

LAB - 1I Hotel Management System:-(i) Introduction:-

(i) Purpose of this Document:- The main aim of the document is to summarise the requirements and specifications of a Hotel Management System. It acts as a guide to the development team and outlines functionalities, objectives & constraints.

(ii) Scope of document:- Describes the functions such as:- reservation management, billing, guest services and inventory.

(iii) Overview:- The system is designed to streamline various hotel operations such as reservation management, guest checkin/out, room service, etc.

(2) General Description:-

→ The hotel management system will cater to the needs of hotel staff & guests, providing intuitive interfaces. It will include features such as:

Reservation Management - Allows ^{guests to} ~~allows~~ make reservations online or in person, quickly & efficiently.

Guest Services - Provides checkin & checkout functionalities, services, etc.

Billing:- Generates invoices, processes payments

(3) Functional Requirements :-

Allows guests to make online reservations
Management room availability
Generate invoice, process payments

(4) Interface Requirements :-

Integration with payment gateways
Intuitive booking interfaces

(5) Performance Requirements :-

Should be able to handle high traffic
Response time should be minimal
System should be reliable

(6) Design Constraints :-

System should comply with industry standards

System should be compatible with current software & hardware.

(7) Non-Functional Attribute

Security

Scalability

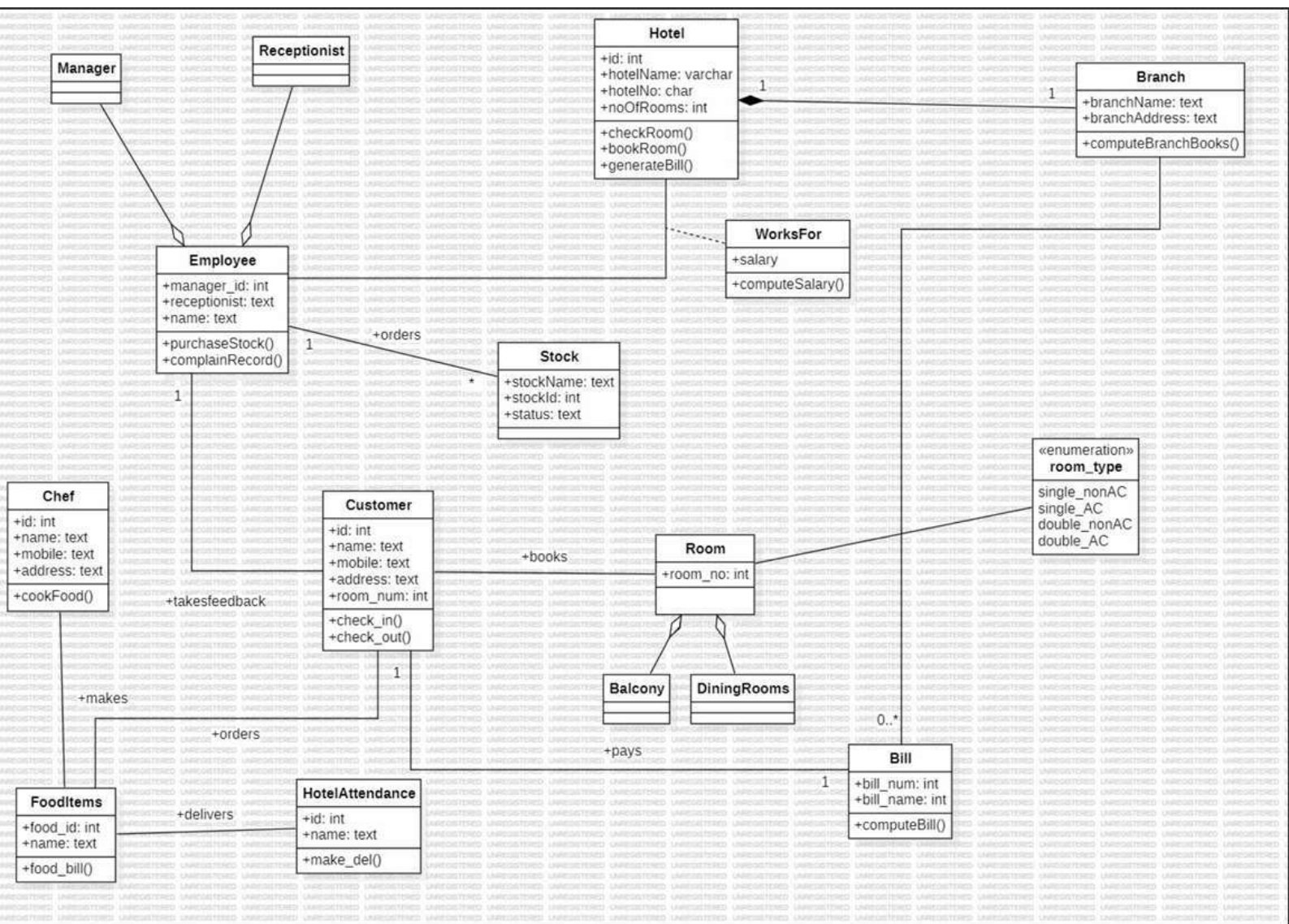
Portability

Reliability

(8) Preliminary Schedule & Budget

Development timeline :- 6 months

Estimate budget :- 100,000 ₹



5/4/21

II Credit Card Processing :-

(1) Introduction :-

(i) Purpose of the document :- This document aims to outline the requirements & specification for the development of a credit card processing software.

(ii) Scope of the document :- This document defines the overall working & main objectives of the credit card processing software.

(iii) Overview :- It is designed to streamline & automate the ~~process~~ process of handling credit card transactions. It provides a platform to accept, manage transactions.

(2) General Description :-

This software facilitates secure transaction b/w retailers and customers. Key features :-

~~Transaction~~ Transaction processing
user characteristics.

Secure payment processing
fraud detection

(3) Functional Requirements :-

Authorization

Transaction logging

Fraud detection

Reporting

Refund processing

(4) Interface Requirements:-

- Payment Gateway
- POS systems
- Merchant Dashboards

(5) Performance Requirement:-

- Response Time should be milliseconds
- High scalability for handling huge transaction
- Low error rate.

(6) Design Constraints:-

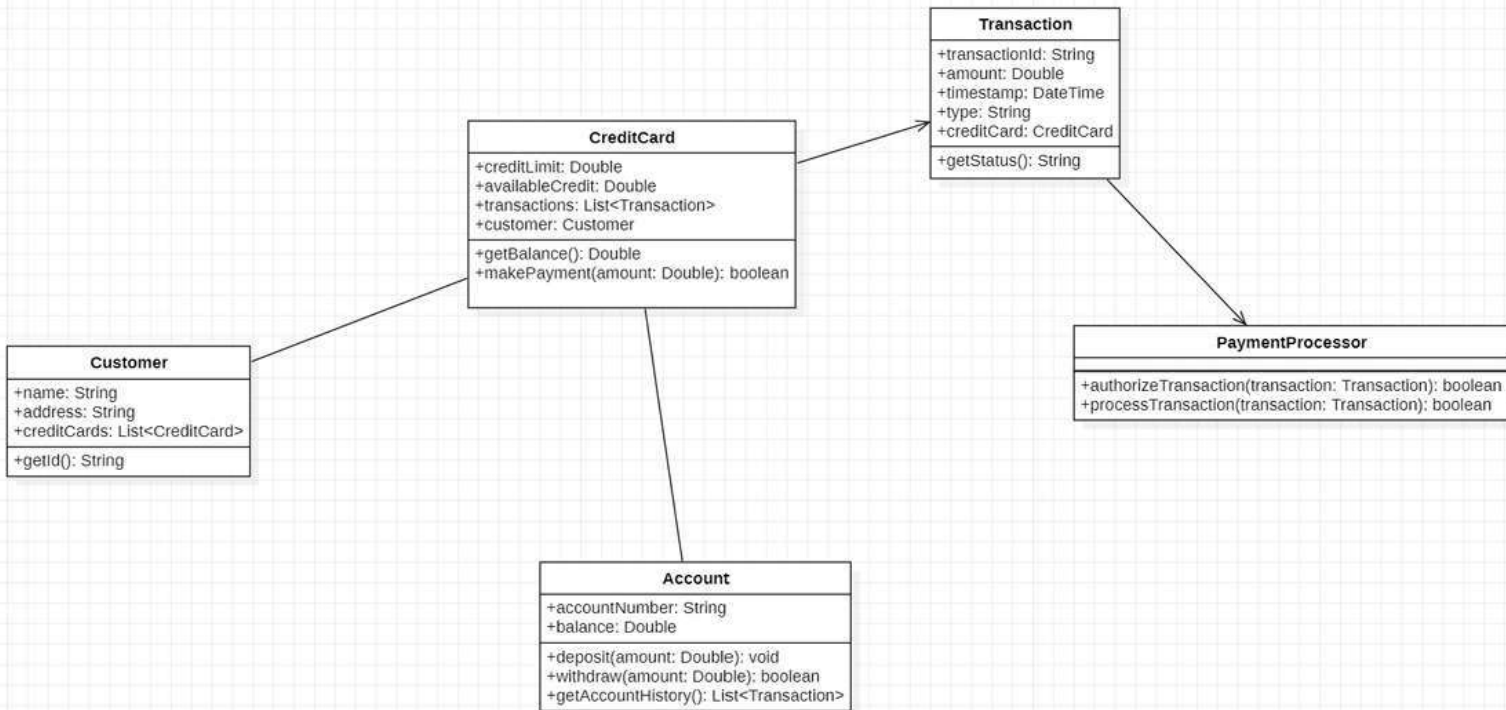
compliance → Adhering to industry standards such as PCI DSS for secure handling of payment card

