18CSC202J - OBJECT ORIENTED DESIGN AND PROGRAMMING

Mini Project

ONLINE EXAM REGISTRATION SYSTEM

Submitted By

PRANAY KAISTHA[RA2111030010123]

PULKIT KHANNA[RA2111030010113]

Online exam registration system

Online exam registration helps in recording all the student details in the database of the server, for the ease of retrieving and manipulating the records of each student.

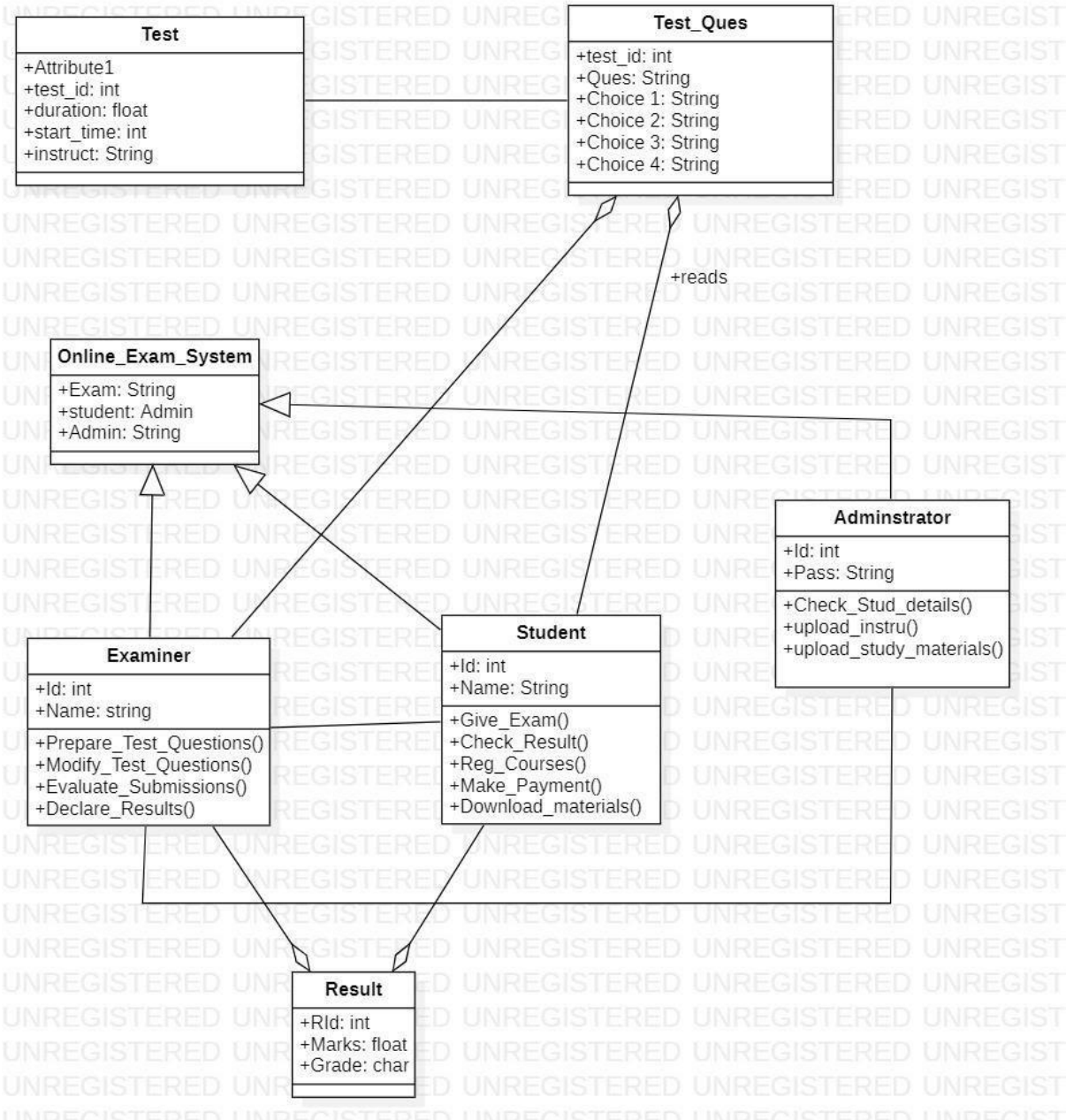
This System is particularly designed for those who is writing online exam through software. It also helps the students to view the marks , grade , rank in server.

