Online Examination Management System

Software Requirements Specification

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Made by:-

Tarun Pratap Singh   16IT143
Akshay Pandita   16IT151
Nimish Mangal   16IT233

Prepared for: -
Software Engineering IT350

Under the guidance of Ms. Raksha Ma'am

Revision History

Date	Description	Author	Comments
21/02/19	1	Tarun, Akshay, Nimish	

Document Approval

The following Software Requirements Specification has been accepted and approved by the following:

Signature	Printed Name	Title	Date
	Tarun, Akshay, Nimish	Group members	

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1.   INRODUCTION

1.1 Purpose

- This Web Application provides facility to conduct online
   examination world wide
- It saves time as it allows number of students to give the exam at a time
   and displays the results as the test gets over, so no need to wait for the
   result. wait for the result. It is automatically generated by the server.
- Administrator has a privilege to create, modify and delete the test papers and its
   particular questions.
- User can register, login and give the test with his specific id, and can see the
   results as well.

1.2 Scope

- this system allows to student to give their exam at any palce.it s save paper and give result very fast.

1.3 Overview

- this system provides an easy solution to the student to give exam online.

1.4 References

This subsection should:
(1) The Complete Reference ----------------PatrikNaughton, Herbert Schildt
(2) Website: - www.tutorialspoint.com/java/
(3) Java Server Pages---------------O'Reilly

2. General Description

This Web Application provides facility to conduct online examination worldwide. It saves time
 as it allows number of students to give the exam at a time and displays the results as the test
 gets over, so no need to wait for the result. It is automatically generated by the server.

Administrator has a privilege to create, modify and delete the test papers and its particular
 questions. User can register, login and give the test with his specific id, and can see the results
 as well.

2.1 Product Perspective

This project aims to eliminate the inconsistencies experienced when giving internship/placement tests in NITK. The platform will ensure that the UX is same for every single test, which will make it easier for users to attain their objectives.
This also ensures that poorly functioning platforms do not hamper the recruitment process.

2.2 Product Functions

The software will enable users to write the tests as well as companies to monitor the test.
All the features and sub-features are a subset of aforementioned general functions.

2.3 User Characteristics

Admin: The admin has root access to all the information and controls everything about the software.
Examiner: Has access to the test questions and some limited information which is for the purpose of conducting the test only.
User: Has access to the questions only. Gives the test.

2.4 General Constraints

The only major constraint is whether companies will be willing to share some of thee questions, which they deem to be proprietary content licensed from a 3rd party.

2.5 Assumptions and Dependencies

The product shall receive licensing from any 3rd party from whom the questions may be sourced.
IRIS NITK shall be willing to integrate their systems with this platform for shared databses.

3. Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

3.1.2 Hardware Interfaces

1. The application demands that all the PCs must be present in the internet
2. Pc should be sufficiently fast with adequate memory at least 64 MB RAM
   and 2 GB hard –disk space is required to run this application.
3. Screen resolution of at least 800*600 required to properly view the screen.
4. It should be supporting the printers

3.1.3 Software Interfaces

1. Any Window Operating System.
2. The PHP must be installed. For the database handling MYSQL must be installed.

3. The final application must be packaged in a set up program, so that the product can be easily installed on the clients-machine.

3.1.4 Communications Interfaces

- The E-mail should be sent within one hour after the registration.

- The system should support registration for examination maximum of Students.

3.2 Functional Requirements

3.1 Description

The Online Examination System is developed for handling the activities for various users such as student, staff, exam staff. Every teacher should have laptop with wireless internet connection.

3.2 Technical Issues

This product will work on client-server architecture. It will be require an internet server and which will be able to run PHP application. The product should be support some commonly used browsers such as Internet Explorer, Mozilla Firefox. External interfaces include key board and mouse, enabling navigation s across the screens.

