12115378 K21SBA23SRS - SRS on online passport registration with DFD

Software Engineering (Lovely Professional University)

A Project Report On

Online Passport Registration

Case Study submitted in partial fulfilment of the requirements for the degree

of

BACHELORS OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

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Software Requirement specification (SRS) FOR ONLine passport Registration.

prepared by Toffe Aalam under the guidance of Dr. Mohit Aroora.

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1. Introduction:

→ 1.1 Purpose:

The purpose of this document is to present the details description of the online passport Registration. it will explain the purpose and features of the system, the interface of the system, And constraints that it must operate, this system is applicable for the hoi-polloi of the nation.

→ 1.2 Scope of this projetect:

The online passport registration have a web portal " passport india.gov.in" is a web based application which helps people apply their passport online through government websites as passwoof seva.

Due to lack of time and increasing penetration of Internet, a lot of people in india have started going E-way to apply passpoot. Earlier, a lot of people in india have started going E-way to apply the mere thought of standing in long queue at the passport office to fill the form used to gives jitters but now the process is much simpler.

→ 1.3 Definitions:—

Administrator :- Refers to Super user who is the central Authority who has been vested with the privilege to manage the entire System. It can be any higher official in regional passport office of ministry of external affairs.

* Applicants :- one who wishes to obtain the passport

* PAS :- Refers to this passport Automation System

* HTML :- Hyper text transfer protocol

* TCP/IP :- Transmission control protocol/internet protocol is the communication protocol.

1.4 Reading Suggestions :-

This SRS is mainly developed for the project development team. In this team there are the project manager, developer, coder & documentation writer & the user of project.

User (Customer)

This document is intended to user and customer to make ensure that the document satisfies the needs of customer.

1.5 Overview :-

The remainder of this documents includes three appendixes. The second one provides an overview of the System functionality & System interactions with other systems. The chapter also introduce various kinds of payments and applications process that are done in online passport registration.

The third chapter provides the requirements and specifications in detailed terms Descriptions of the system interface, different specification techniques are used in order to specify the requirements.

The fourth chapter deals with prioritization of the requirements. it includes different kinds of methods too.

1.6. References :—

* http://www.slideshare.net / srs-for-passport
* https://www.academia.edu
* https://www.studymode.com/essays/srs-for-passport-39807538.html
* https://secftrackers.blogspot.in/2011/01/passport-automation-system.html
* https://www.nyc.edu/classes/Jcts/g22.2440-001-SP07/Lec handouts/Assignment 1 sample solution.pdf

2. Overall Description

2.1 product perspective

This section will give overview of the whole system. The system will be explained in the content to show how to apply the passport for registration online online through a flow chart. it also describe the documents required that being submitted to government.
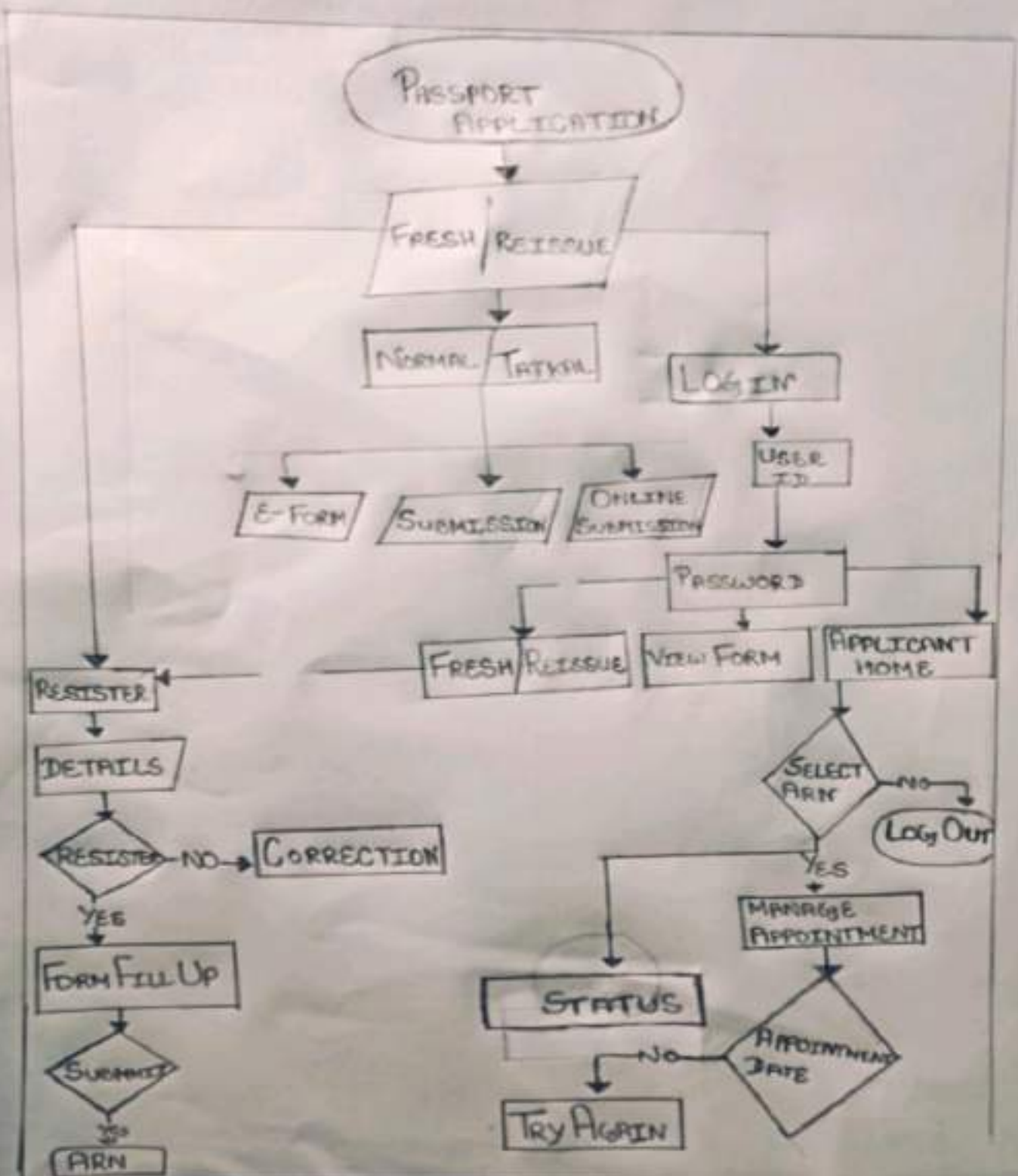
2.1.1 User interface