This System has four functions-

1. Add student details.
2. Modify student details.
3. Cancel exam.
4. Display scores and ranks.

Server has access to use all these functions whereas students can only view the marks , grade , rank in server.

Class Diagram

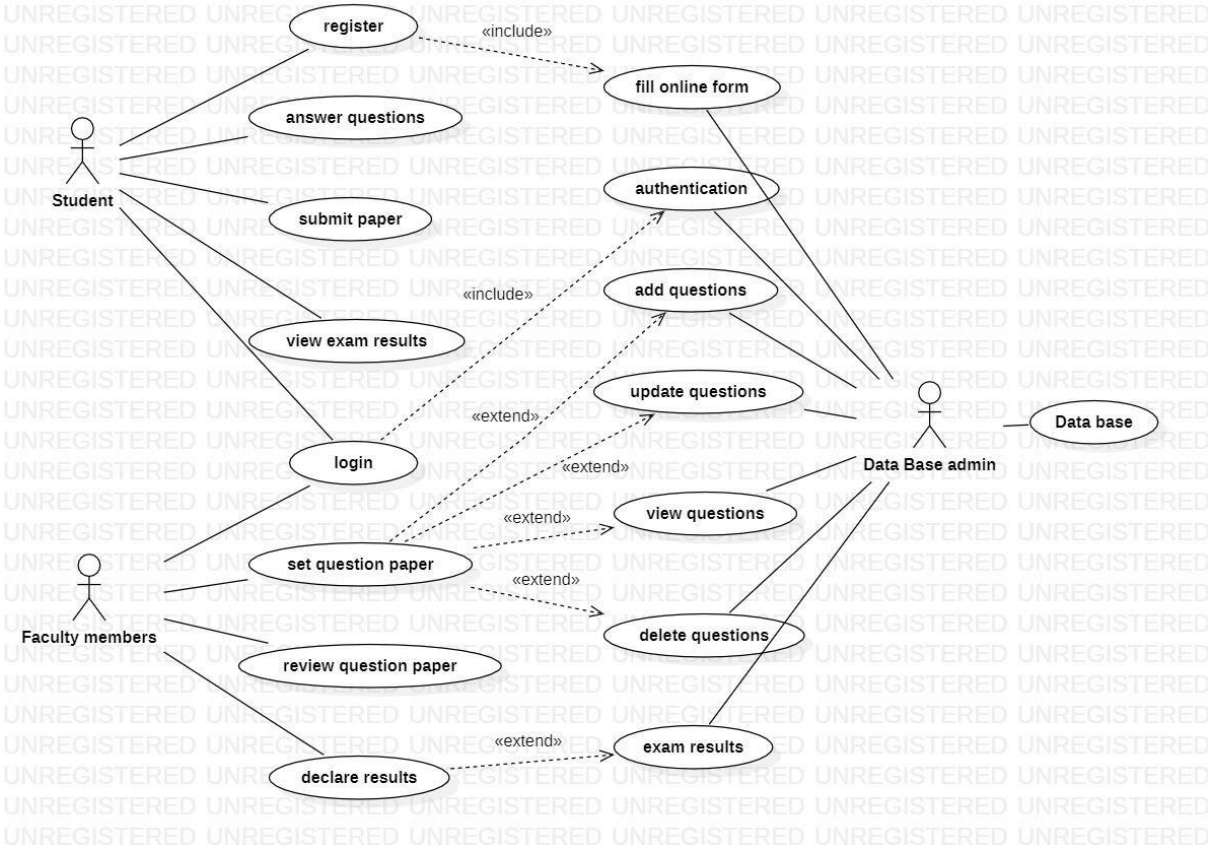


It has seven classes- Test, Test_ques, Online_Exam_System, Student, Adminstrator, Examiner, Student, Result.

