Software Requirements Specifications

for

Online Examination Portal

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1. Introduction:

1. Purpose:

The purpose of this project is to provide the College, a software solution that delivers a scalable, secure, and reliable system that manages Examinations and Exam reports, Instructors, Students, Courses of an institution. The following SRS document will outline the features of the “Online Examination System” and the requirements that the project will adhere to in developing the software for the organization.

2. Document Conventions:

- All text contained in this document is 12pt and font is Arial.
- Section titles are 24pt and the font is Arial.
- Subsection titles are 17pt and the font is Arial.
- Any further subsection breakdown is 12pt and the font is Arial.
- All sections and subsections are numbered using X.X.X format, where X represents numbers.

3. Intended Audience:

- Schools
- Collages
- Government Examinations Boards (Intermediate Board, etc.)
- Private Testing Institutes

4. Product Scope:

Online Examination System is aimed at conducti ng examinations and managing information about the Exams, Students, Instructors, Scorecard of the organization. The system is intended to automate the process of addition, updating and report generation operations of the records in the database containing information about the Courses, Exams, test details, Scorecard of the Student. The objective of the project helps the college to speed up the procedure of Students Examinations and reduces the operational cost. Also, this software reduces the paper work, thus showing the concern towards conserving the environment.

The goal of the project is to Remotely test Students and to reduce the time and cost incurred in an access to the database and design a database feasible to provide appropriate results to the queries of all the stakeholders

5. References:

There are no other documents or Web addresses to which this SRS refers.

2. Overall Description:

1. Product Perspective:

- To develop online base live exam system thus the examination process could be monitored in live mode and participant can attend in the exam remotely.
    - To give the live results after the exam gets over
    - To Maintain the Exam details confidentially.

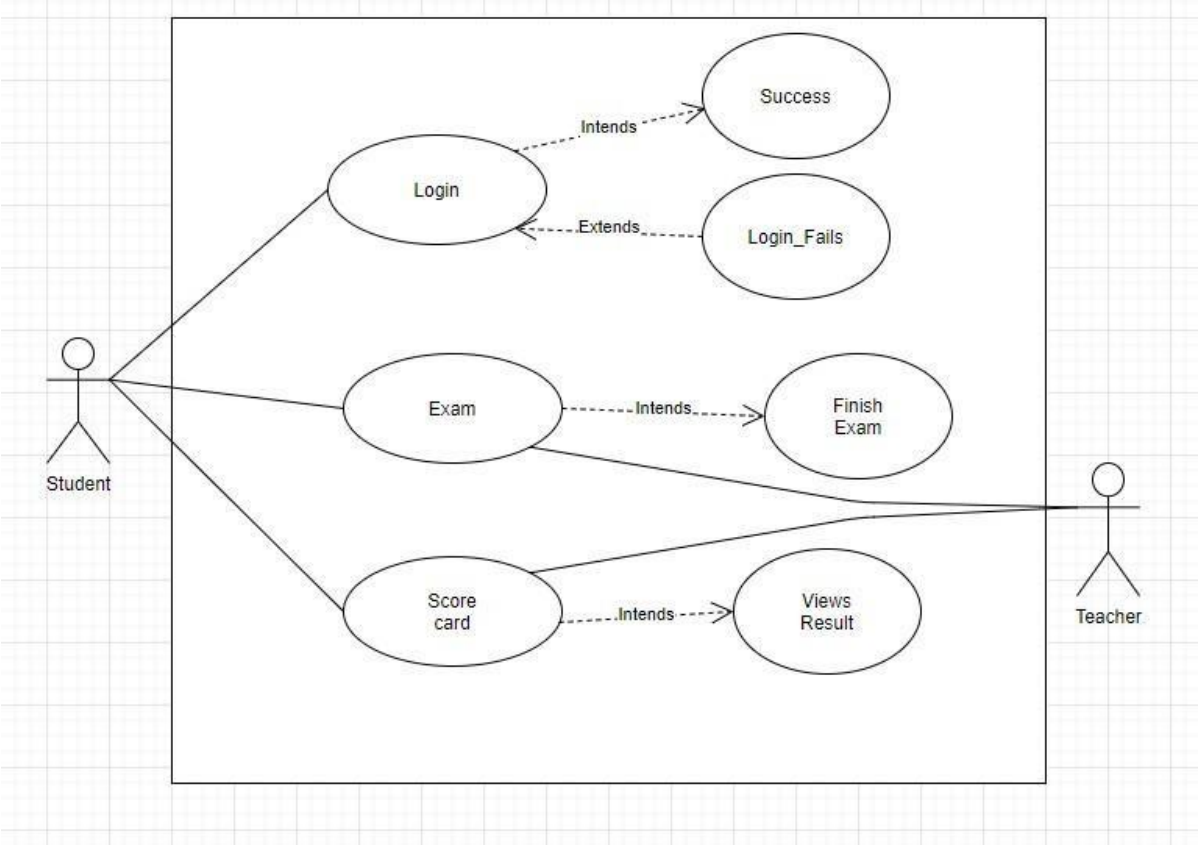
2. Product Functions:

- On the home page, the students get a login page where using the credentials provided by their respective deans they have to login into their account.
- On the home page, the teacher gets a login page where using the credentials provided by the Admin they have to login into their account.
- The students after logged in there are two options available, they are to write a exam and and to view the details of the exams written.
- The teacher whereas gets add student option to add the students and the teacher can able to create an exam to the respective course and class. If it is a descriptive model the teacher has to update the answer scripts.
- Admin can login into their dashboard by external link. Only the add teacher option is additionally available in the admin's dashboard compared to teacher's dashboard.