* **Administrator :-** Admintrator has a special right to add and approve the passport status.

* **Applicant :-** They are the people who desires to obtain the passport & submit the information to the database.

* **police :-** he is the person who receives details about the applicants. A personal verification of applicant and see if he is has any criminal criminal case against him/her before or parents. He as the power to decline the application by suggesting it to administrator if any case the police finds any difference the application can be cancelled. He communicates w/a via this PAS.

2.1.2 Hardware Interfaces :-

The server is directly connected to the clients system. The client system have an access to the database in the server

2.1.3 Software Interfaces :-

* **Front end client :-** the applicant & administrator online interface is built using JSP & HTML. The Administrator's local interface is built using Jang.

* **web browser :-** it uses Glashfish application server (Started by Sun micro systems now sponsored by oracle corporation)

* **Back End :-** oracle database

2.1.4 Operations :-

* User interface :- Help Desk Support
system users have a 24×7 access to telephone
assistance for questions that are technical in
nature, such as, slow or sluggish system response
time, incompatible browser features, application
errors, system downtime inquiries, account lock
out assistance, etc.—

* Application service & technical support
Application services & technical support programmers
and applications developers will have access to
source code to address bugs or system enhan-
cements as deemed necessary. network admini-
strator and DBA support is also required to
maintain a 24×7 system uptime.

* Administration features :-
system security and access levels are provided in
the online system. There are varying levels of
system access and functional authority. Each users
access is limited to his/her own registration reco-
rdd. only authorized system administrator(s) has
access for all user application registration records.

* System Hardware Fail :-
                              Computer operat-
ions center will handle system hardware tasks
such as data tape back-up, hardware maintenance,
be fail over, scheduled system patches and main-
tenance.

2.2 Product Function

* Secure registration of information by
  applicants.
* schedule the applicants an appointment
  for virtual manual verification of the
  original documents.

* Mail and SMS updates to applicants given by the administrator.
* passport Application status is given by the administrator
* Administrator can generate the reports from the information only for the authorized personnel and information is entered into database.

2.3 User characteristics :-

* Administrator :- Administrator has a special right to add and approve the passport status. administrator has a boatload under him to verify the persons.
* Applicant :- they are the people who desires to obtain the passport and sumbi Submit the information to database .

2.4 Operating Environment :-

particular	Clients requirements	System Server
processor	Intel or AMD	intel or AMD
operating System	windows /Linux/ Android /iOS	Linux
RAM	200mb	40GB
Hard Disk	2 GB	2 TB

2.5 Implementation constraints :-
* the user have to be careful while submitting hrs information.
* applicants require a computer to submit their information

Constraints :-

    * security is given higher importance, there is always a chance of taking action in the web
* requires the constant morning.

2.6 Assumptions & dependencies
  * The applicants & administrator must have a basic knowledge of English.
  * The applicants & administrator must have a basic knowledge of usage of computer.
  * internet connection is must
  * maintaining the database in consistent way is important.
  * proper browser should be installed.
  * Each user must have a separate user id and password.
  * The required scanned documents of an applicants to be sent to the administrator if needed.

B. Specific Requirements.
  B.1 External interface requirements
  B.1.1 user interface.

    * Administrator :- Administrator has a special right to add and approve the passport status. Administrator has a boatload under him verify the person.
    * Applicant :- They are people having desires to submit the passport to database.
    * police :- He is the person who receives details about the applicants.