3.3 Use Cases

3.3.1 Use Case #1
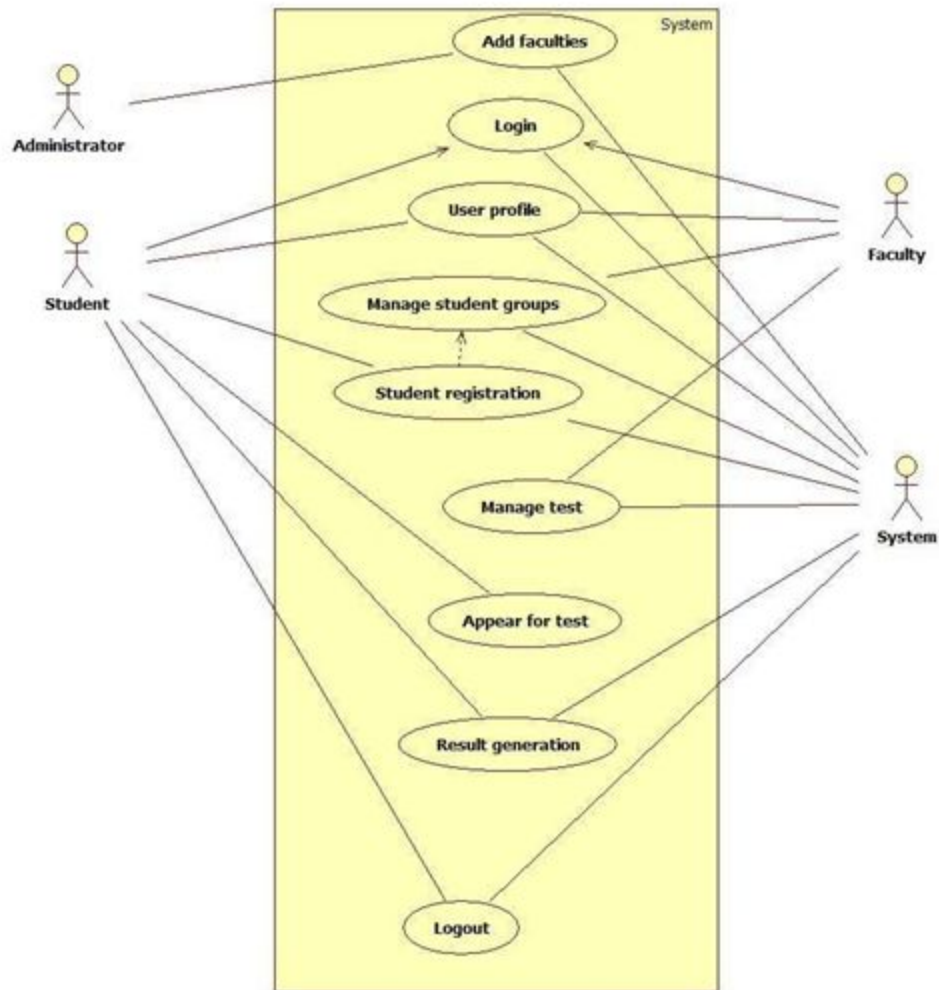
3.3.2 Use Case #2
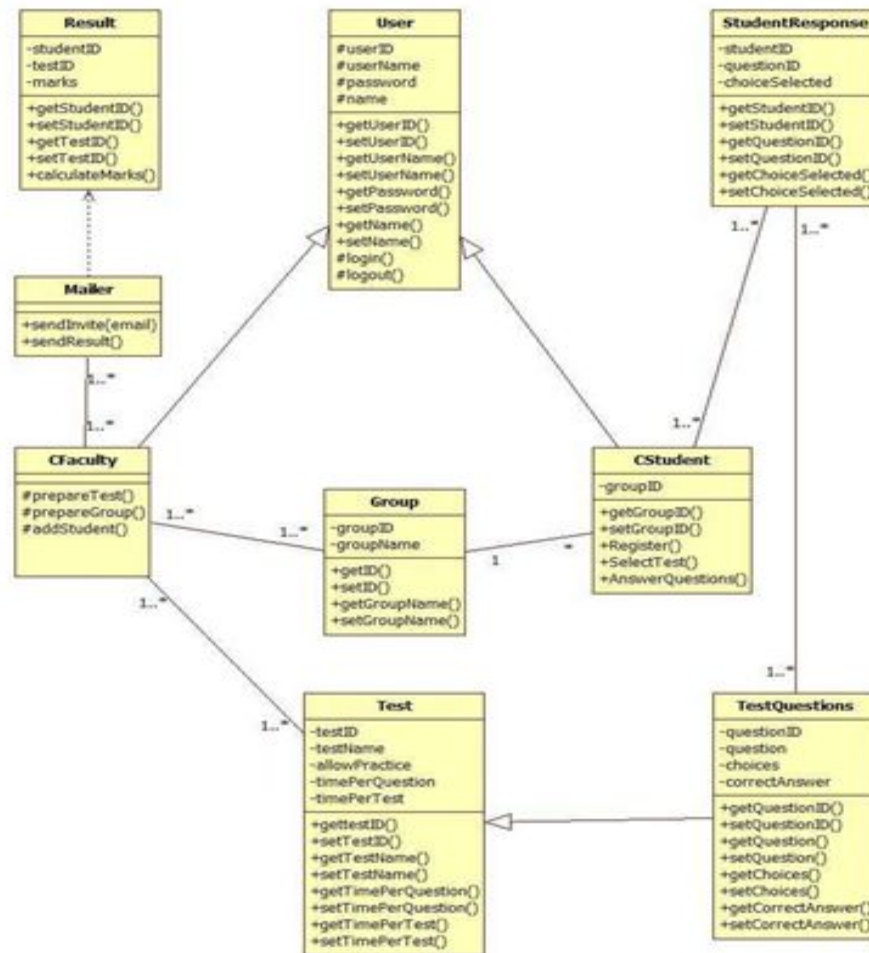
3.4 Classes / Objects

