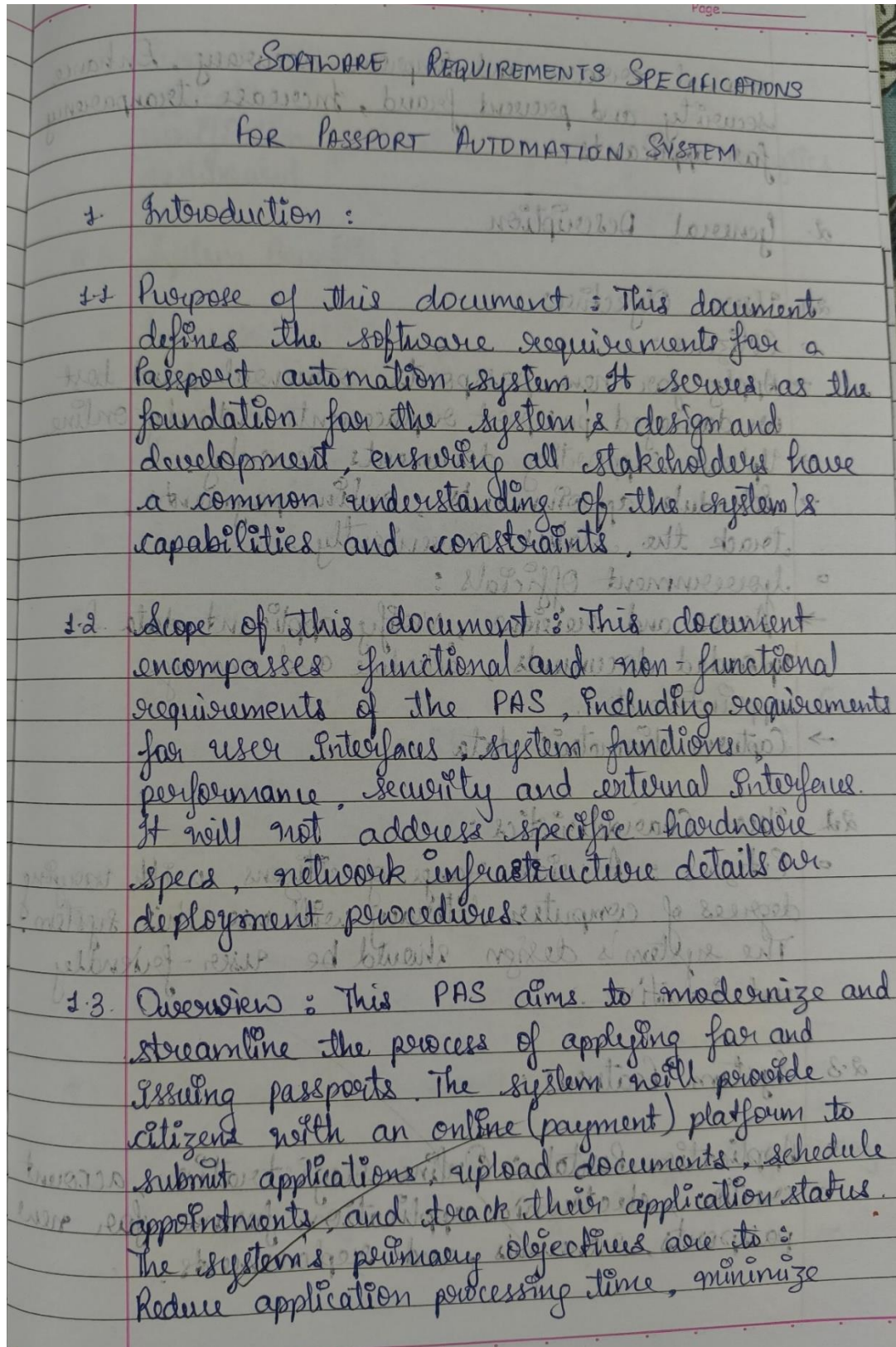


# PASSPORT AUTOMATION SYSTEM

## SOFTWARE REQUIREMENTS SPECIFICATION





<p>manual errors and improve accuracy. Enhance security and prevent fraud, increase transparency for applicants.</p> <h2>2. General Description</h2> <h3>2.1. User Objectives:</h3> <ul style="list-style-type: none"> <li>• Citizens:             <ul style="list-style-type: none"> <li>→ Apply for new passports, renewals, and lost or damaged passport replacements entirely online.</li> <li>→ Upload supporting documents securely.</li> <li>→ Schedule appointments, online payments, track the status conveniently.</li> </ul> </li> <li>• Government Officials:             <ul style="list-style-type: none"> <li>→ Access and review, verify applicant data &amp; uploaded documents, schedule and manage appointments.</li> <li>→ Capture biometric data.</li> </ul> </li> </ul> <h3>2.2. User Characteristics:</h3> <ul style="list-style-type: none"> <li>• Citizens: A wide range of citizens with varying degrees of computer literacy will use this system. The system's design should be user-friendly and intuitive.</li> </ul> <h3>2.3. System Features:</h3> <ul style="list-style-type: none"> <li>• Application Portal: Online registration, account creation, electronic application forms for new passports, renewals, and replacements.