3.1.2 Hardware Interfaces :-

The server is directly connected to the client system. The client systems have an access to the database in the server.

3.1.3 Software Interfaces :-

* Front End Clients :- The applicants & administrator online interface is built using JSP & HTML. The administrator's local interface is built using Java.

* web browser :- it uses Glassfish application server (started by sun micro systems now sponsored by oracle corporation)

* Back End :- oracle database

VISITORS   STAFF

FRONT END → DATA BASE → BACK END
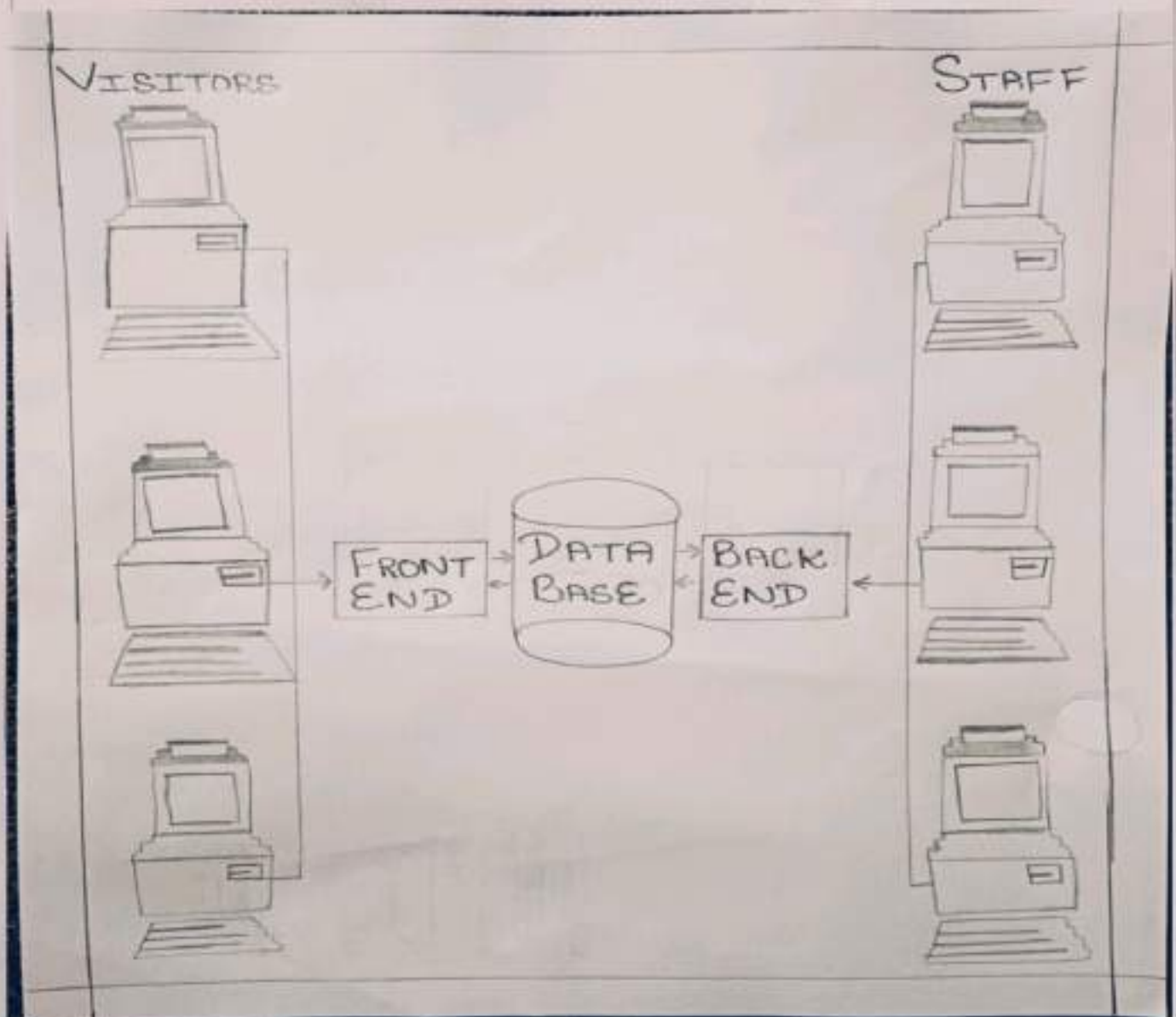
3.4.4 Communication Interfaces:

Online passport registration uses internet. Hence, it uses HTTP for transmission of the data. This protocol allows easy interaction between clients & server.

3.2 Specific Requirements:—
3.2.1 Sequence Diagram (User case diagram)

use case diagram 1.