Student class had five functions Give_exam, Check_result, Reg_courses, Make_payments, Download_materials.

Result class has marks and grade function and Student can use the functions listed above.

Use-Case Diagram

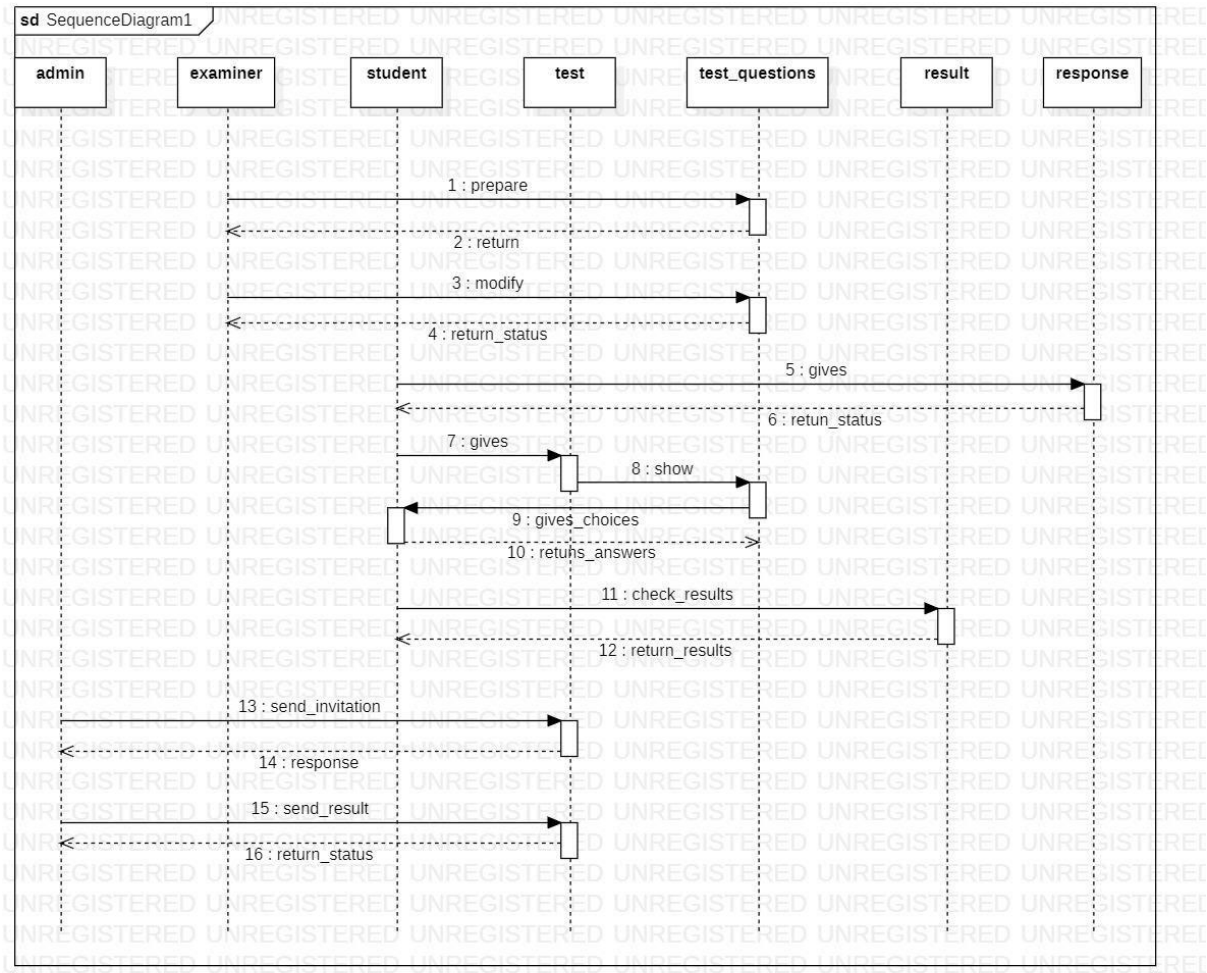


Here in the use-case diagram it depicts that student can register, answer questions, submit paper, view exam results, login.