</li> </ul>	<p>Passport Office Dashboard: Secure login, application queue management, document verification features, reporting and analytics dashboard.</p> <h2>2.4. System Benefits:</h2> <ul style="list-style-type: none"> <li>• Increased efficiency</li> <li>• Reduced Errors</li> <li>• Enhanced Security</li> <li>• Improved Transparency</li> <li>• Cost Reduction</li> <li>• Improved accessibility</li> </ul> <h2>3. Functional Requirements:</h2> <h3>3.1. Applicant Registration and authentication:</h3> <p>Create secure accounts with unique usernames &amp; passwords</p> <h3>3.2. Application submission</h3> <h3>3.3. Document Upload and verification</h3> <h3>3.4. Appointment scheduling</h3> <h3>3.5. Fee payment</h3> <h3>3.6. Application status tracking</h3> <h2>4. Interface Requirements:</h2> <h3>4.1. External Systems:</h3> <p>A secure payment gateway for processing online payments.</p>
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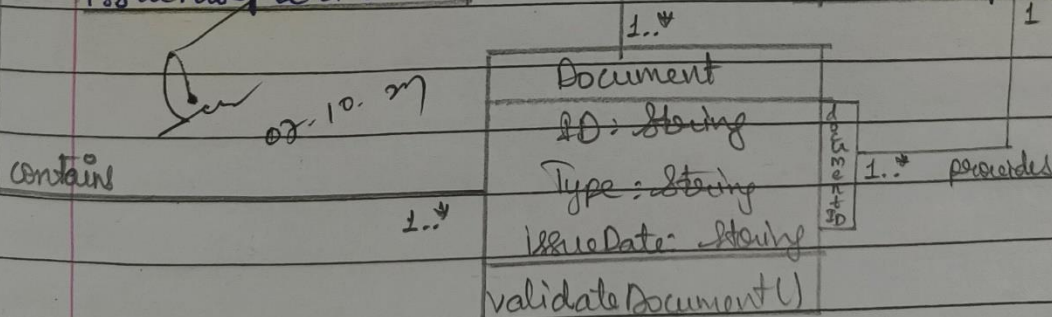
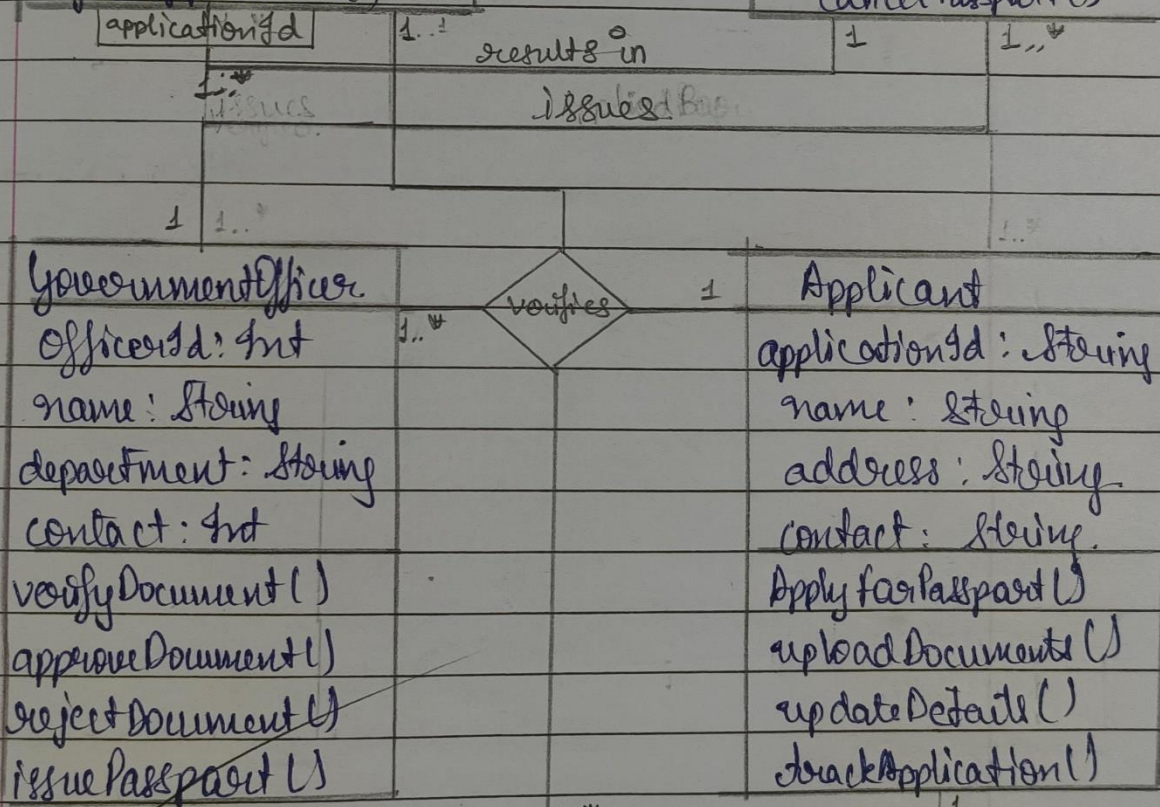
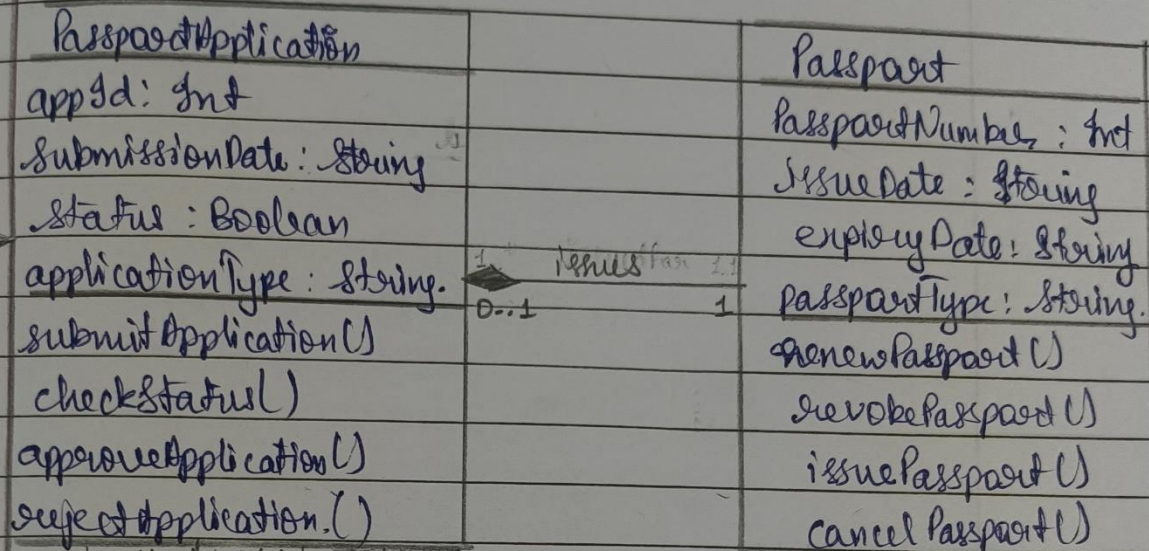