3.4.1 User

3.4.1.1 Attributes
-user ID
-username
-password
-name

3.4.1.2 Functions
-getUserID( )
-setUserID( )
-getUserName( )
-setUserName( )

-getPassword( )
-setPassword( )
-getName( )
-setName( )
-login( )
-logout( )

3.4.2 Student Response

3.4.2.1 Attributes
-studentID
-questionID
-choiceSelected

3.4.2.2 Functions
-getStudentID( )
-setStudentID( )
-getQuestionID( )
-setQuestionID( )
-getChoiceSelected( )
-setChoiceSelected( )

3.4.3 Admin

3.4.3.1 Attributes
-adminID( )
-adminPassword( )

3.4.3.2 Functions
-setQuestions( )
-removeQuestions( )
-setUsers( )
-getUsers( )
-getQueries( )
-deleteQueries( )

3.5 Non-Functional Requirements

3.5.1 Performance
The application should be efficient and should perform better in all conditions.

3.5.2 Reliability

The application should be highly reliable and it should generate all the updated information in correct order.

3.5.3 Availability

System will be available around the clock except for the time required for the back up of data.

3.5.4 Security

Application will allow only valid users to access the system. Access to any will application resource depend upon user's designation. There are two types of users namely Administrator and Student. Security is based upon the individual user ID and Password.

3.5.5 Maintainability

The installation and operation manual of examination management system will be provided to user.

3.5.6 Portability

The application should be portable on any windows based system

3.6 Inverse Requirements

State any *useful* inverse requirements.

3.7 Design Constraints

Specify design constrains imposed by other standards, company policies, hardware limitation, etc. that will impact this software project.

3.8 Logical Database Requirements

Will a database be used? If so, what logical requirements exist for data formats, storage capabilities, data retention, data integrity, etc.