Use case Diagram 2

Participants: Administrator, System, Admin Panel, Database, Applicant

1. Username/password
2. Authentication Success
3. Data of application yet to be processed
4. Details of application dispatched
5. Enter Applicant in process
6. Give details
7. Dispatch eligible passport
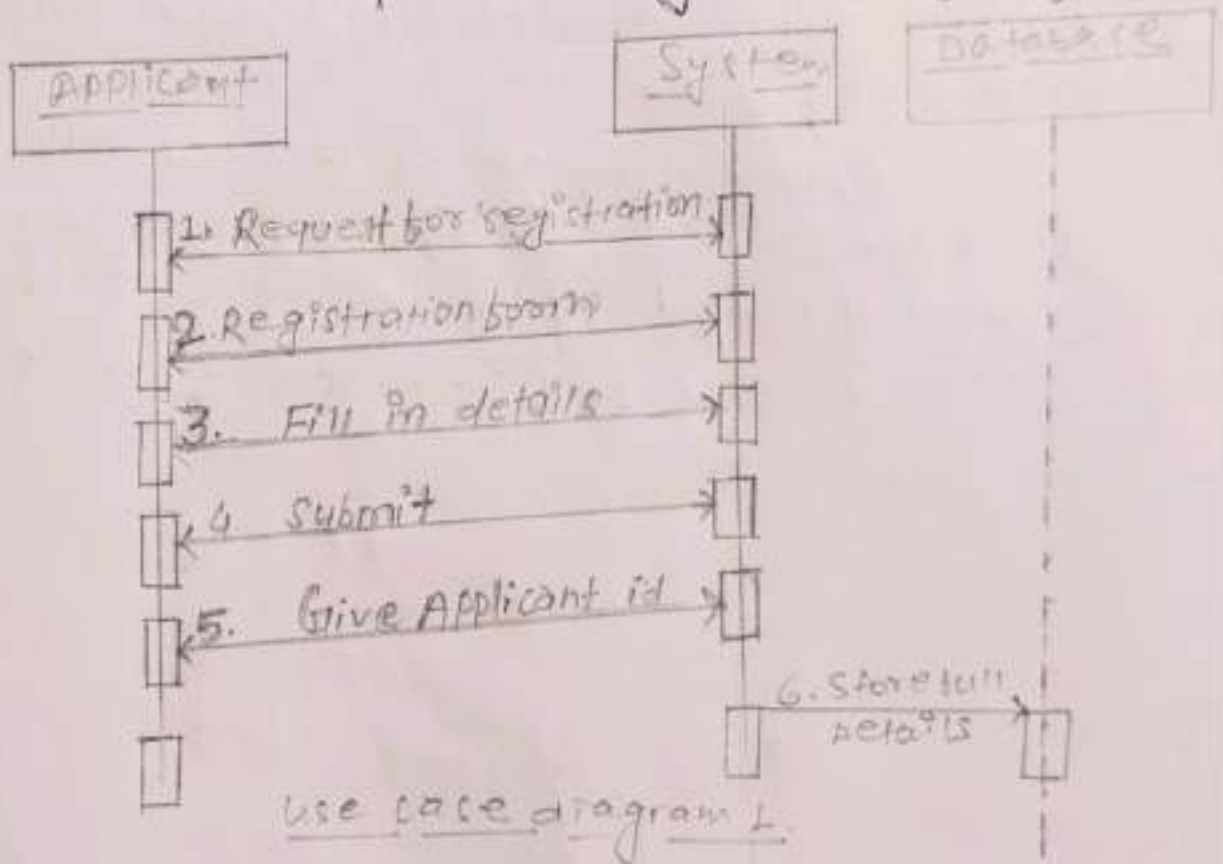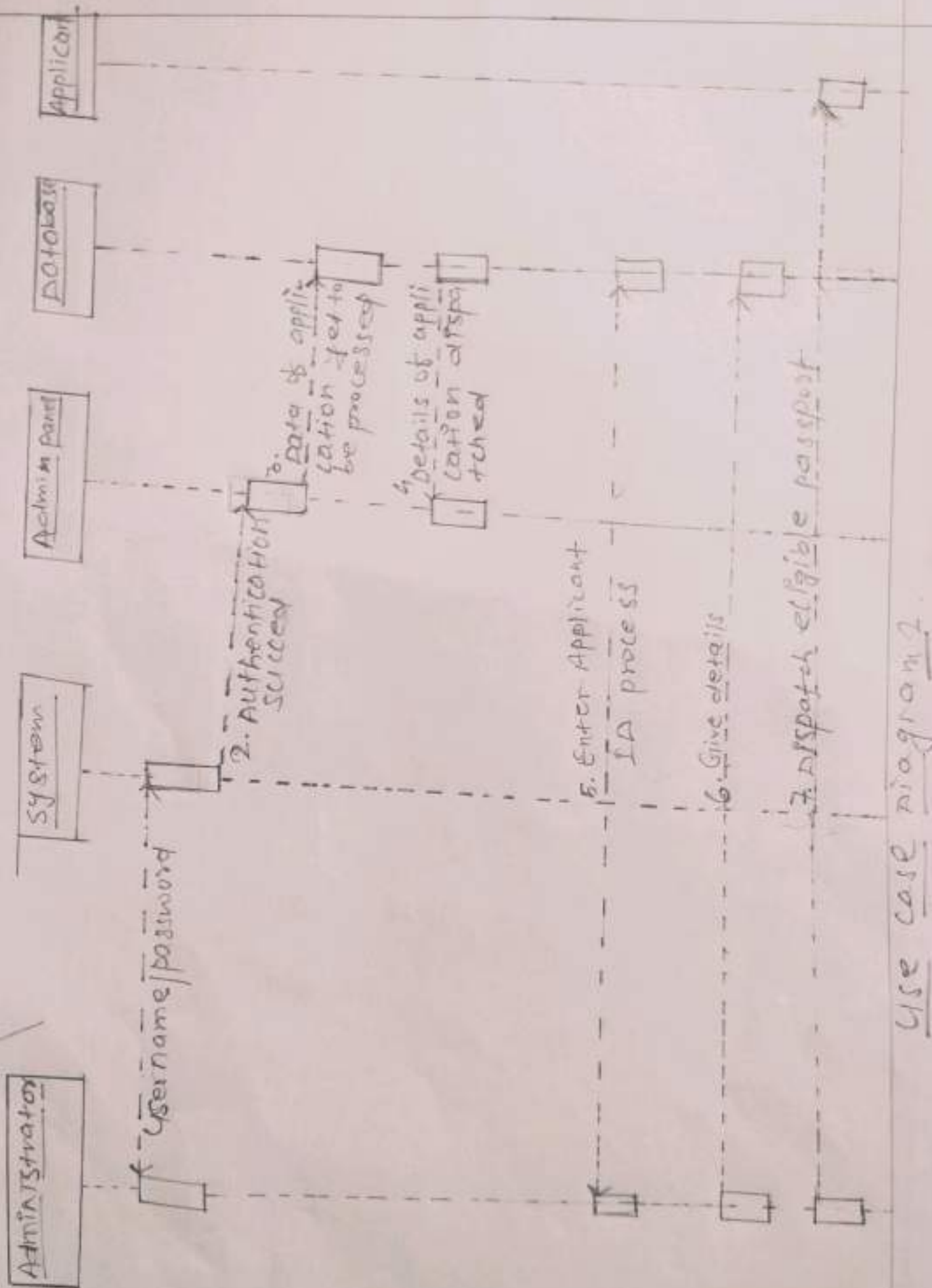
3.3 Software System attributes :-
3.3.1 Reliability
* The system should not be down more than two times a year