<h2>5. Performance Requirements:</h2> <ul style="list-style-type: none"> <li>• Response time</li> <li>• Data processing</li> <li>• Capacity</li> </ul> <h2>6. Design Constraints</h2> <ul style="list-style-type: none"> <li>• Technology Stack: Developed using a modern web application framework and a RDBMS.</li> <li>• Operating System: The system is platform-independent.</li> </ul> <h2>7. Non-functional Attributes:</h2> <ul style="list-style-type: none"> <li>• Security</li> <li>• Usability</li> <li>• Reliability</li> <li>• Maintainability</li> <li>• Scalability</li> </ul> <h2>8. Preliminary Schedule and Budget:</h2> <h3>8.1. Schedule:</h3> <p>The project is estimated to take 5 months</p> <ul style="list-style-type: none"> <li>→ Requirement gathering (2 weeks)</li> <li>→ Design phase (1 month)</li> <li>→ Development phase (2 months)</li> <li>→ Testing phase (1 month)</li> <li>→ Deployment and training (2 weeks)</li> <li>→ Post-deployment support (2 weeks)</li> </ul>	<h3>8.2. Budget:</h3> <p>Total estimated budget is \$3000;</p> <ul style="list-style-type: none"> <li>• Requirement gathering: \$500</li> <li>• Design phase: \$700</li> <li>• Development phase: \$1000</li> <li>• Testing phase: \$400</li> <li>• Deployment and training: \$200</li> <li>• Post-deployment support: \$200</li> </ul>
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# PASSPORT AUTOMATION SYSTEM - CLASS DIAGRAM