But, faculty members can only set question paper, review question paper, declare results.

As student should not be given access to the other functions to misuse the system.

Sequence diagram

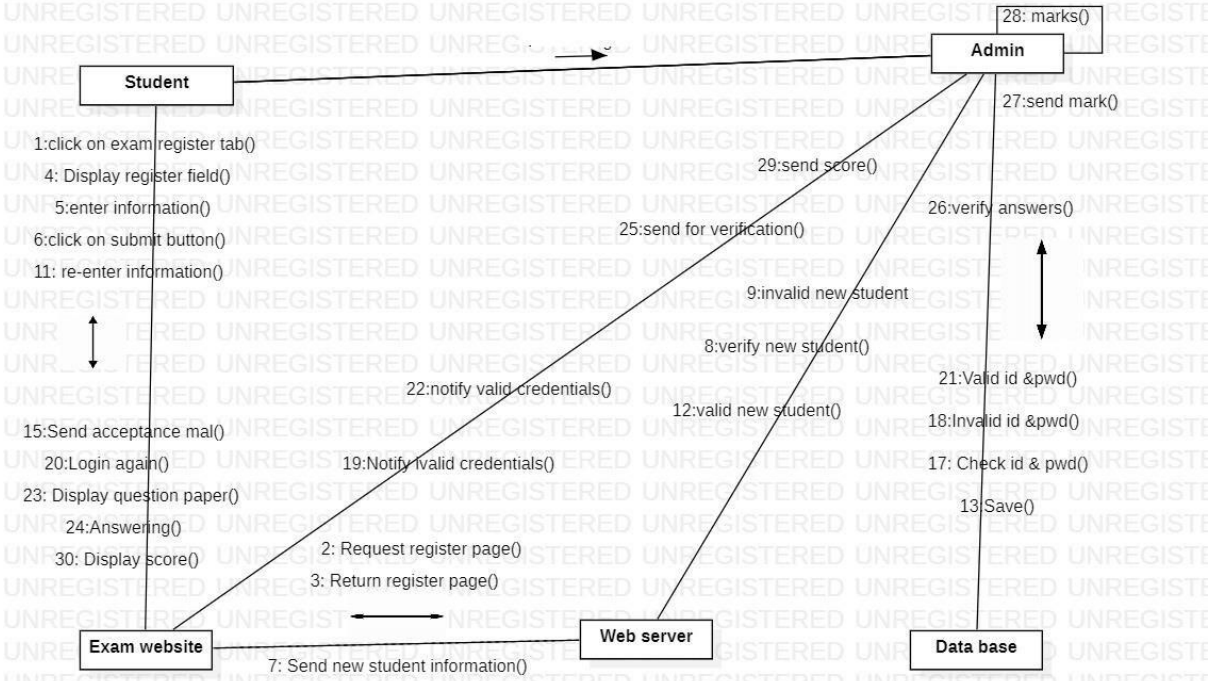


Sequence diagram show the flow of the system or the software follow up when its being used.

Here it asks who is the student and then the flow starts for test.

For the customer, they can only view results in the server.