3.3.2 Scalability
* Scaling a system to large number of users.

3.3.3 Security :-
* Firewall protection :- The course management shall run inside the firewall.
* Support different roles :- The system shall support the different roles to users, instructors, administrators, the user is allowed to logged with the consistent role. for example if a user is logged in it he shouldn't have right to change is particular vs.

Applicant

Application till the detail to born

System admin

verify the applicant details enquiry

Authority

Issuing the passport
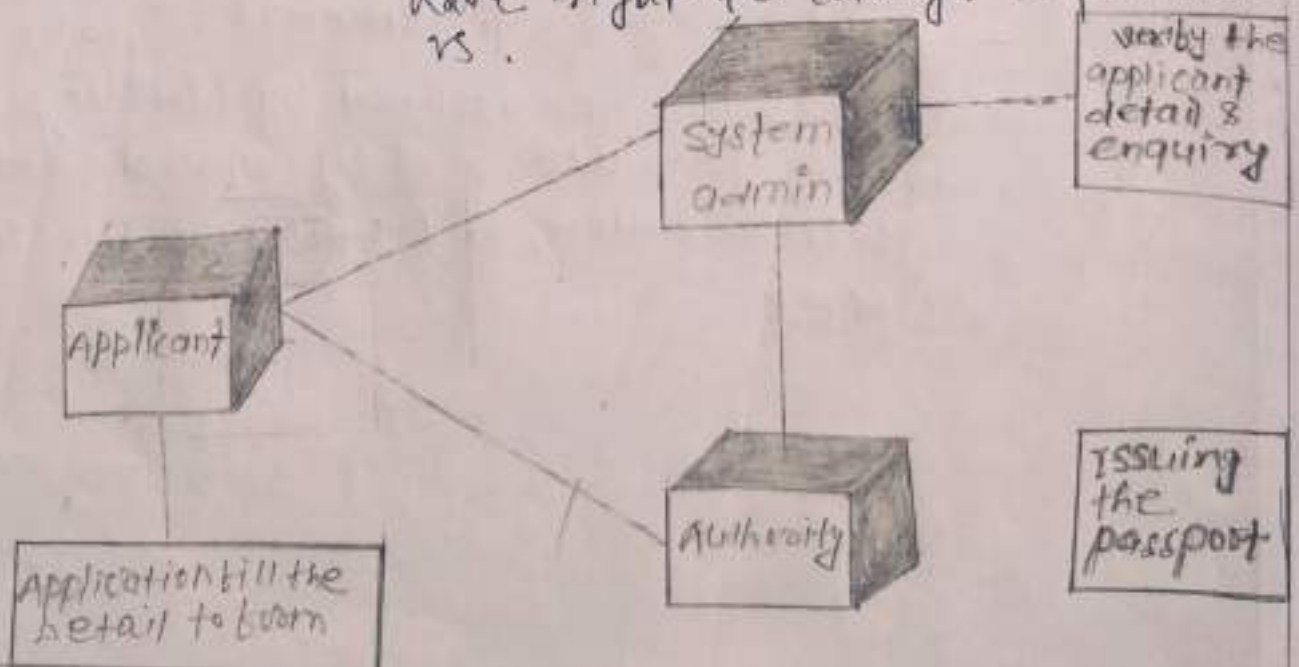
3.3.4 Maintainability and requirements :-