## 5. PASSPORT AUTOMATION SYSTEM





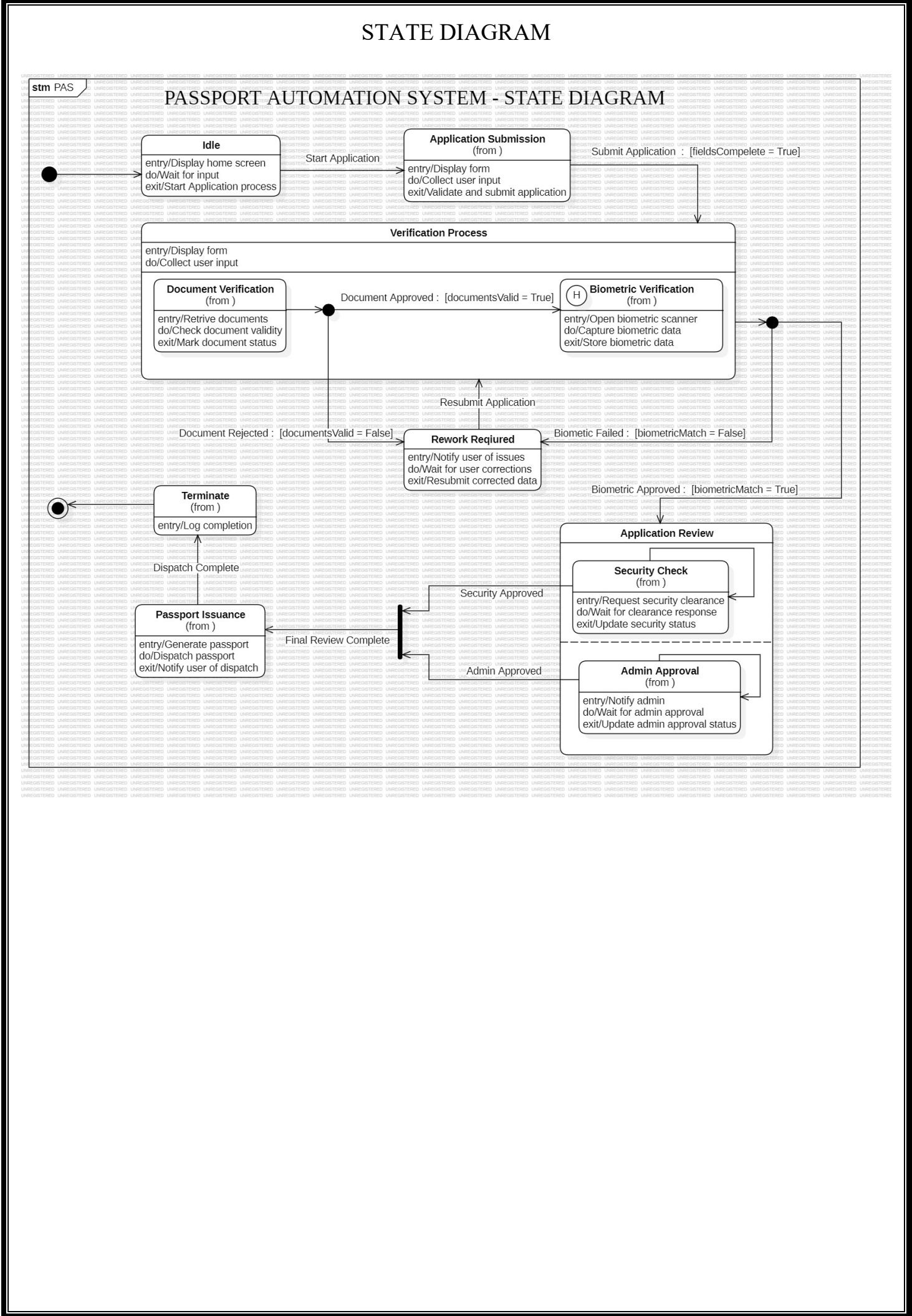
# STATE DIAGRAM

stm PAS

## PASSPORT AUTOMATION SYSTEM - STATE DIAGRAM

```
stateDiagram-v2\n    [*] --> Idle\n    Idle: entry/Display home screen\ndo/Wait for input\n    Idle --> ApplicationSubmission: Start Application\n    ApplicationSubmission: entry/Display form\ndo/Collect user input\n    ApplicationSubmission --> ApplicationSubmission: Submit Application : [fieldsComplete = True]\n    ApplicationSubmission --> VerificationProcess\n    VerificationProcess: entry/Display form\ndo/Collect user input\n    VerificationProcess --> DocumentVerification\n    DocumentVerification: entry/Retrieve documents\ndo/Check document validity\n    DocumentVerification --> DocumentVerification: Document Approved : [documentsValid = True]\n    DocumentVerification --> BiometricVerification: Document Rejected : [documentsValid = False]\n    BiometricVerification: entry/Open biometric scanner\ndo/Capture biometric data\n    BiometricVerification --> BiometricVerification: Biometric Failed : [biometricMatch = False]\n    BiometricVerification --> ReworkRequired: Biometric Approved : [biometricMatch = True]\n    ReworkRequired: entry/Notify user of issues\ndo/Wait for user corrections\n    ReworkRequired --> ReworkRequired: Resubmit Application\n    ReworkRequired --> ApplicationSubmission: Resubmit Application\n    ReworkRequired --> ApplicationReview: Security Approved\n    ApplicationReview: entry/Request security clearance\ndo/Wait for clearance response\n    ApplicationReview --> ApplicationReview: Security Check (from)\n    ApplicationReview --> AdminApproval: Admin Approved\n    AdminApproval: entry/Notify admin\ndo/Wait for admin approval\n    AdminApproval --> AdminApproval: Admin Approval (from)\n    AdminApproval --> ApplicationReview: Admin Approval\n    AdminApproval --> PassportIssuance: Final Review Complete\n    PassportIssuance: entry/Generate passport\ndo/Dispatch passport\n    PassportIssuance --> Idle: Dispatch Complete
```