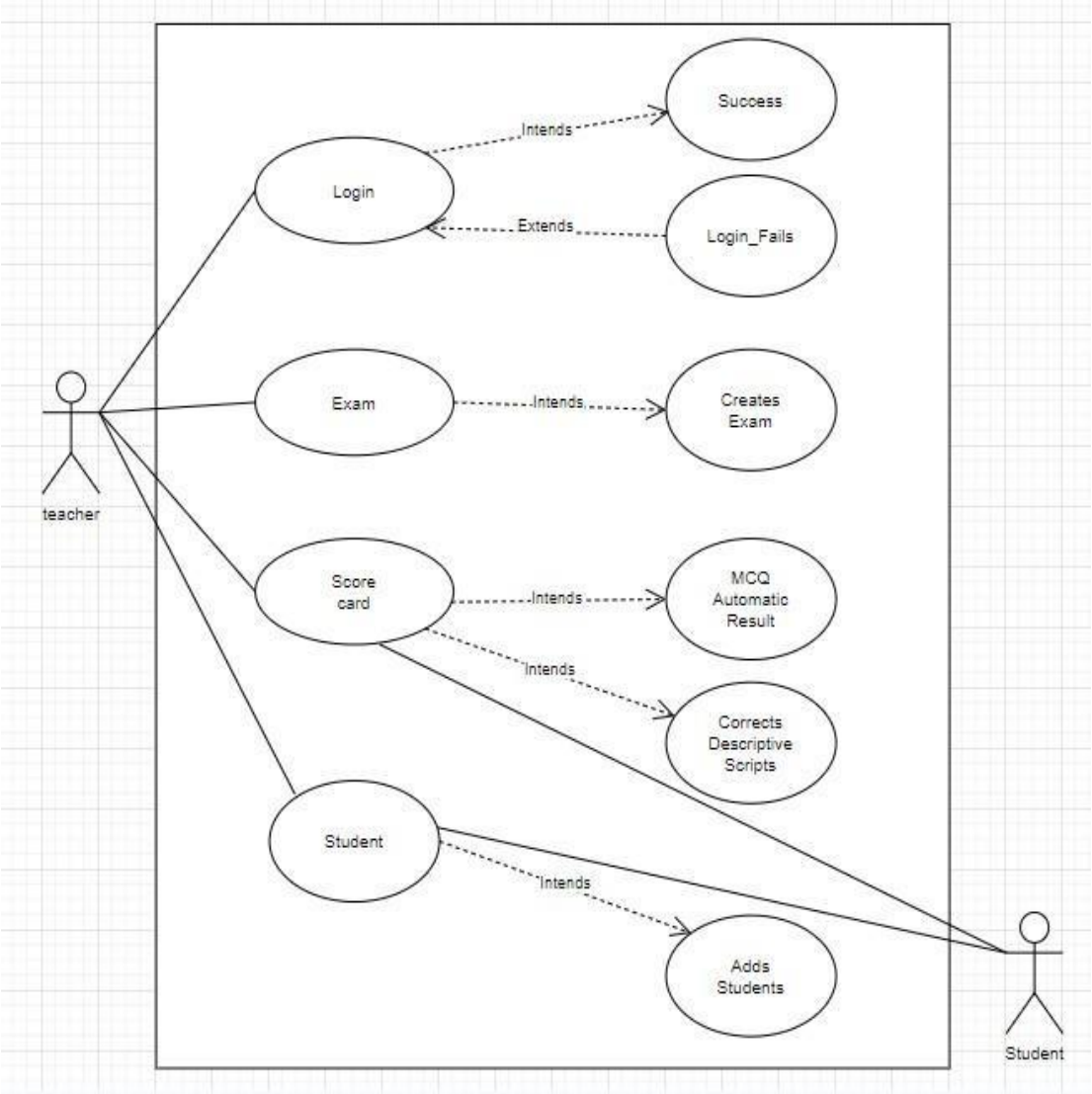
3. User Classes and Characteristics:

There are three roles in this system

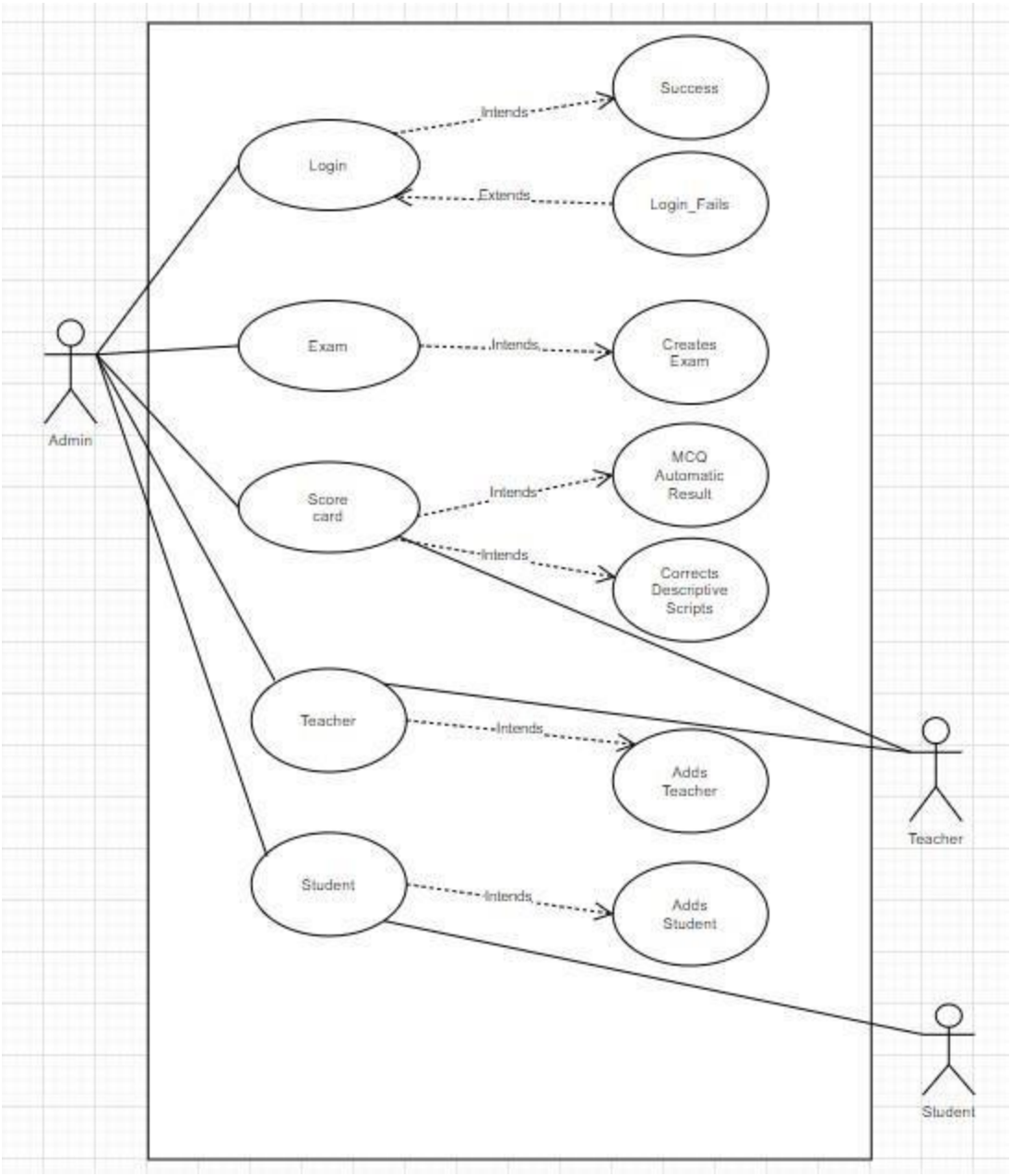
1. Student



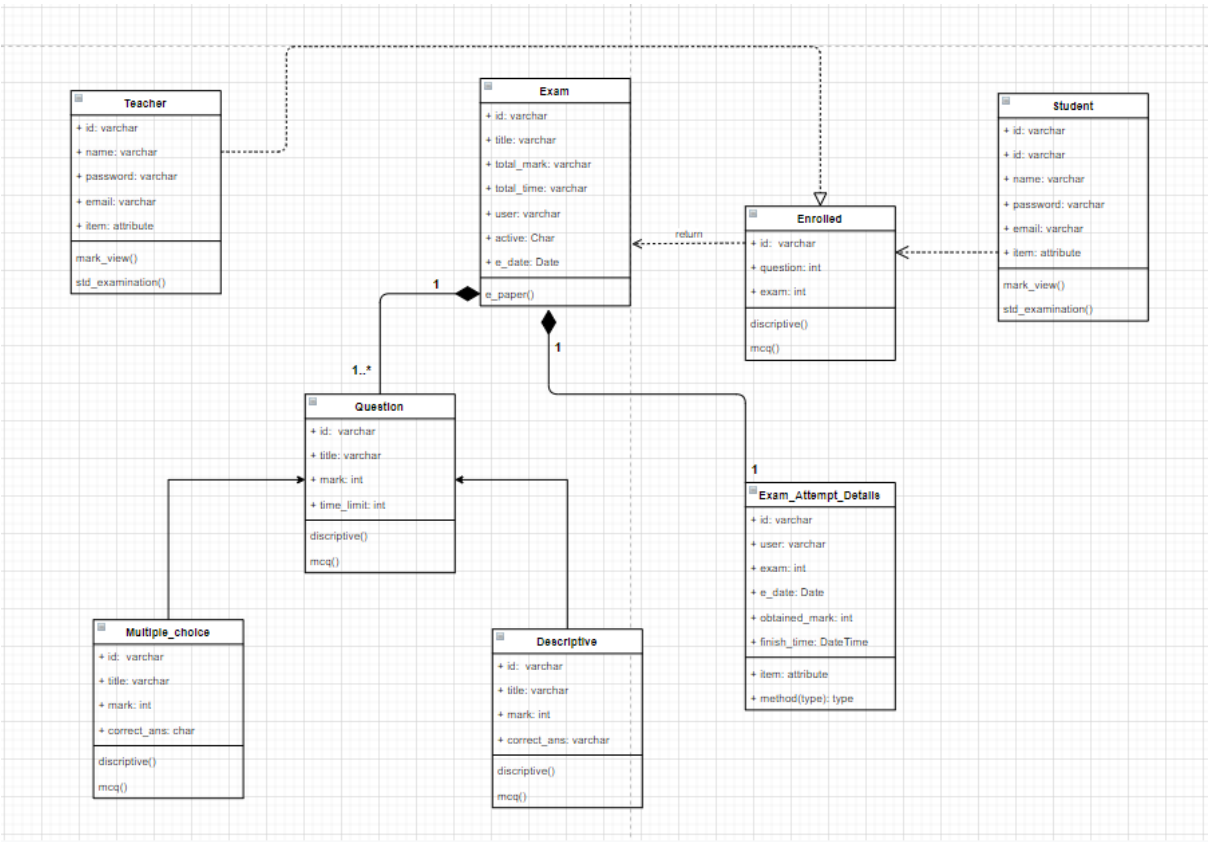
2. Teacher:



3. Admin.

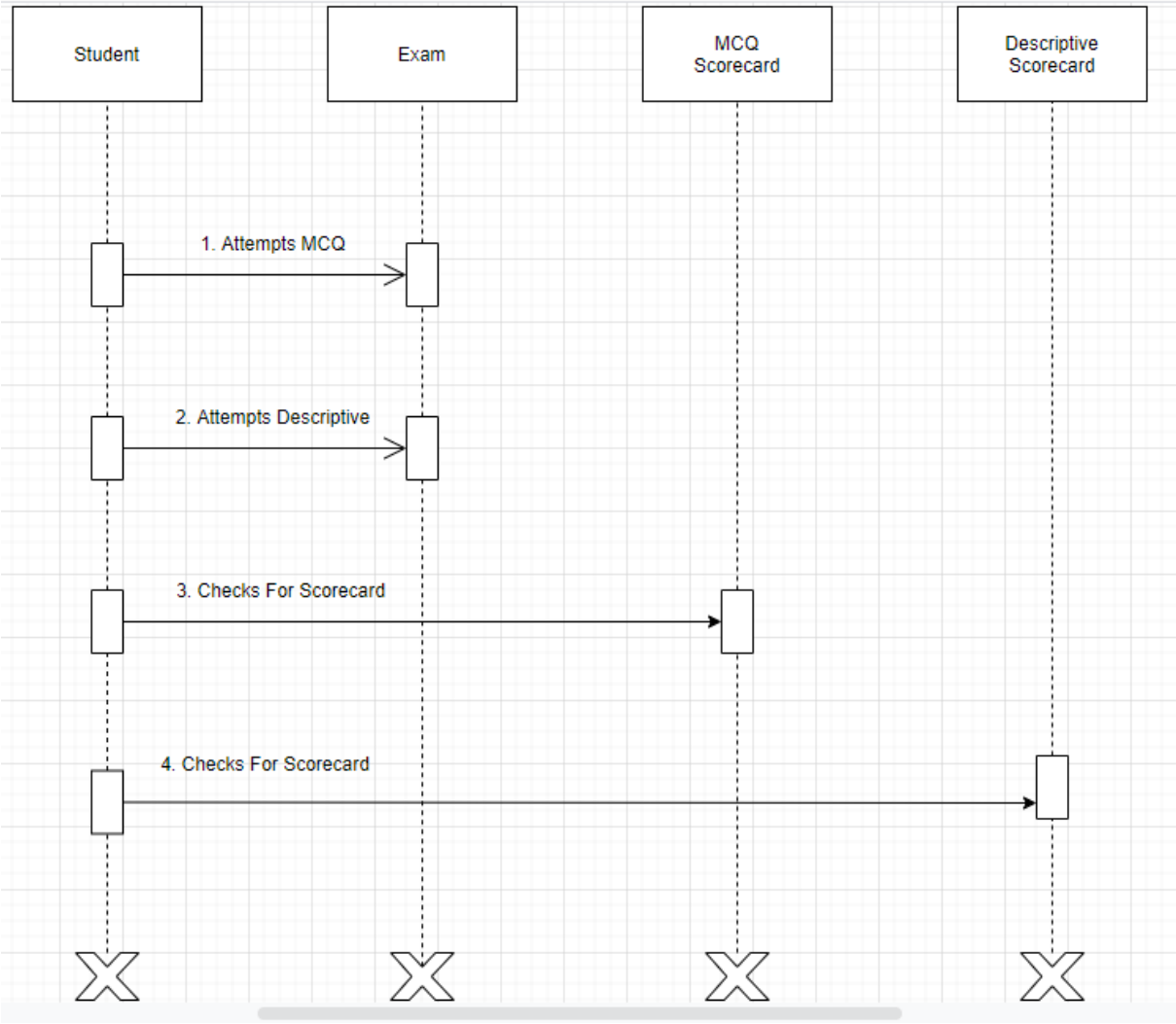


Class diagram:

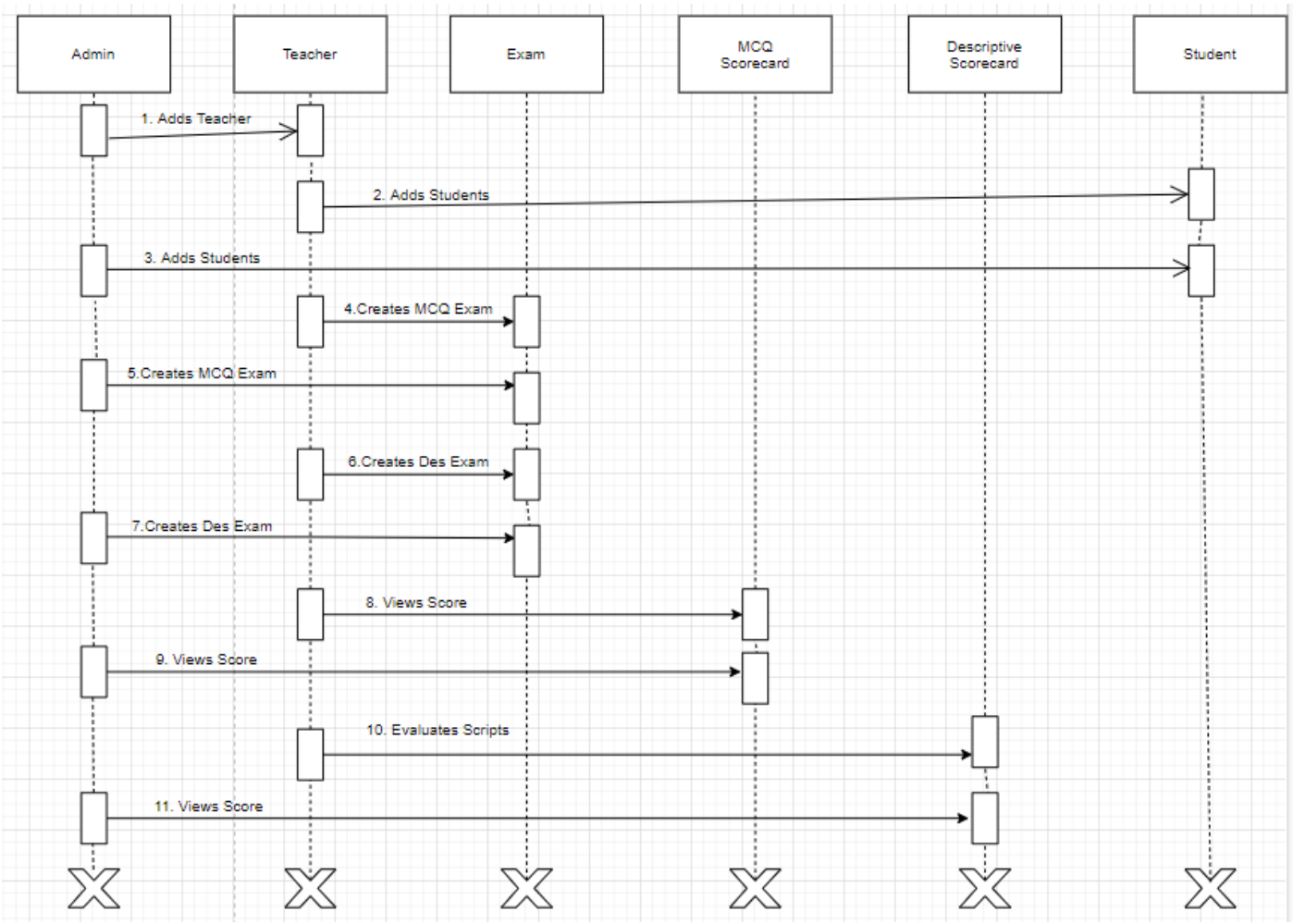


Sequence diagram:

Student:

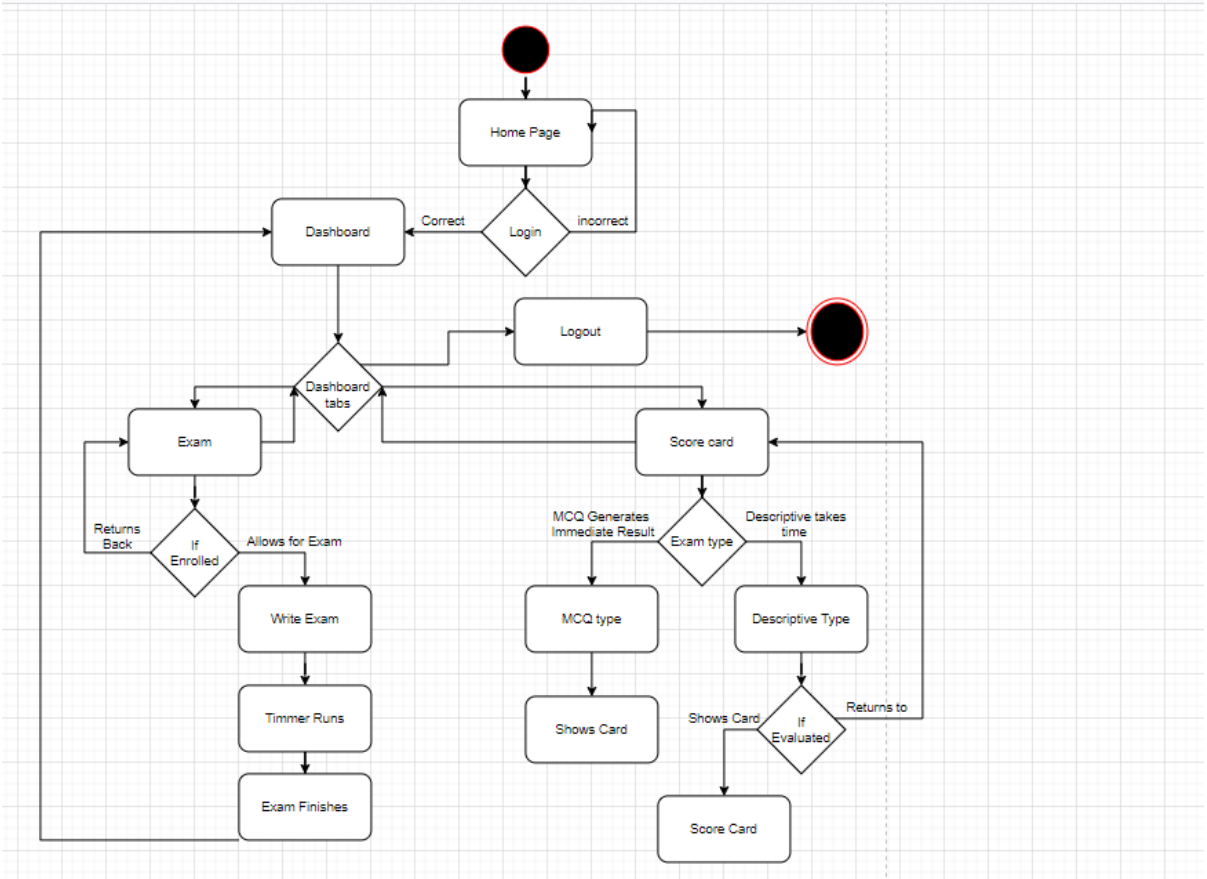


Teacher and admin

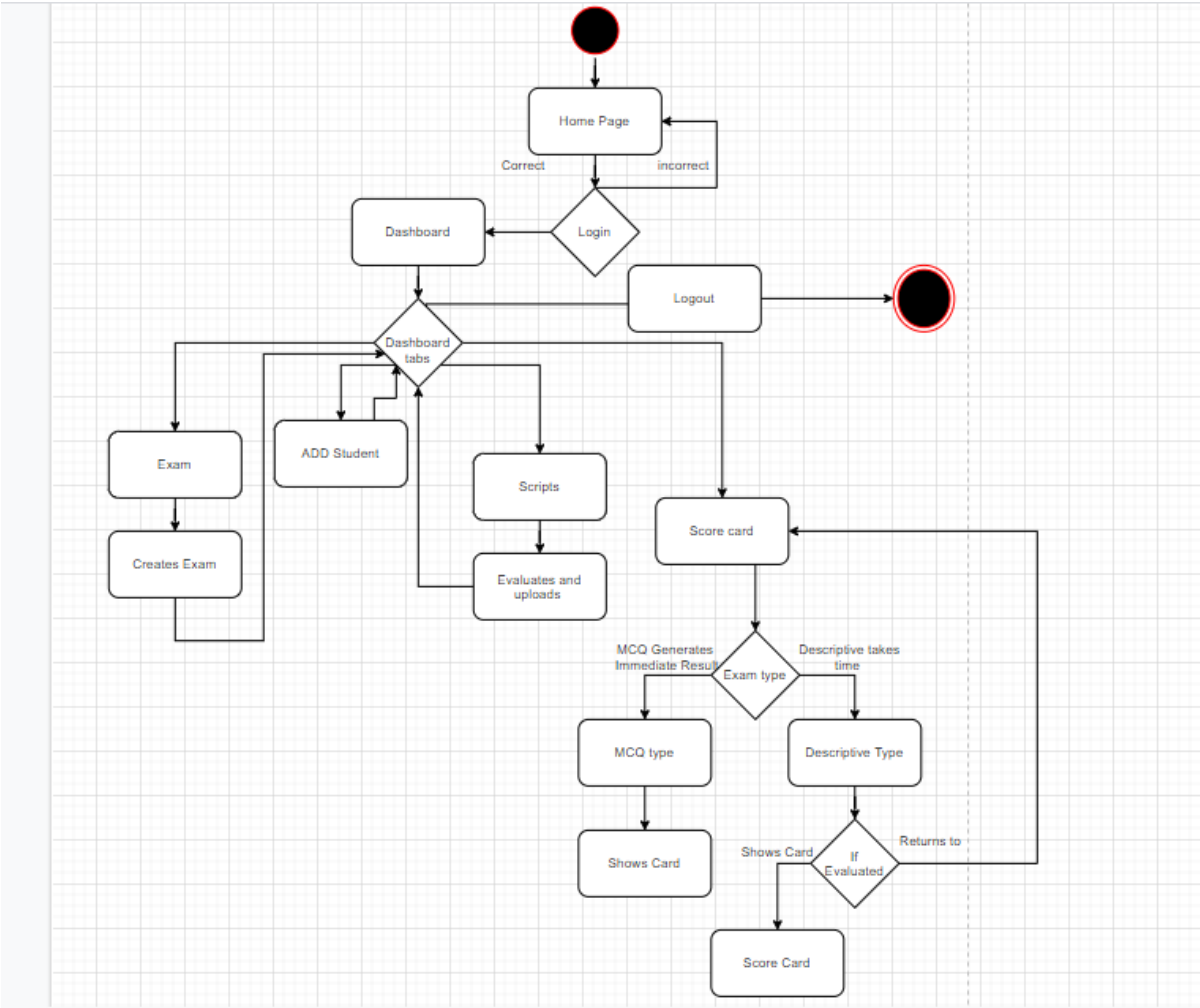


Activity diagram:

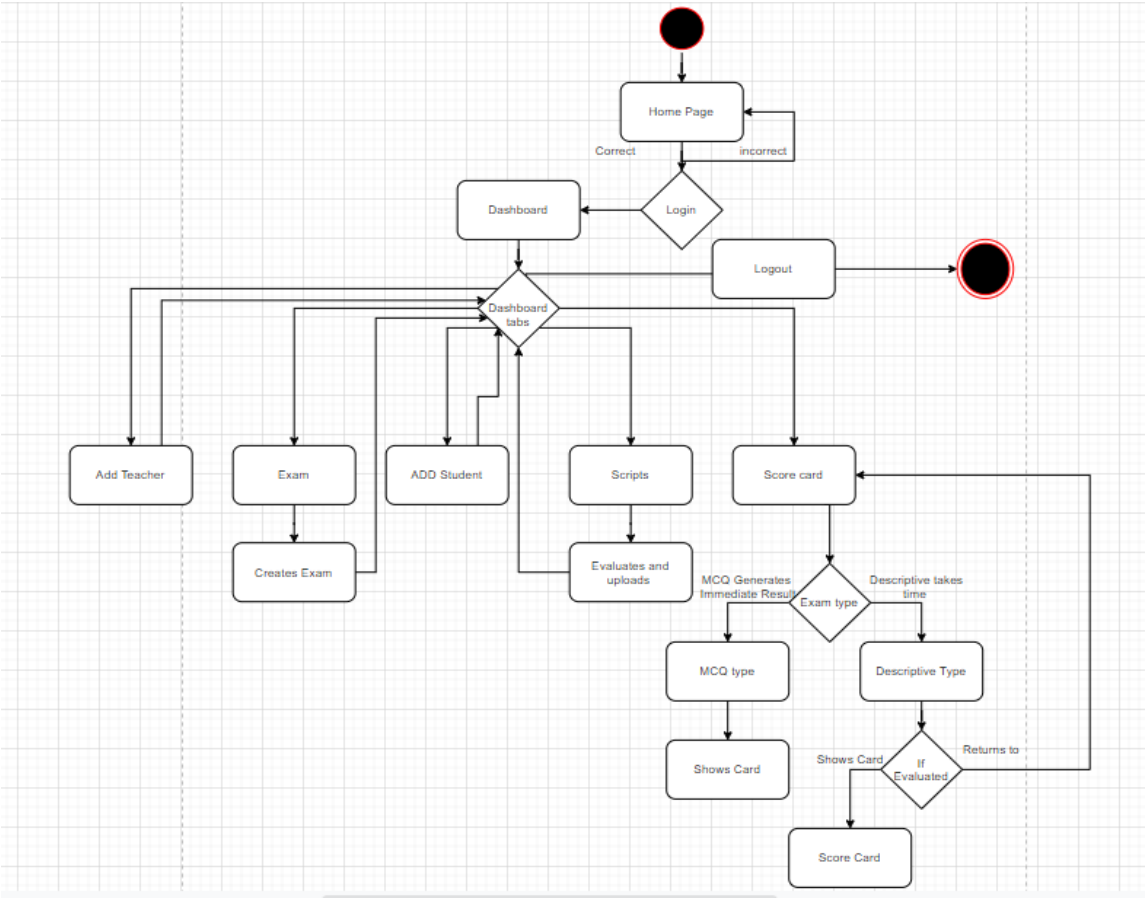
Student:


Home Page
Login
Correct
incorrect
Dashboard
Logout
Dashboard tabs
Exam
Score card
Returns Back
If Enrolled
Allows for Exam
Write Exam
Timmer Runs
Exam Finishes
MCQ Generates Immediate Result
Exam type
Descriptive takes time
MCQ type
Descriptive Type
Shows Card
Shows Card
If Evaluated
Returns to
Score Card

Teacher:


Home Page
Correct
incorrect
Login
Dashboard
Logout
Dashboard tabs
Exam
ADD Student
Scripts
Score card
Creates Exam
Evaluates and uploads
MCQ Generates Immediate Result
Exam type
Descriptive takes time
MCQ type
Descriptive Type
Shows Card
Shows Card
If Evaluated
Returns to
Score Card

Admin:



Brief Description:

At first all the user dashboards units were created. Only the admin and the teacher have the access to create the exam. Here the students are manually added by the teacher. No student adding module is given access to the student. Once the teacher adds the student then the teacher circulates the login details with students. Then students can login to their accounts. Where the eligible students can able to attend the exam. After completing the examination, they can view their marks also. If it is a MCQ based test then they can view their marks then and there. If it is a descriptive type exam then the students have to wait until the teachers corrects the answer scripts. If the teacher uploads answers scripts, then

they can verify their answers. In teacher dashboard there are various options available

1. create a test
2. Add Student
3. Marks View

4.Question Paper viewing Answer Scripts.