→ Maintenance Requirements

To ensure the functionality for the maximum period of time, the database and the catalogue must be updated at least every 15 days. Also, the system should timely integrate modification suggested by stakeholders.

→ Supportability Requirements :-

The system should need to be entirely self-supporting since the users would be using it only to register.

→ Adaptability Requirements :-

The web interface should be compatible with standards in order to be usable via all major web browsers in a wide variety of environments.

3.3.5 Security Requirements :-

Integrity Requirements :- Data integrity should be assured by limiting access to the database and by appropriate Synchronization, and back-up functionalities.

→
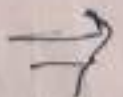
→ 4. DATA FLOW DIAGRAM(DFD) :-
         FOR
   * passport registration system (passport
     Automation system) :

   Applicant   verification
     Details   details

   ┌──────────┐   Registered   ┌─────────────┐   ┌────────┐
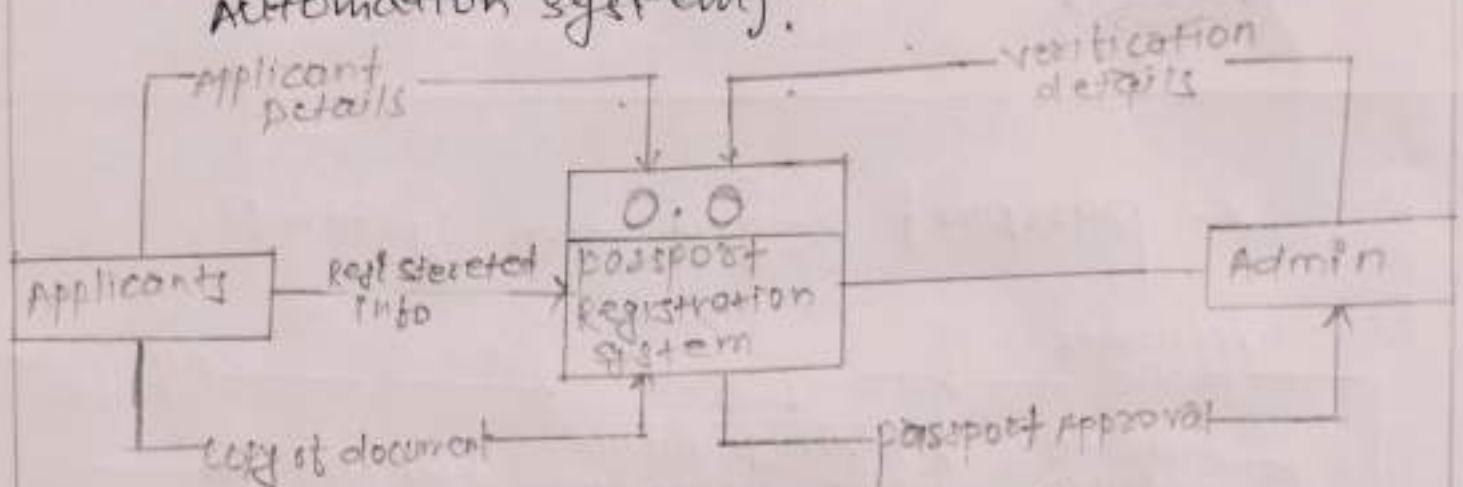   │   │─────────────────── │   0.0   │   │   │
   │Applicants│   Info   │ passport   │────────────────────│ Admin │
   │   │   │ Registration│   │   │
   └──────────┘   │   system   │   └────────┘
         │   └─────────────┘
     copy of document   passport Approval

         · DATA FLOW DIAGRAM LEVEL-0

* passport Registration system!

Applicants profile → 1.0 Manage Application information ← Application profile

Applicants Details → 1.0 Manage Application information — Check Application Details