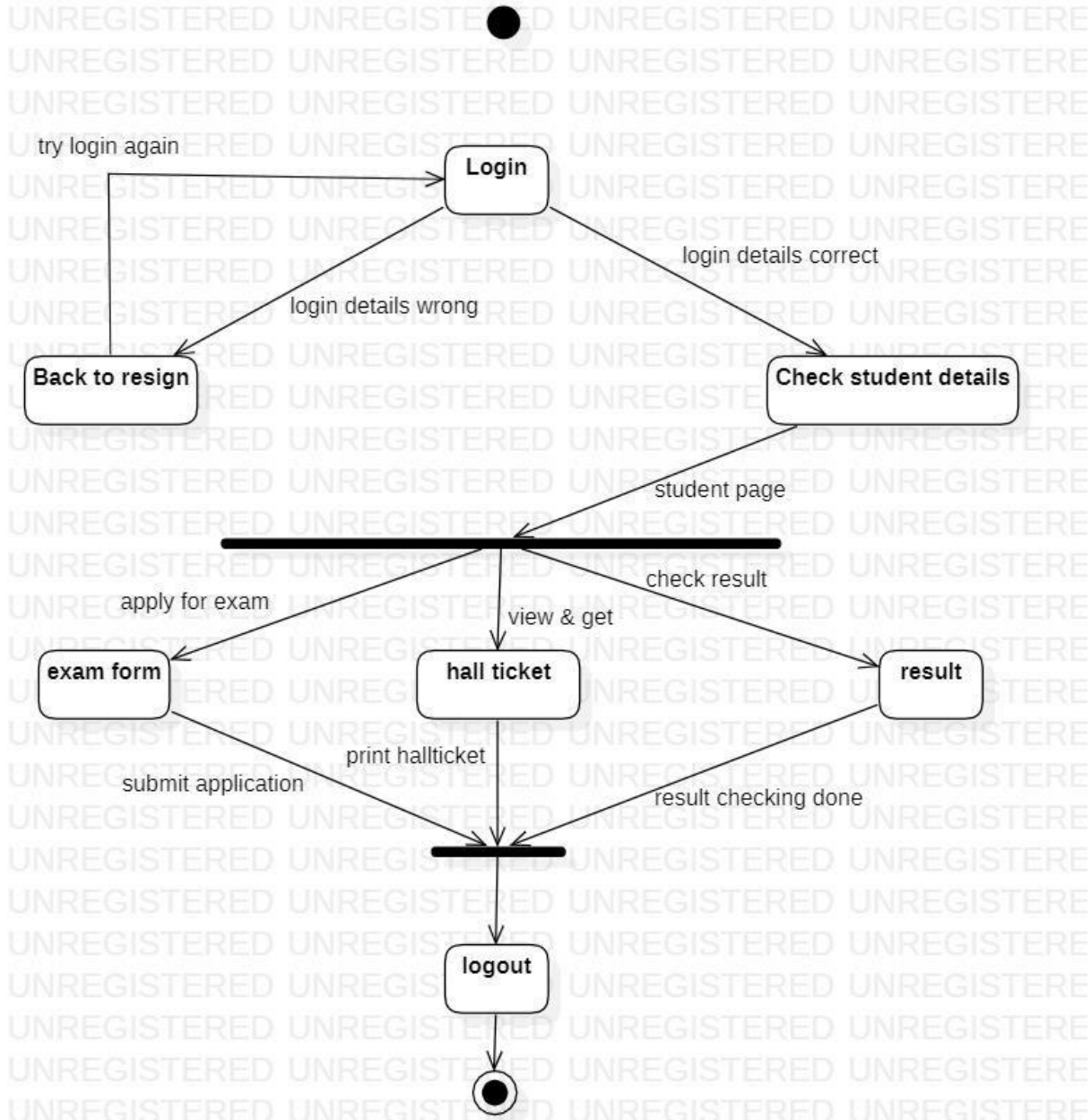
Communication Diagram



A Communication diagram models the interactions between objects or parts in terms of sequenced messages. Communication diagrams represent a combination of information taken from Class, Sequence, and Use Case Diagrams describing both the static structure and dynamic behaviour of a system.

Here this diagram explains and show the flow of the system how it proceeds after the software gets executed.