3.9 Operational Scenarios

There will be student database, examination database. The student database will contain students name, e-mail address, address, phone number, qualification. The examination database contain exam date, time, exam hall ticket for student.
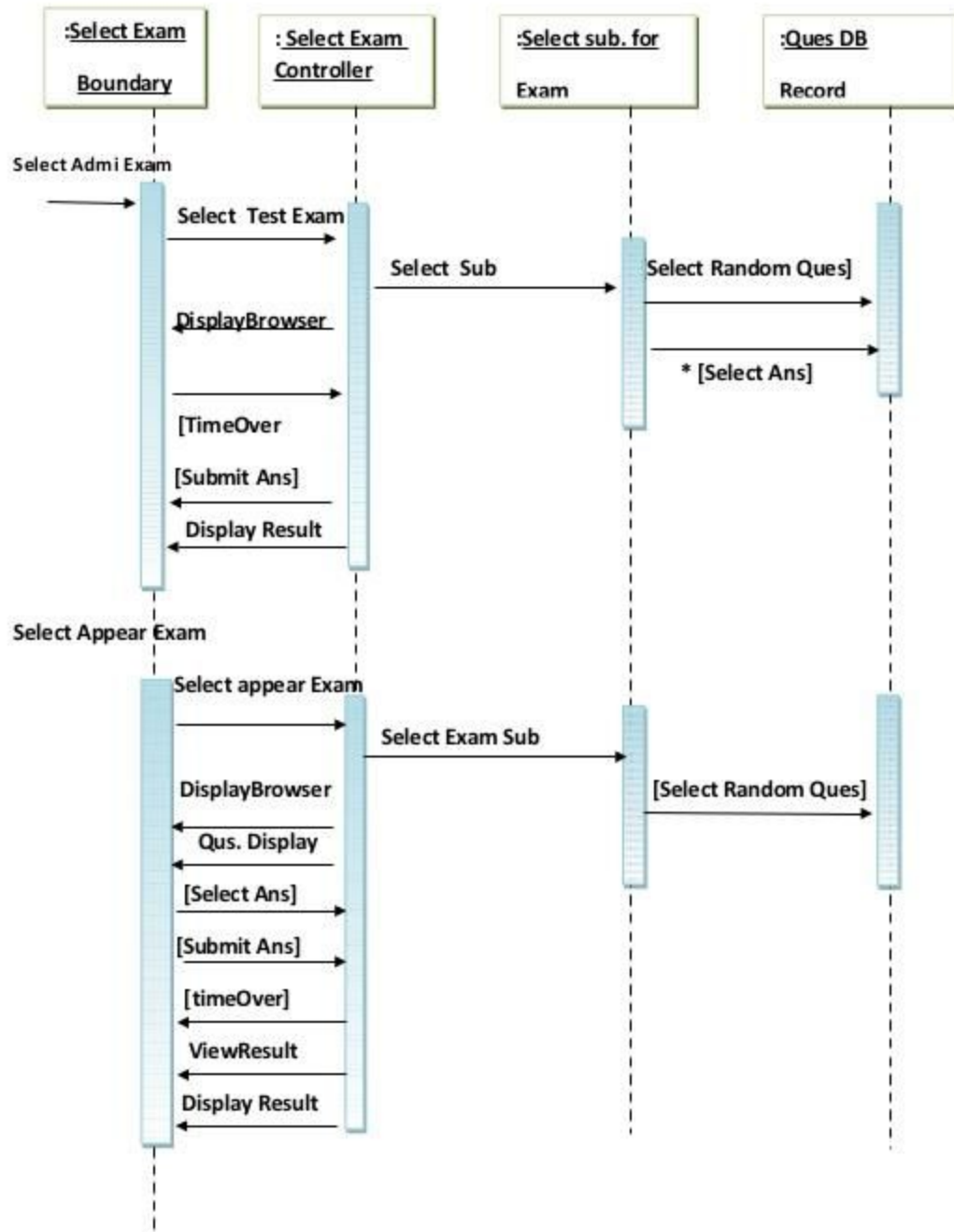
4. Analysis Models