(7) Non functional Attributes:-

Scalability, Reliability, Portability, Data Integrity

(8) Preliminary Schedule and Budget:-

The initial version of the project plan include a timeline for development and estimated budget requirement around 6 months time and \$200000.



III Library Management System:-

(1) Introduction:-

(i) Purpose of the document:- The document serves as a guide for the requirement specification for developing library management system (LMS).

(ii) Scope of the Document:- The document defines the overall working and main objective of LMS.

(iii) Overview:- LMS is a software designed to automate & stream line library operations like circulation, cataloging, inventory management.

(2) General Description:-

- User characteristics → Designed based on req. of Lib.
- Objective of users
- Cataloging, circulation management, patron registration.

(3) Functional Requirements:-

- Cataloging → Based on books, journal, multimedia.
- Circulation management
- Reservation and hold management

(4) Interface Requirements:-

- User Interface
- Database Interface
- Integration Interface.

(5) Performance Requirements:-

→ Response Time, Scalability, Reliability, Data Integrity

(6) Design Constraints:-

→ Software compatibility over various OS & DBMS

→ Data security → Protect library data from unauthorised entities.

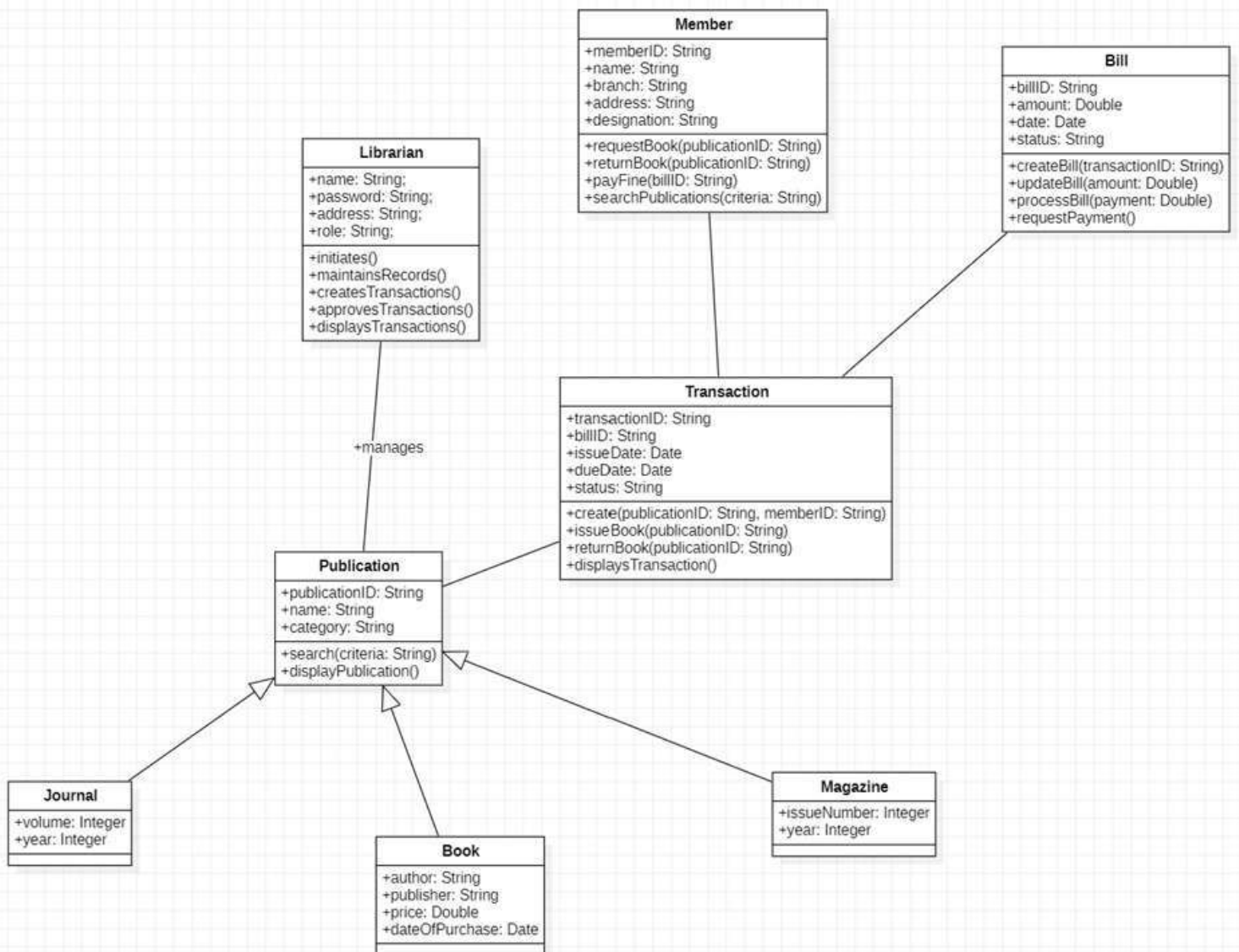
(7) Non functional Attributes:-

~~Soft~~
→ Security, Portability, Reliability, Scalability

(8) Preliminary Schedule and Budget:-