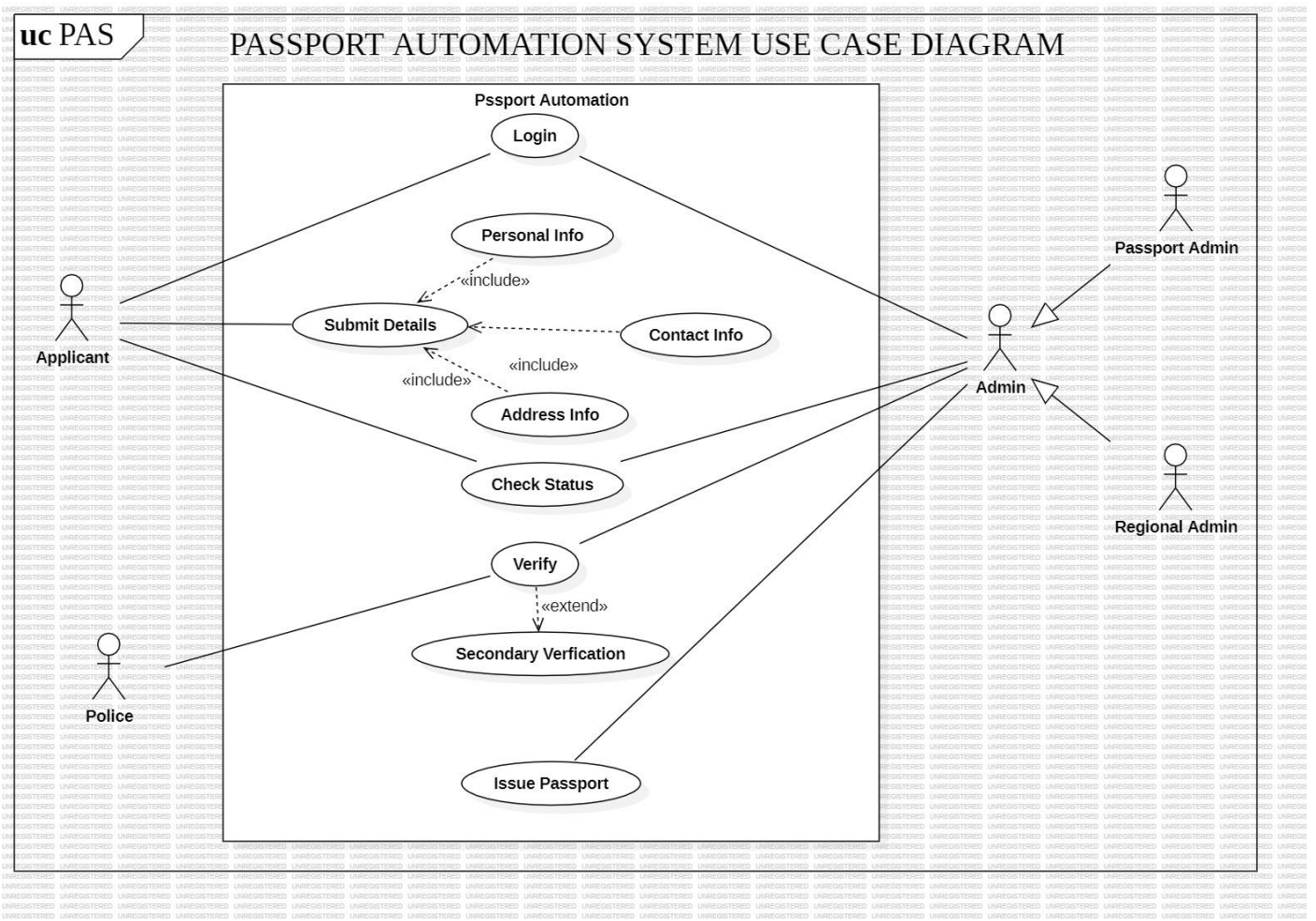
The diagram illustrates the state transitions for a Passport Automation System. It starts at an initial state (represented by a black dot) and proceeds through several states: Idle, Application Submission, Verification Process, Document Verification, Biometric Verification, Rework Required, Application Review, Security Check, Admin Approval, and Passport Issuance. Transitions are labeled with events and actions, and some include guard conditions in square brackets. The process ends at the Passport Issuance state, which then transitions back to the Idle state upon completion.



# USE CASE DIAGRAM

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## PASSPORT AUTOMATION SYSTEM USE CASE DIAGRAM



## SEQUENCE DIAGRAM

## ACTIVITY DIAGRAM