List all analysis models used in developing specific requirements previously given in this SRS. Each model should include an introduction and a narrative description. Furthermore, each model should be traceable the SRS's requirements.
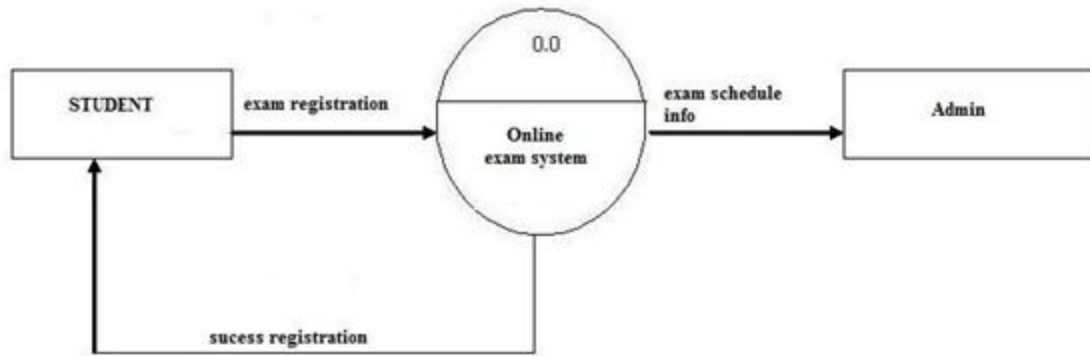
4.1 Sequence Diagrams
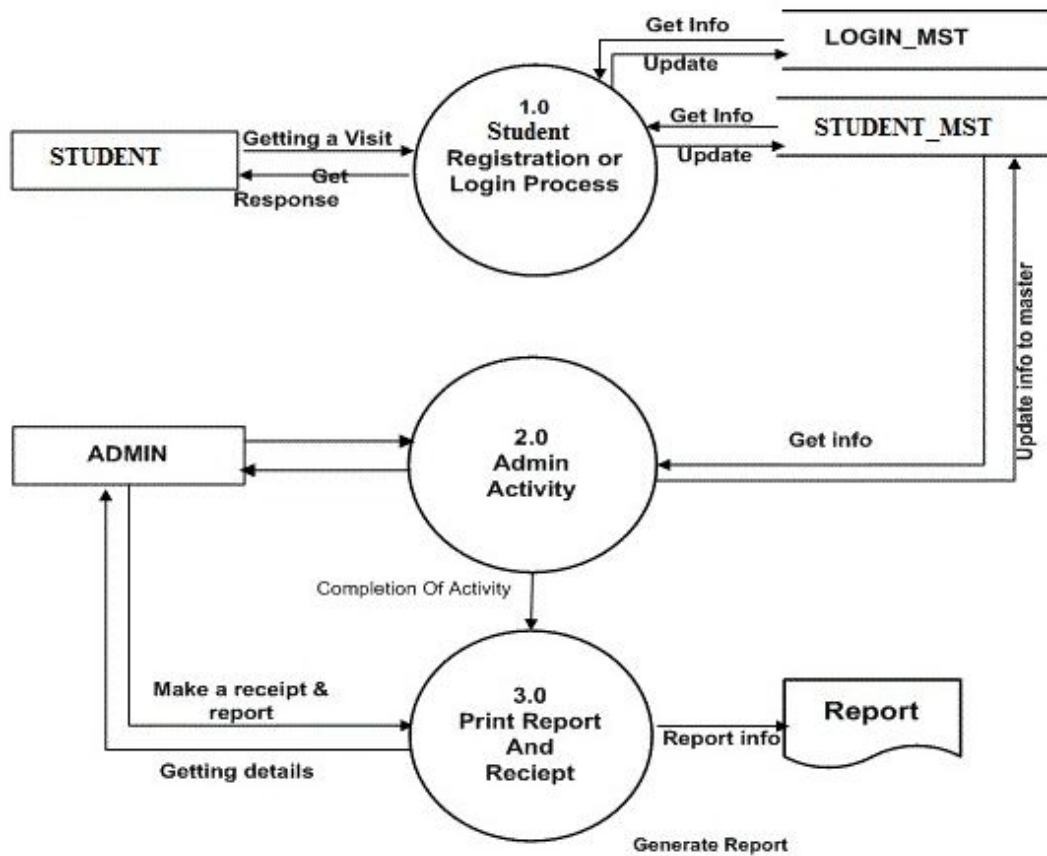
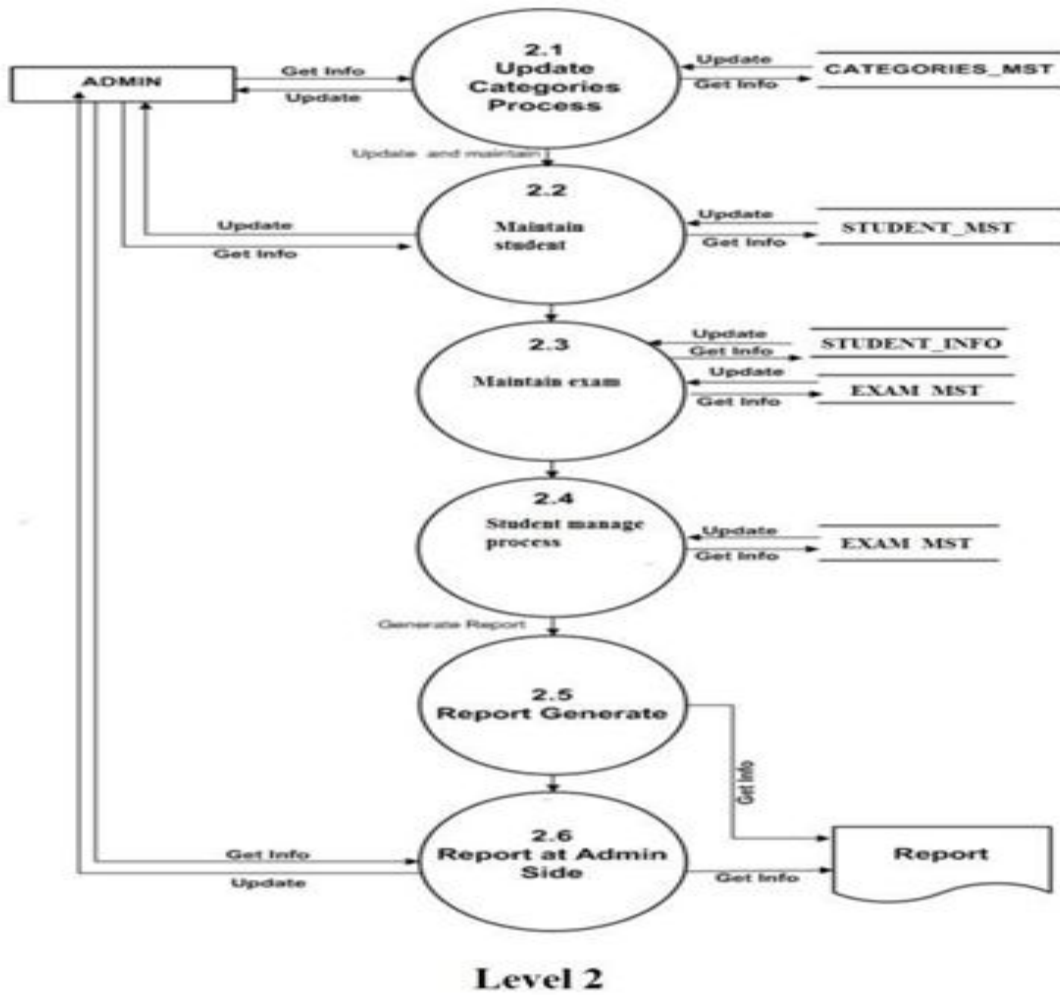**Sequence Diagram for User Login**
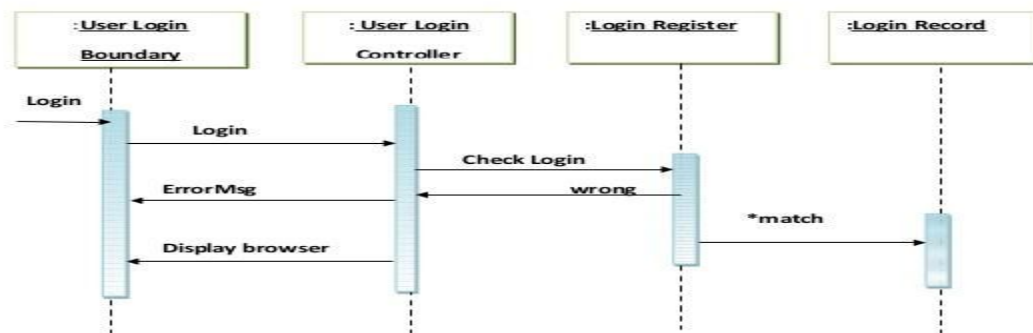
Sequence Diagram for Exam