By using respective create a test button teacher sets the questions paper questions type. After correcting the scripts, he gets the upload button to add the scripts. Teacher can able to view the overall mark also in his dashboard. The same features also available for admin also. But here adds teacher is the only additional column available in admin dashboard

4. Operating Environment:

- **Hardware**

RAM: 4 GB or more

Hard Disk: 500 GB

- **Software**

Operating System	Windows 7/8/10 Mac
Programming Language	Html, CSS, Php, JavaScript
IDE	Visual Studio Code, NetBeans

Database	MySQL
Server	Xampp

2.5 Design and Implementation Constraints:

Design Constraints

Design of the project looks like a normal website with some limited constraints like Hosting the site in localhost and giving examination timer limit. The user interface must be viewable on a monitor with a *1920×1080* resolution (Which is similar to resolution of the normal website). This program can round the clock to give access to all the students.

Safety and Security Considerations

Since personal information of Instructors and students, and Confidential information about Each Student Exam will be contained and accessed Safety and Security considerations need to be taken into account that personal and sensitive information are not accessed by unauthorized users (Like Teacher and Admin).

2.6 User Documentation:

This Project doesn't require any user manual and step by step user guide. This SRS document will include product overview, complete configuration of the required software and hardware, technical details...etc. One is able to understand easily once they read this SRS document. This software will be user friendly which doesn't require any pre-read before working the software.

3. External Interface Requirements:

1. User Interfaces:

- Professionals look and feel easy. Easy UI
- Browser testing and support for IE.
- Reports exportable in .XLS or any other desirable format.

2. Hardware Interfaces:

- Any normal laptop or desktop computer with a supportable browser with proper working condition.
- Hard Disk: 500GB
- RAM: 4GB or more

3.3 Software Interfaces:

Operating System	Windows 7/8/10 Mac
Programming Language	Html, CSS, Php, JavaScript
IDE	Visual Studio Code, NetBeans
Database	MySQL
Server	Xampp

3.4 Communications Interfaces:

No Communication interfaces will be required for this project as we are running it on local host through Xampp.

4. System Features:

- As it is a Portal it can be hosted anywhere and works around the clock.
- This Portal supports multiple users at a time.
- Data Transparency is maintained.
- Data manipulation functions are available.
- Can be Remotely Accessible.

1. User Login Module:

1. Description and Priority:

This is the feature where the users are able login for their account. So, this is a high priority feature.

Student Login

Students are manually added by their teachers so each student respective credentials were given by their respective Deans. Here for Student, there will be Student Login page. By using their respective credentials, they can login into their accounts. If it is a Successful Login then it gets Redirected to the Dashboard. If login fails it shows an error at login page.

Teacher Login:

Teachers are manually added by the Admin so each teacher respective credentials were given by their respective Deans. Here for Teachers, there will be Student Login page. By using their respective credentials, they can login into their accounts. If it is a Successful Login then it gets Redirected to the Dashboard. If login fails it shows an error at login page.

Admin Login:

Admin Login page is different from the home page. Admin gets logged from Admin Login page. Their Credentials are created by themselves. If it is a Successful Login then it gets Redirected to the Dashboard. If login fails it shows an error at login page.

4.2 User Module Feature:

This is the feature where the users access their Dashboards. So, this is a high priority feature

Student Dashboard:

After logins the comes to the dashboard. And dashboards contain Two menus. One is exam and second one is Scorecards. If it is exam time then the exam is visible in the exam menu. If the student attempts the exam then the details can be viewed in Scorecard.

Teacher Dashboard:

After logins the comes to the dashboard. And dashboards contain Four menus. One is Add Student option to adding the Student into the course or Class. Second one is Add Exam where the teacher can create a Question and add it to Question Paper. Third one is Enabling and Disabling the Exam. Fourth one is Scoreboard where the teacher can evaluate descriptive questions and view the marks of students.

Admin Dashboard:

After logins the comes to the dashboard. And dashboards contain Five menus. One is Add

Student option to adding the Student into the course or Class. Second one is Add Exam where the teacher can create a Question and add it to Question Paper. Third one is Enabling and Disabling the Exam. Fourth one is Scoreboard where the teacher can evaluate descriptive questions and view the marks of students. Fifth one is Adding the Teacher to the institution.

5. Other Nonfunctional Requirements

1. Performance Requirements

The system must be interactive and the delays involved must be less. So, in every action- response of the system, there are no immediate delays.

2. Safety Requirements

After Student Writes their Scripts or attempts the MCQ then it is un changeable. Whenever the student enters into the exam then the timer starts and their no possibility to stop the Timer. Safety and Security considerations need to be taken into account that personal and sensitive information are not accessed by unauthorized users (Like Teacher and Admin).

3. Security Requirements

- Only the Teachers and Admin can give the marks.
- Unauthorized access to the system and its data is not allowed.
- Once the student submits the answers cant be changed even by the admin.

5.4 Software Quality Attributes

- Accurate and hence reliable
- Availability
- Secured
- Fast Speed
- Compatibility
- User Friendly.
- Users can log in to the system at any time.
- Can take the Exam only in available time.

5. Business Rules

- There aremainly three types of users using the system, such asthe Student, Teacher, Admin.
- Admin has the full permissions of controlling the system.
- Teacher has the partially full permissions of the System.
- Student can only access their exams and scoreboards.

6. Other Requirements

All the necessary requirements are mentioned in the above SRS document. No need of extra requirements to be done.

Appendix A: Glossary

In the above SRS document, the user means Student, Teacher and Admin. They have the same options or privileges in this software. But the Teacher and Admin has Additional Privileges.

Appendix C: To Be Determined List

No need for any TBD list for this SRS. All the necessary information is given above.