State chart Diagram

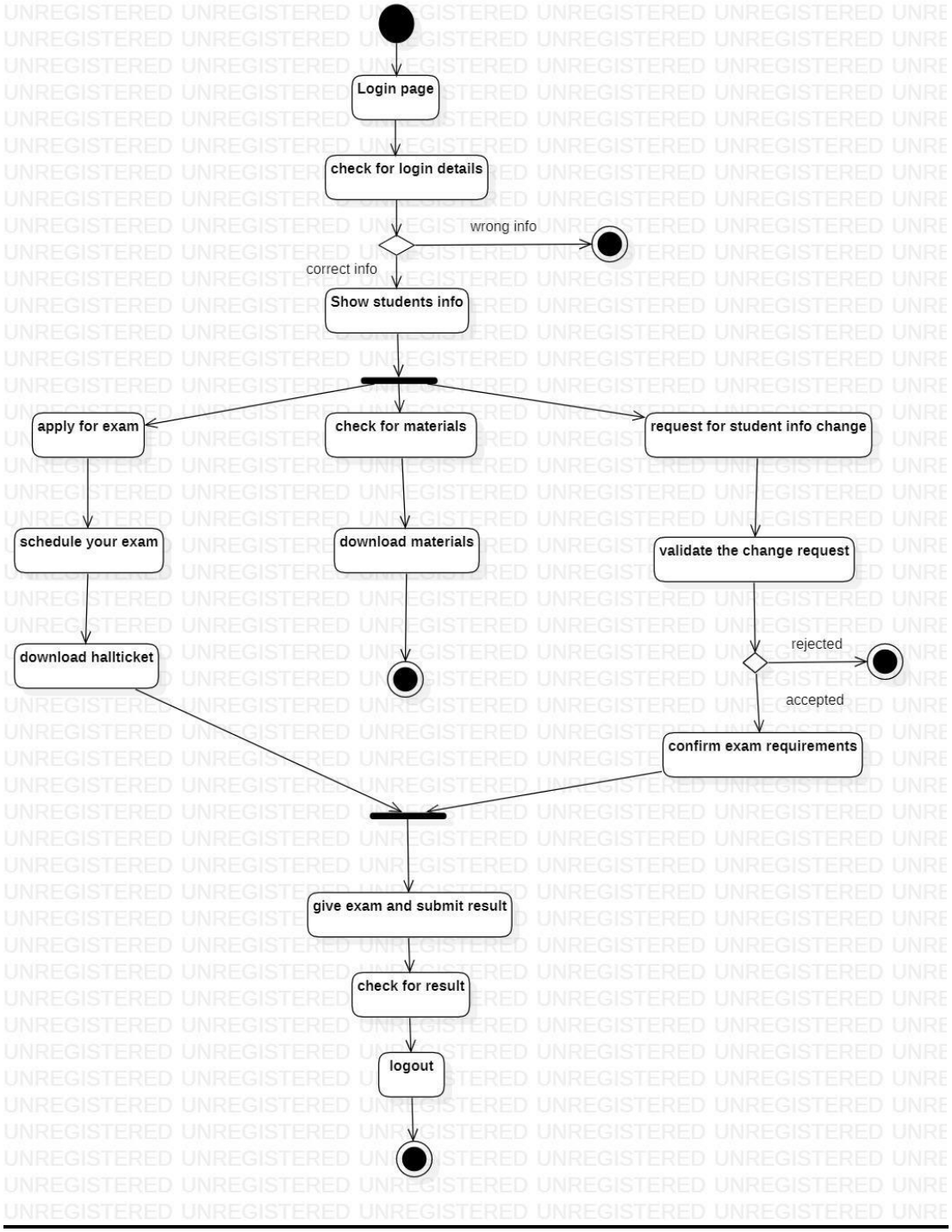


A state diagram is used to represent the condition of the system or part of the system at finite instances of time. It's a behavioural diagram and it represents the behaviour using finite state transitions.

a state diagram is used to model the dynamic behaviour of a class in response to time and changing external stimuli.

In this Diagram it shows the transition of the commands happening in this system.

