PES University, Bengaluru

(Established under Karnataka Act 16 of 2013)

Department of Computer Science & Engineering

Session: Jan - May 2022

UE19CS353 – Object Oriented Analysis and Design with Java

Theory ISA (Mini Project)

Report on

Examination Registration System

By:

Shreyas M R – PES1UG19CS467

SIDDHARTH SHANBHAG – PES1UG19CS483

Sneha P – PES1UG19CS490

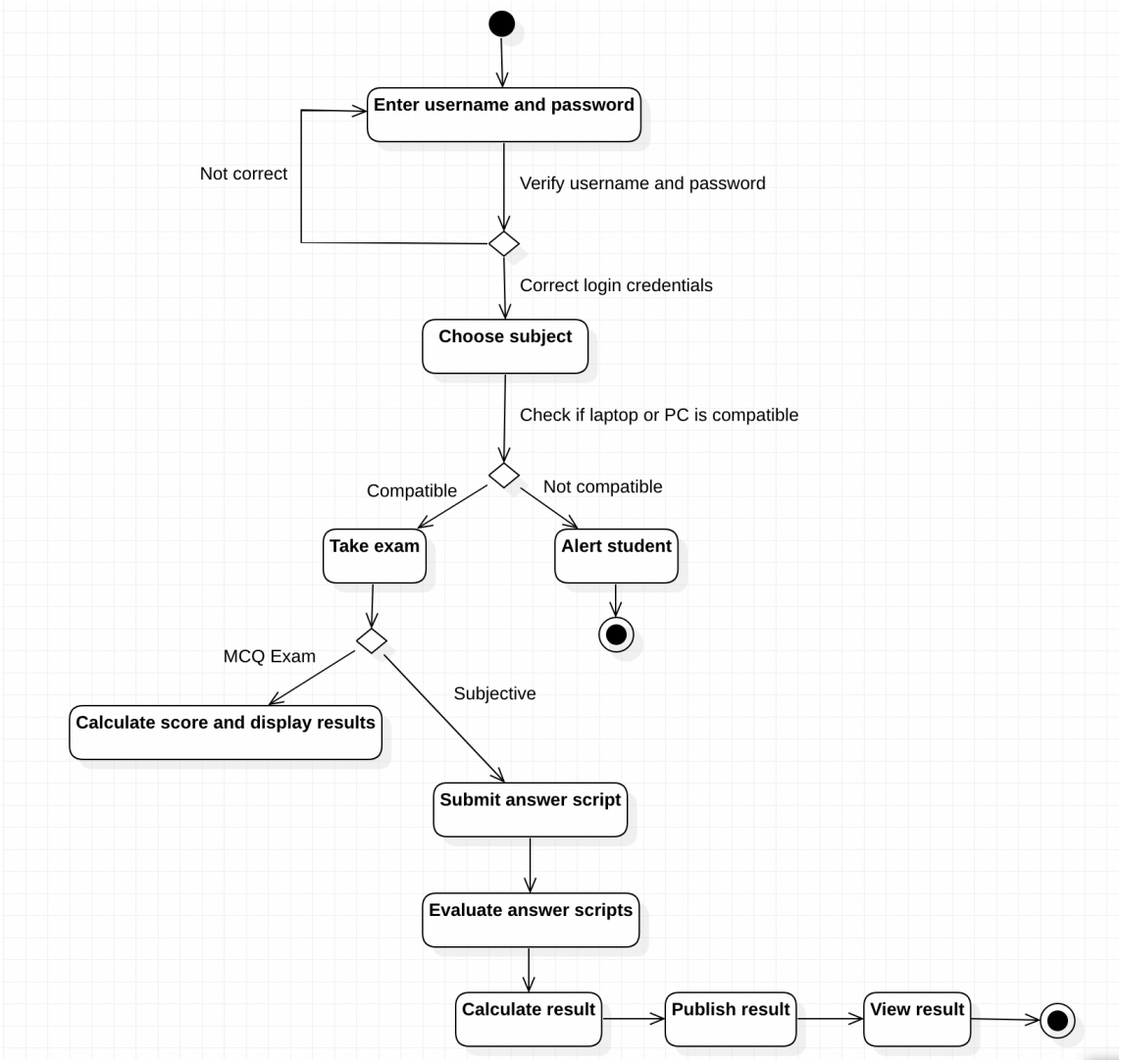
6th Semester H

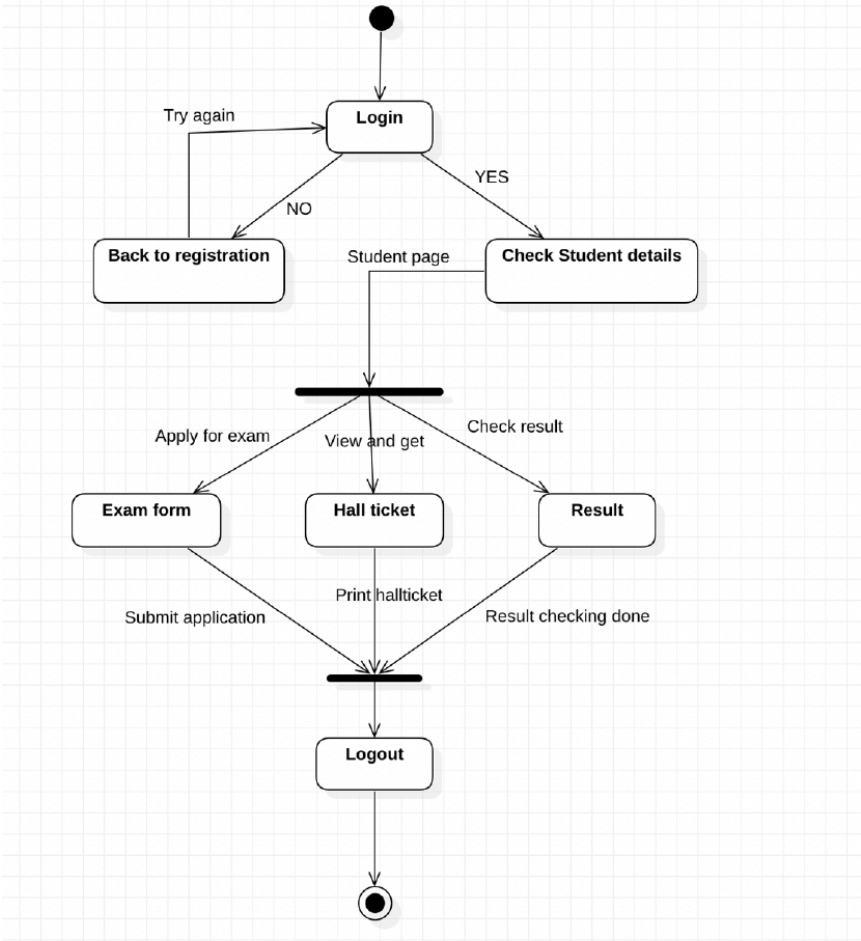
1. **Project Description**

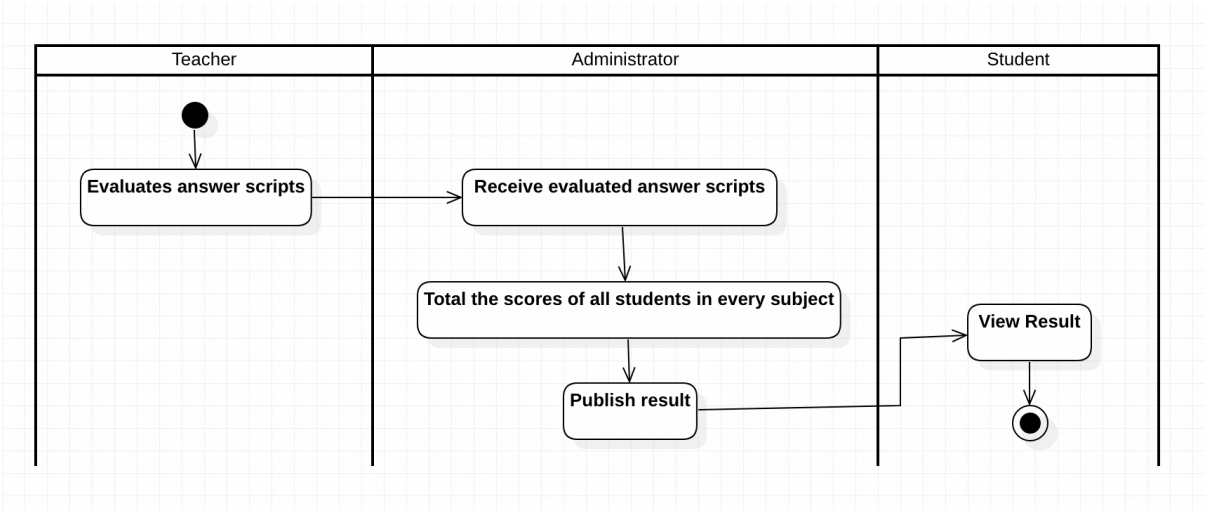
- This project elaborates the functionalities of an online examination system.
- Three main actors: Administrator, Student and Teacher
- GitHub link: https://github.com/shreyas38/OOADJ_Project