Registration Details

Registration Details → 2.0 Manage registration — Confirmed Registration

Registration status → 2.0 Manage registration

User

Documents Details → 3.0 Manage Documents ← verify Documents

Admin
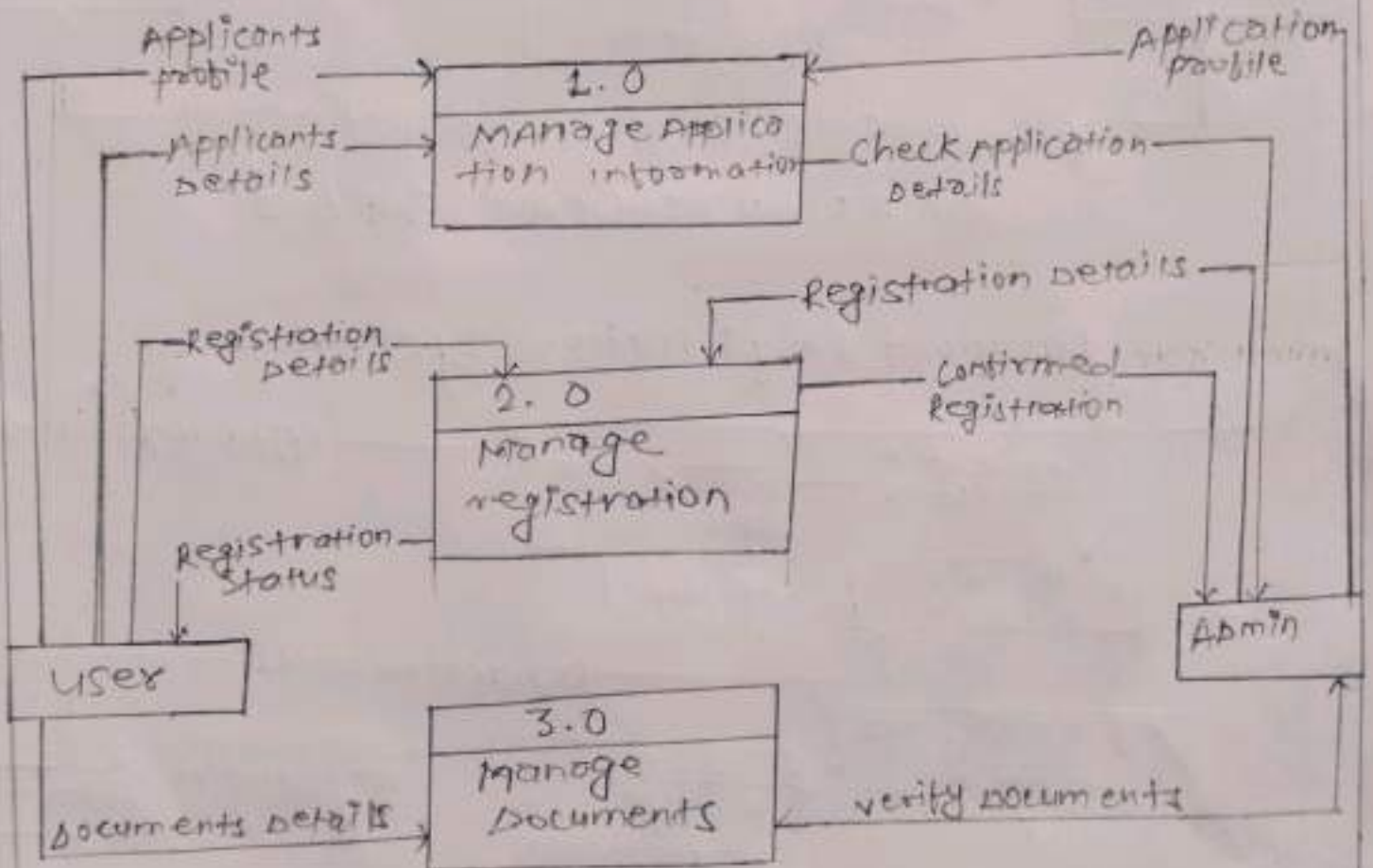
DATA FLOW DIAGRAM LEVEL 1

* Passport Registration System!
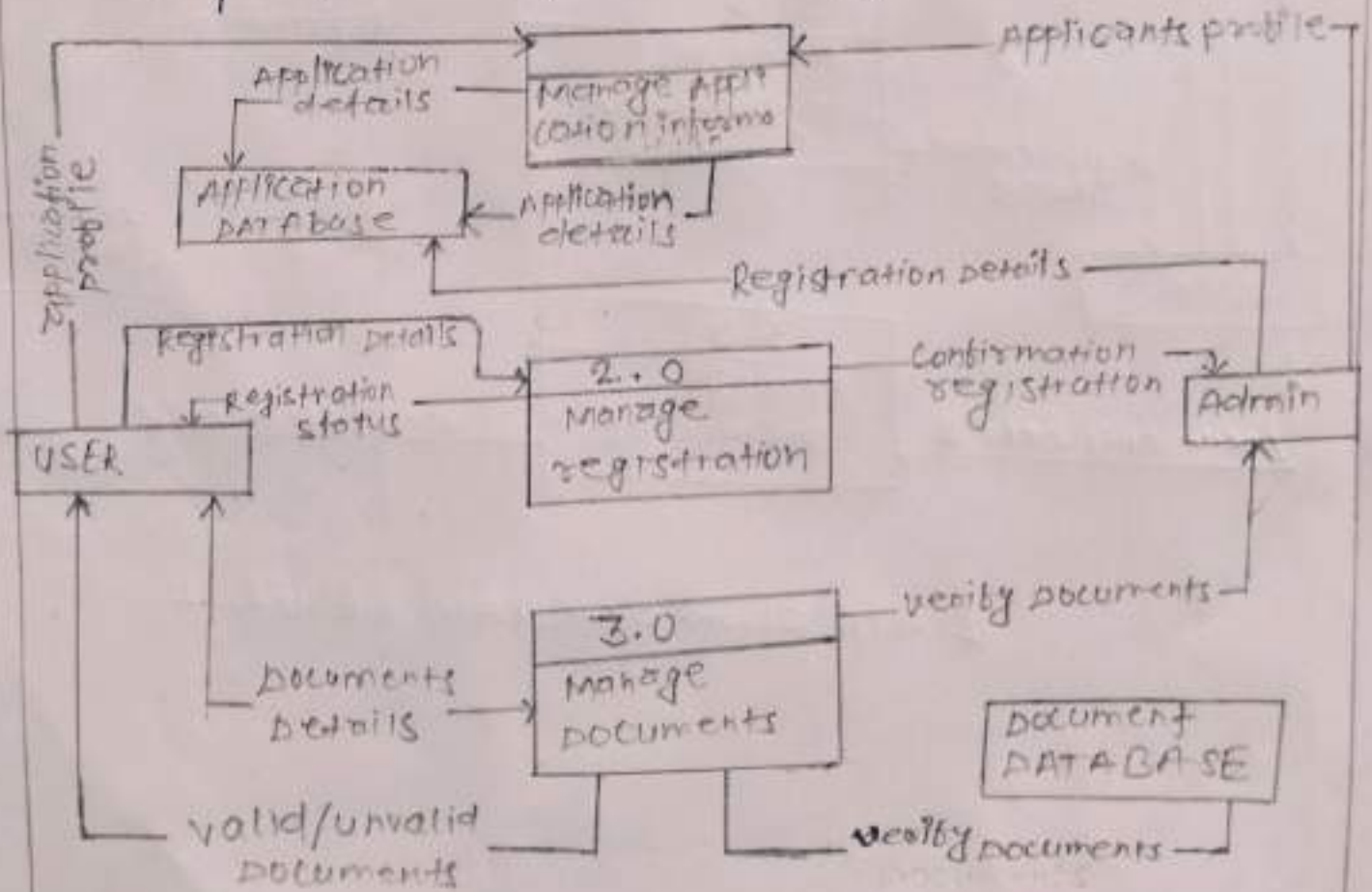
DATA FLOW DIAGRAM LEVEL - 3

→ page-16 of 24 ←

Immunity Requirements :–

The system will develop a security system that will reduce to the minimum the possibility of corruption from system and/or humans.

3.4 Technical Issues :-

When you, Due to the material being defective, unable to have your passport application registered when using your passport administration? Did you have your details registered & where you invited by your administration to return because your details had been loast? Did this problem cause you to suffer damages?

The exsisting "passport browser" will become obsolete as soon as the online registration system is active.

5. Supporting information

5.1. Appendices
Defination, Acronyms, & abbreviations :

* SRS :–   Software requirement Specification.

* Client/user :– The entity who will be using passport registration

* server :– A system that runs in lium that monitors the passport registration.

* RAM :– Random Access Memory

Downloaded by Shrey Garg (shreygarg1230@gmail.com)

* MySQL :— A relational database management system

* HTTP :— Hyper text Transfer protocol

* PDF :— portable Document format

* Username :— unique name given to each account of digital library

* password :— unique word given to each user as a secret code

→6. Test cases for Registration page
→Signup & login page by assuming some client