There are multiple phases such as Requirements, gathering, Design & ~~Dev~~ Architecture, Development, Testing and Quality Assurance, Deployment and launch, Post launch support.

The expected time is 5 months with a budget of \$150,000 - \$200,000



IV Stock Maintenance System:-

(i) Introduction:-

This document serves as a guide outlining the requirements and specifications for the development of stock maintenance system (SMS)

(i) Scope of the document:- The document defines the overall working & main objective of SMS

(ii) Overview:- The SMS is a software solution designed to automate and streamline inventory management processes for businesses

(2) General Description:-

Objective of User:- To efficiently manage inventory, track stock levels.

Features & Benefits → Stock tracking, inventory replenishment, reporting, analytics and forecasting.

(3) Functional requirements:-

Stock Tracking
Inventory Replenishment
Reporting and analysis

(4) Interface Requirements:-

User Interface
Database interface
Integration Interface.

(5) Performance requirements:-

- Response Time → Prompt response to user ~~and~~ queries and transactions
- Scalability:- Ability to handle large volume of inventory transactions
- Data Integrity → Ensure the accuracy and confidentiality of inventory data.

(6) Design constraints:-

- Software compatibility → Ensuring compatibility with various OS & DBMS
- Data security → Implementation of robust security measures to protect inventory data from unauthorized access & data breach