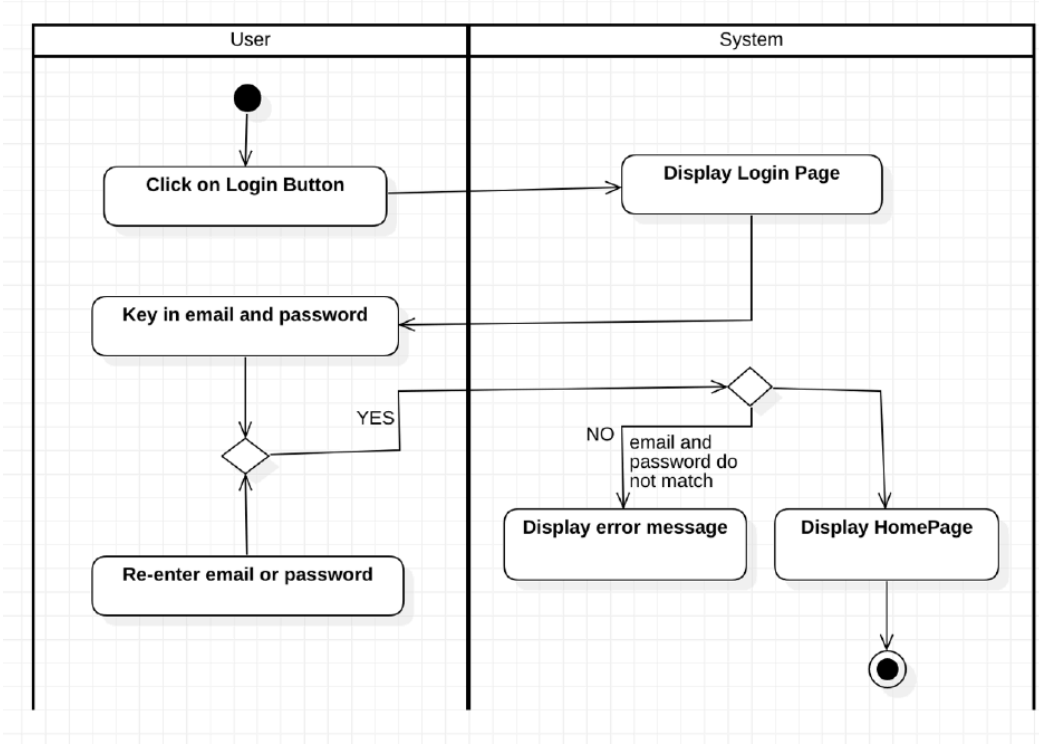
2. **Analysis and Design Models**

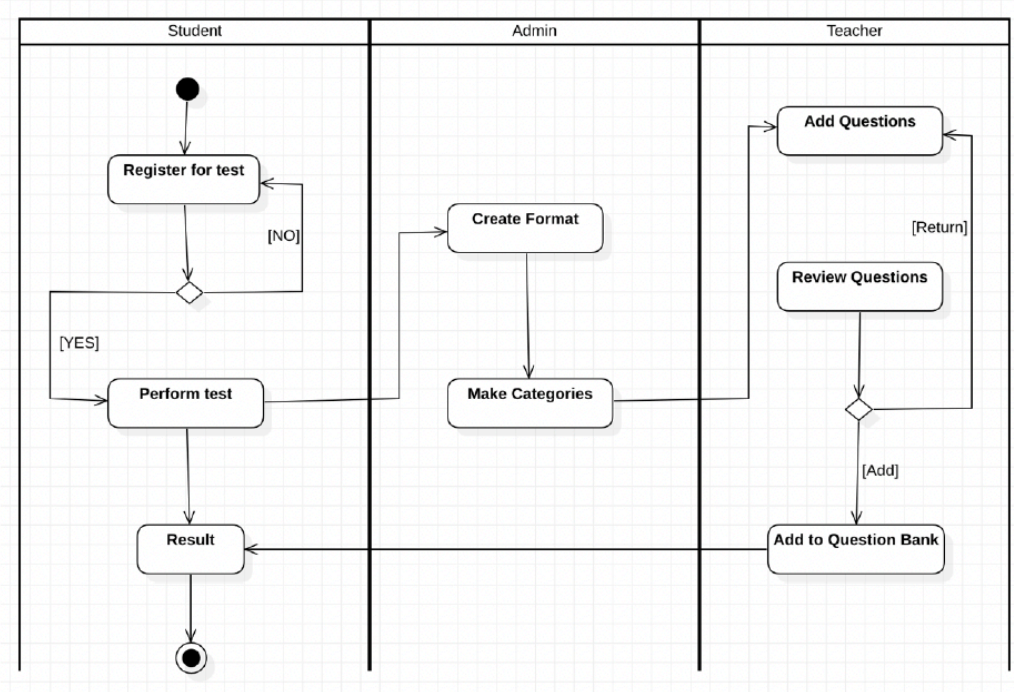
- The project is structured using MVC architecture.
- All the actors along with the examination, courses, question papers have all a model, view and controller.
- The controller controls all the functionalities, model describes each class and view shows what it looks like.
- Admin has access to view and update both student and teacher information.
- Teacher can set a question paper and review the answer script.
- The student has access to the question paper and submits the answer script.
- Examination has take exam functionality which enables the student to register and take the exam.


Enter username and password
Not correct
Verify username and password
Correct login credentials
Choose subject
Check if laptop or PC is compatible
Compatible
Not compatible
Take exam
Alert student
MCQ Exam
Subjective
Calculate score and display results
Submit answer script
Evaluate answer scripts
Calculate result
Publish result
View result


Try again
Login
YES
NO
Back to registration
Student page
Check Student details
Apply for exam
View and get
Check result
Exam form
Hall ticket
Result
Print halltcket
Submit application
Result checking done
Logout


Teacher
Administrator
Student
Evaluates answer scripts
Receive evaluated answer scripts
Total the scores of all students in every subject
Publish result
View Result


User
System
Click on Login Button
Display Login Page
Key in email and password
YES
NO
email and password do not match
Display error message
Display HomePage
Re-enter email or password


Student
Admin
Teacher
Register for test
[NO]
[YES]
Perform test
Result
Create Format
Make Categories
Add Questions
[Return]
Review Questions
[Add]
Add to Question Bank

3. Tools and Frameworks Used

- VS Code, MySQL

4. Design Principles and Design Patterns Applied

- "Don't Repeat Yourself", "Keep it Simple, Stupid" principles
- Facade Design Pattern: Facade is a structural design pattern that provides a simplified (but limited) interface to a complex system of classes, library or framework. While Facade decreases the overall complexity of the application, it also helps to move unwanted dependencies to one place.

5. Application Screenshots (3-4 important pages)

6. Team member contributions

Shreyas M R	PES1UG19CS467	Code, Report
Sneha P	PES1UG19CS490	Code, Report
Siddharth Shanbhag	PES1UG19CS483	Code