Activity diagram

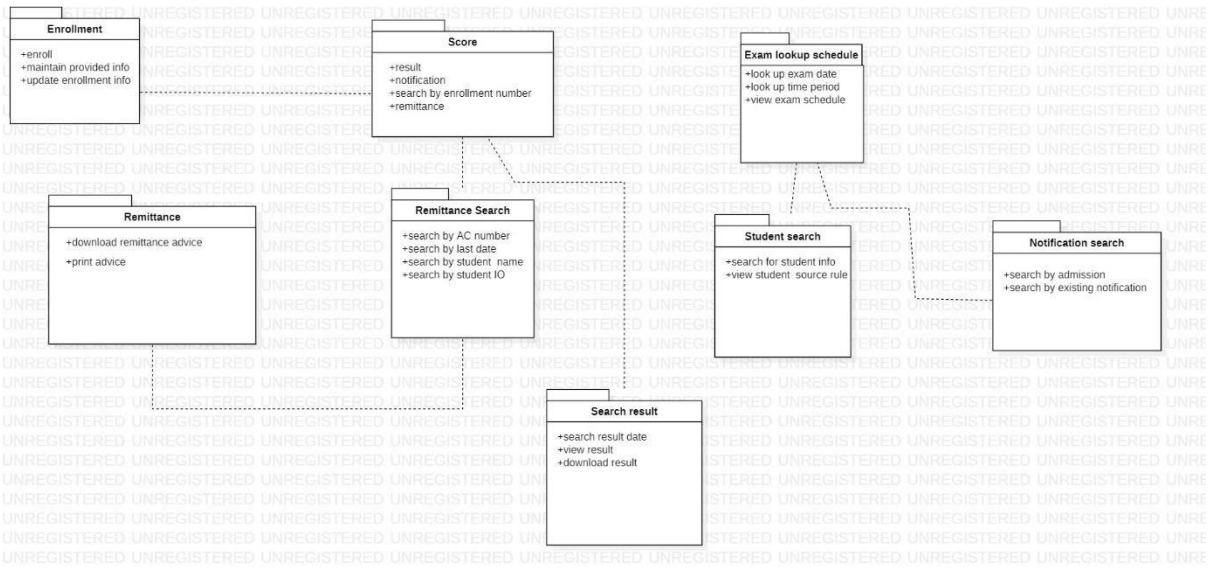


Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system.

The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent. Activity diagrams deal with all type of flow control by using different elements such as fork, join, etc.

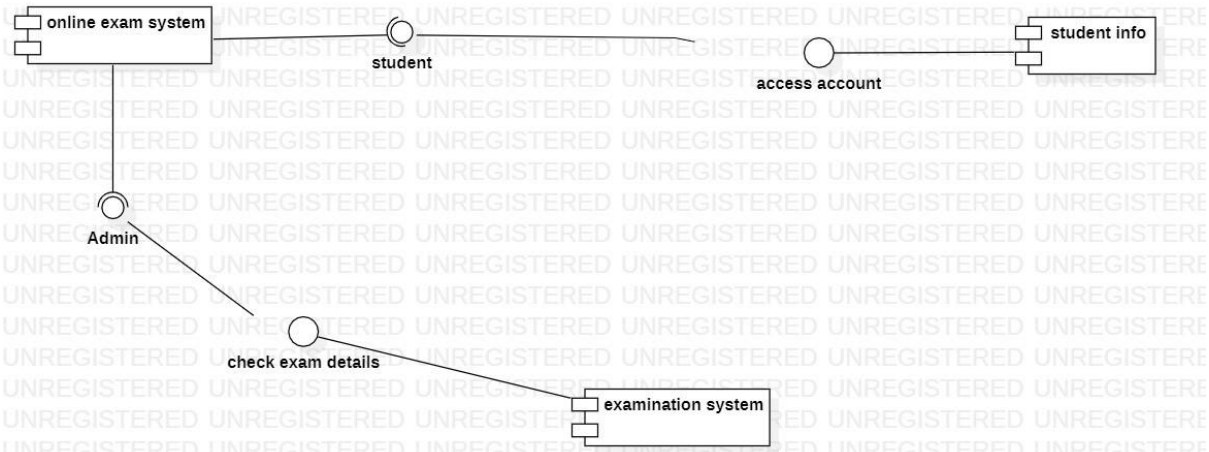
Here this diagram shows how the flow of the system will progress based on the options chosen by the user.

Package Diagram



Package diagrams are structural diagrams used to show the organization and arrangement of various model elements in the form of packages. A package is a grouping of related UML elements, such as diagrams, documents, classes, or even other packages.