4.3 Data Flow Diagrams (DFD)
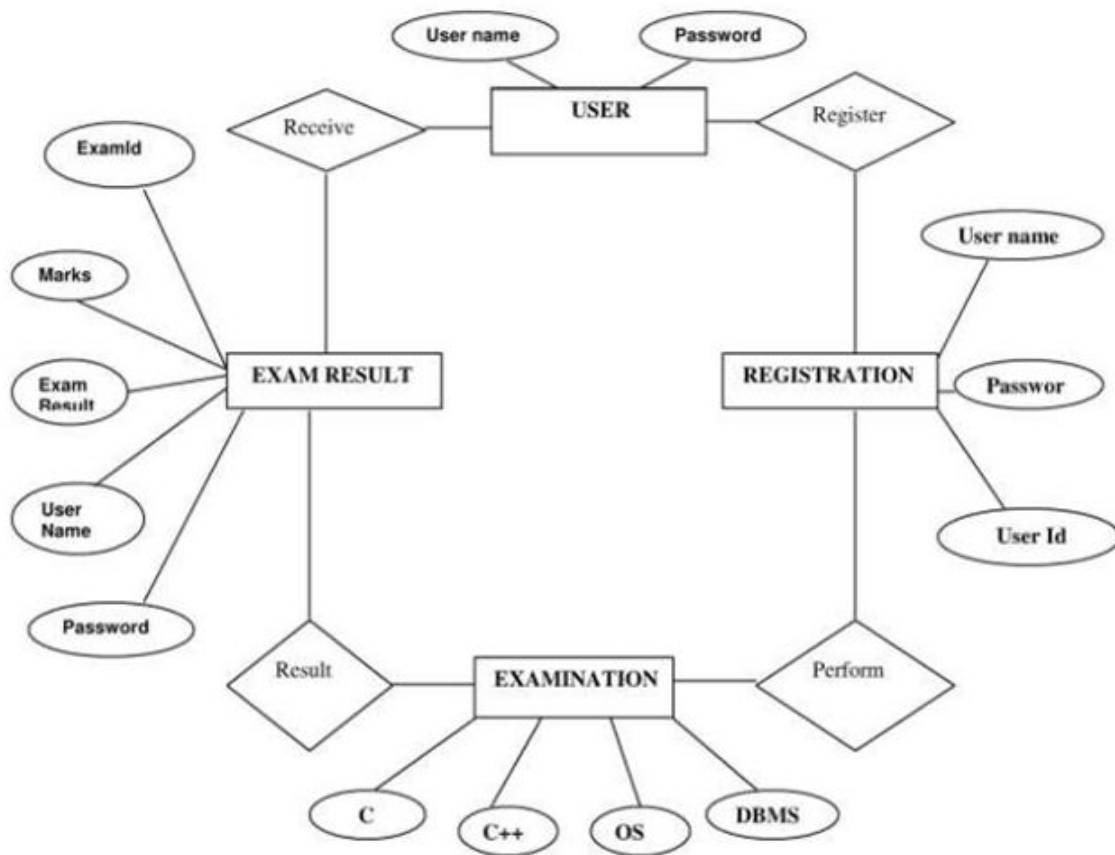

Level 0

Level 1

Level 2

4.2 State-Transition Diagrams (STD)

5. Change Management Process

GitHub will be used to commit the changes whenever requirement changes and all the group members will be able to contribute in making the SRS using GitHub platform. Every contributor can work individually and change whenever requirement changes.

6. Other Requirements

Currently there are no other known requirements for the project. However this may change in the event of unforeseen circumstances encountered during the duration of the project.

A. Appendices

Appendices may be used to provide additional (and hopefully helpful) information. If present, the SRS should explicitly state whether the information contained within an appendix is to be considered as a part of the SRS's overall set of requirements.

Example Appendices could include (initial) conceptual documents for the software project, marketing materials, minutes of meetings with the customer(s), etc.

A.1 Appendix 1

Term	Description
SRS	Software Requirements Specification
IEEE Engineers	Institute of Electrical and Electronics
User/Customer	Person using the App.
API	Application Program Interface
GUI	Graphical User Interface
IDE	Integrated Development Environment

Appendix 2: To Be Determined List

●   Not yet done as the application is still in requirement phase.

Project Budget Estimation

Number of Team Members	3
Price (per hour)	NA
Number of working hours per day	2 hrs

Total price (per day)	NA
Number of working days per week	5 days