requirements such as :-
         ✗ username and password are
           mandatory fields.

Sr No.	Test cases	Feature	Description
1	TC-001	User Interface	check all the text boxes, radio buttons, buttons etc...
2.	TC-002	Required Fields	check the required fields by not filling any data
3.	TC-003	" "	check user should Register by filling all the required fields.
4.	TC-004	optional fields	check all the optional fields when do not fill data
5.	TC-005	" "	check all the optional fields when filling data
6	TC-006	Email validation	check the email text field that has an email address without @ symbol. check the email text field that has a random string instead of a real mail. check the ~~text~~ Email text field that has a missing dot in the email. address.
7	TC-007	Email validation	check all the valid emails
8	TC-008	phone number validation	check the phone number when passing alphanumeric data

             —→ page 19 to 20 ←—

9	TC-009	phone no. validation	check the phone no when not pass country code.
10	TC-010	phone no. validation	check the phone no. when passing country code.
11	TC-011	password validation	check the password limit when enter value less than min.
12	TC-012	password validation	check the password limit when ener value gnater than max.
13	TC-013	password validation	check the password when passing only number & possing valid data
14	TC-014	Required fields	verify if bank spaces are in passed in required fields
15	TC-015	" "	verify user can verify its email ID
16	TC-016	phone no. validation	verify if the length of the phone number is incorrect g.e. less than 10.
17	TC-017	password validation	verify if the password requi red rules are not satisfied in the password