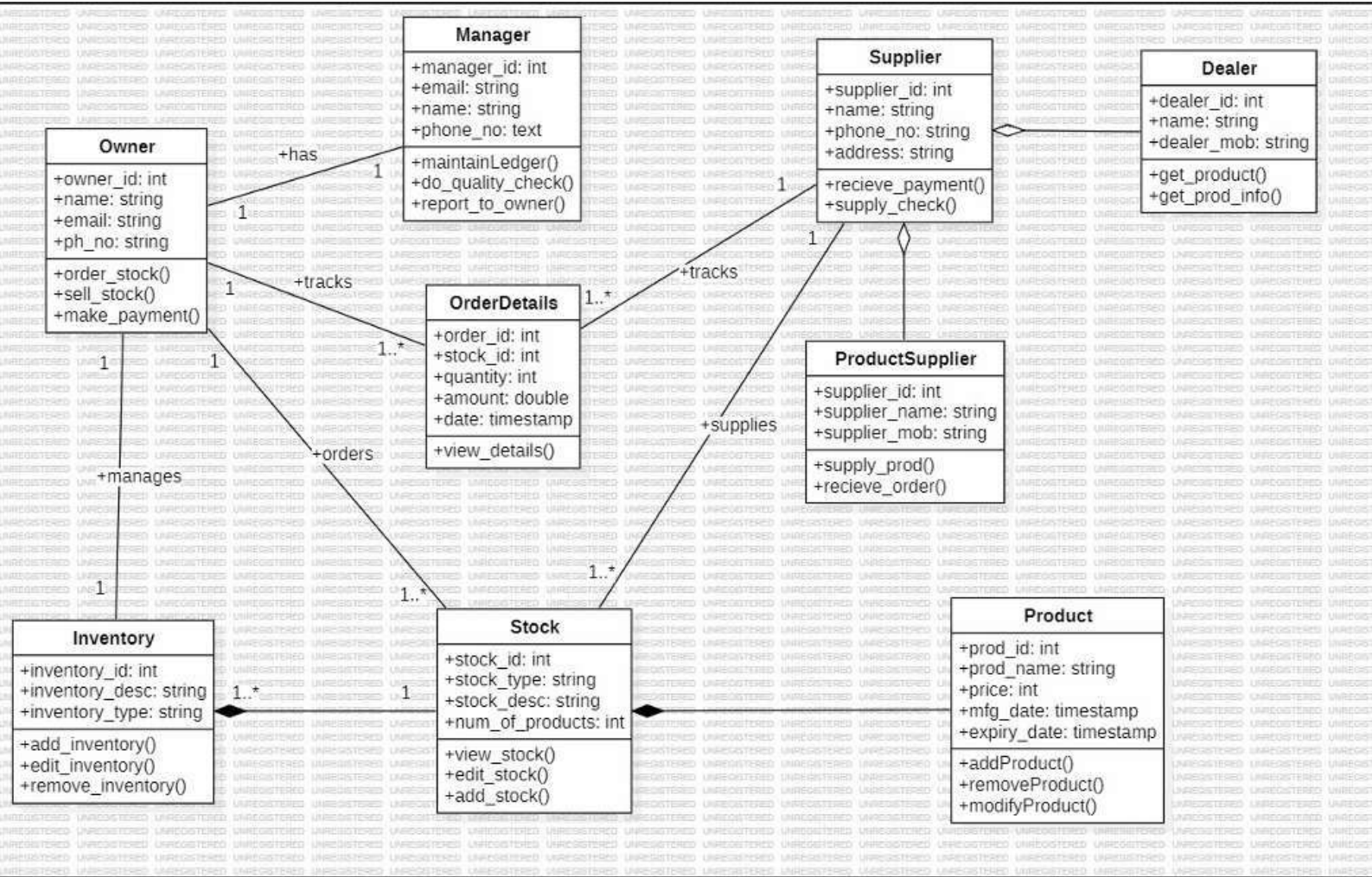
(7) Non Functional Attributes:-

Security, Portability, Reliability, Scalability

(8) Preliminary Schedule and Budget:-

- We have the following schedule goals:- Requirements Gathering & Analysis, Design & Architecture, Development, Testing & Quality assurance, Deployment and Launch, post launch support

The overall time will be 6 months with an budget estimate of ₹200,000.



V Passport Automation System:-

(1) Introduction:-

- (i) Purpose of this document:- The purpose of this document is to provide a comprehensive overview of the requirements & specifications for the development of Passport automation system.
- (ii) Scope of this document:- This document defines the scope of PAS, detailing its intended functionalities and benefits to the end users.
- (iii) Overview:- This PAS is designed to streamline & automate the process of passport issuance and management.

(2) General Description:-

- Objective of user:- To simplify and expedite the process of applying for and obtaining passports.

(3) Functional Requirements:-

~~Registration~~

Online Application Submission
Appointment scheduling
Document verification
Passport Printing

(4) Interface Requirements:-

- Web Portal
→ Biometric Devices

Document Verification Systems Passport Printing Systems.

- (5) Performance Requirements:-
Response time, scalability, Reliability,
Data security
- (6) Design constraints:-
Regulatory compliance
System Integration
Data Privacy.
- (7) Non functional Attributes
Security
Portability
Reliability
Scalability.
- (8) Preliminary Schedule and Budget:-
Development time 6 months
Budget : \$ 600 000