Component Diagram



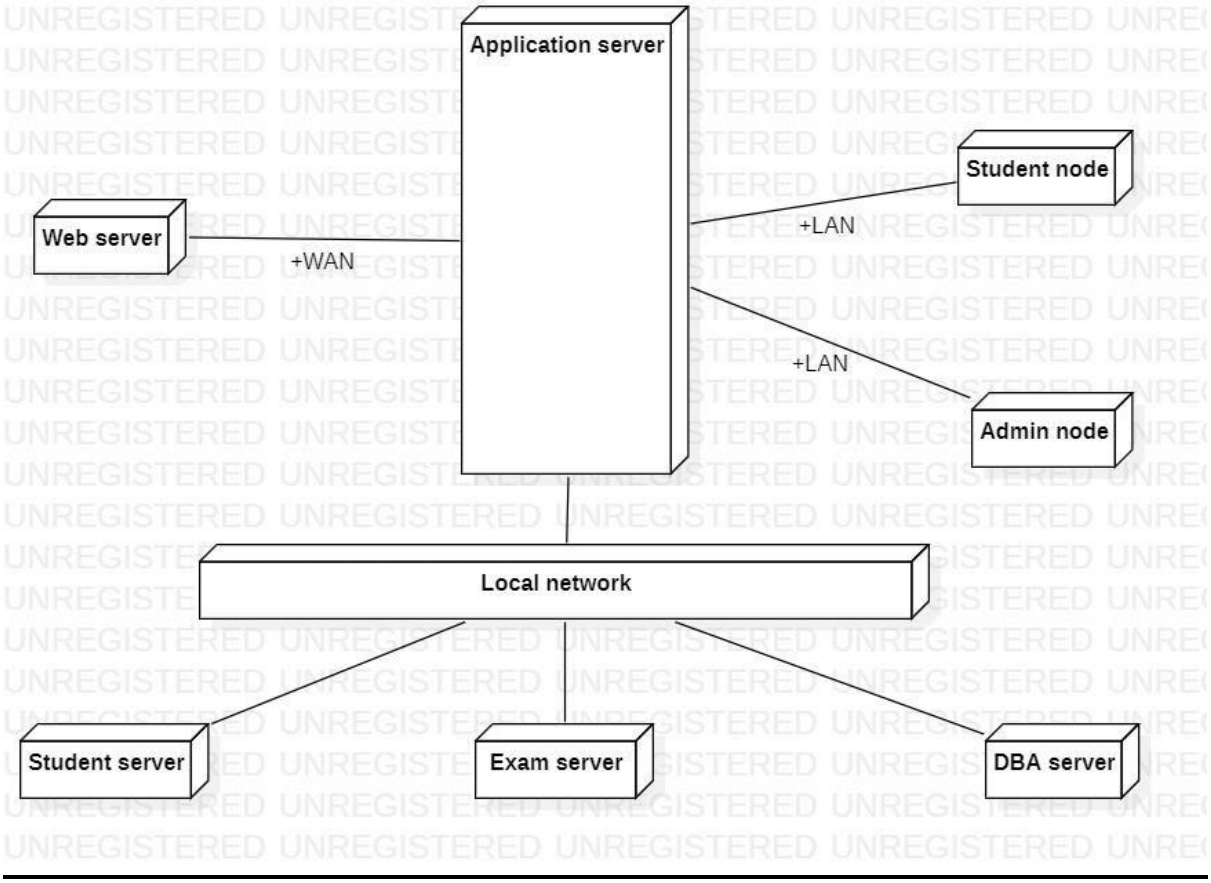
Component diagrams are used to model the physical aspects of a system.

The purpose of the component diagram can be summarized as −

- Visualize the components of a system.
- Construct executables by using forward and reverse engineering.
- Describe the organization and relationships of the components.

Here the Components are Online exam system, Student info,Examination system.

Deployment Diagram



Deployment diagrams are used to visualize the hardware processors, nodes, devices of a system, the links of communication between them and the placement of software files on that hardware.

It shows the execution architecture of a system, including nodes such as hardware or software execution environments, and the middleware connecting them.

Conclusion

ONLINE EXAM REGISTERATION SYSTEM can be implemented by the help of all the above UML diagrams.

It will ease the process of storing all the records of all STUDENTS in a server with the help of a database.

Also, the STUDENT cannot add, delete or modify any of the EXAM RESULT details and can only view all the RESULTS.

References

- www.youtube.com
- www.wikipedia.com
- www.google.com
- https://www.tutorialspoint.com/uml/uml_standard_diagrams.htm

Software used-

- https://staruml.io/