TEST BOARD

ONLINE TEST TAKING SYSTEM

Programmer's Documentation

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INTRODUCTION

'Test Board' is an online test taking system that allows students to register and attempt for tests based on the courses they have opted for. Post the submission of a test, it allows the students to view their scores, grade and feedback from faculty if any. Students are given the option to select from the available date and time slots for a particular exam to register for the test.

Faculty can also login to the application to set the date and time slots and time duration for a specific course test they teach. They have an option to set the questions and multiple choice options for a particular test.

Tools used in the making of this application are stated as follows:

Programming tools	
Java SE	1.7 or above
Integrated Development Environment	
Eclipse	Neon
Database	
MySQL	5.7.14
Server	
Apache Tomcat	8.0
Java Database Connector	
MySQL JDBC (Connector/J)	5.1.39
Apache Math Libraries, Java Beans	

Deployment of Enterprise Applications:

Deployment refers to all the activities needed in order to make an application system available for use.

Enterprise applications after being implemented successfully can be deployed in 2 ways:

a. **Use 2 host Servers**: Use one for client application | use another for the database
b. **Use 1 host Server**: Use one server to host both the client application and database

Types of Enterprise Application Deployments:

Various resources are available which helps in deploying complex software on different environments, contents and stacks. Some of them are as follows:

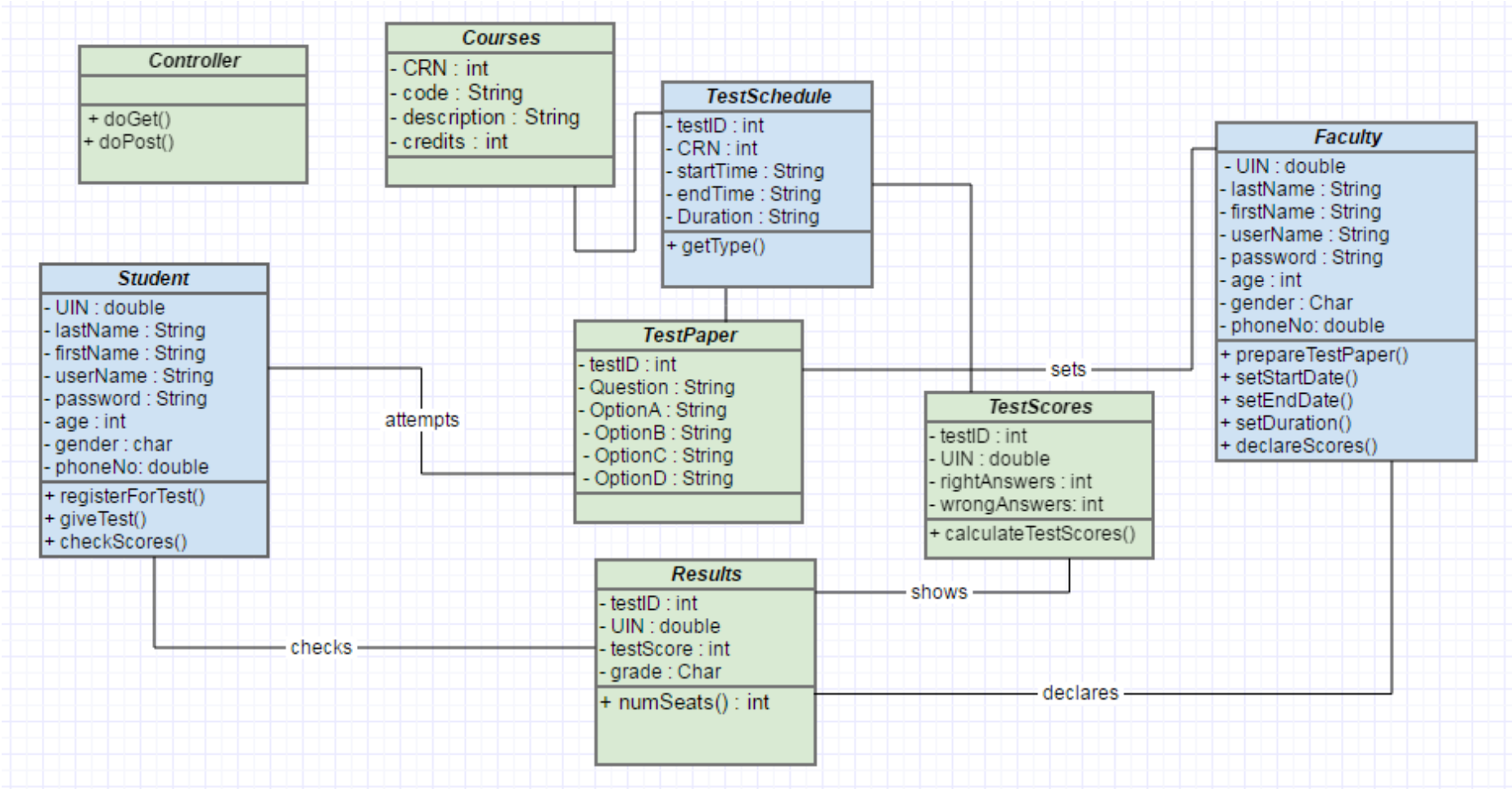
a. **Deployments in SDLC:** In this case, the deployment process happens after the successful completion of every stage of a software development lifecycle. E.g. after Development, testing, production etc.

b. **Deployment by Type of Application**: This type refers the resources on how to deploy diverse types of applications like web apps, enterprise applications and mobile apps.

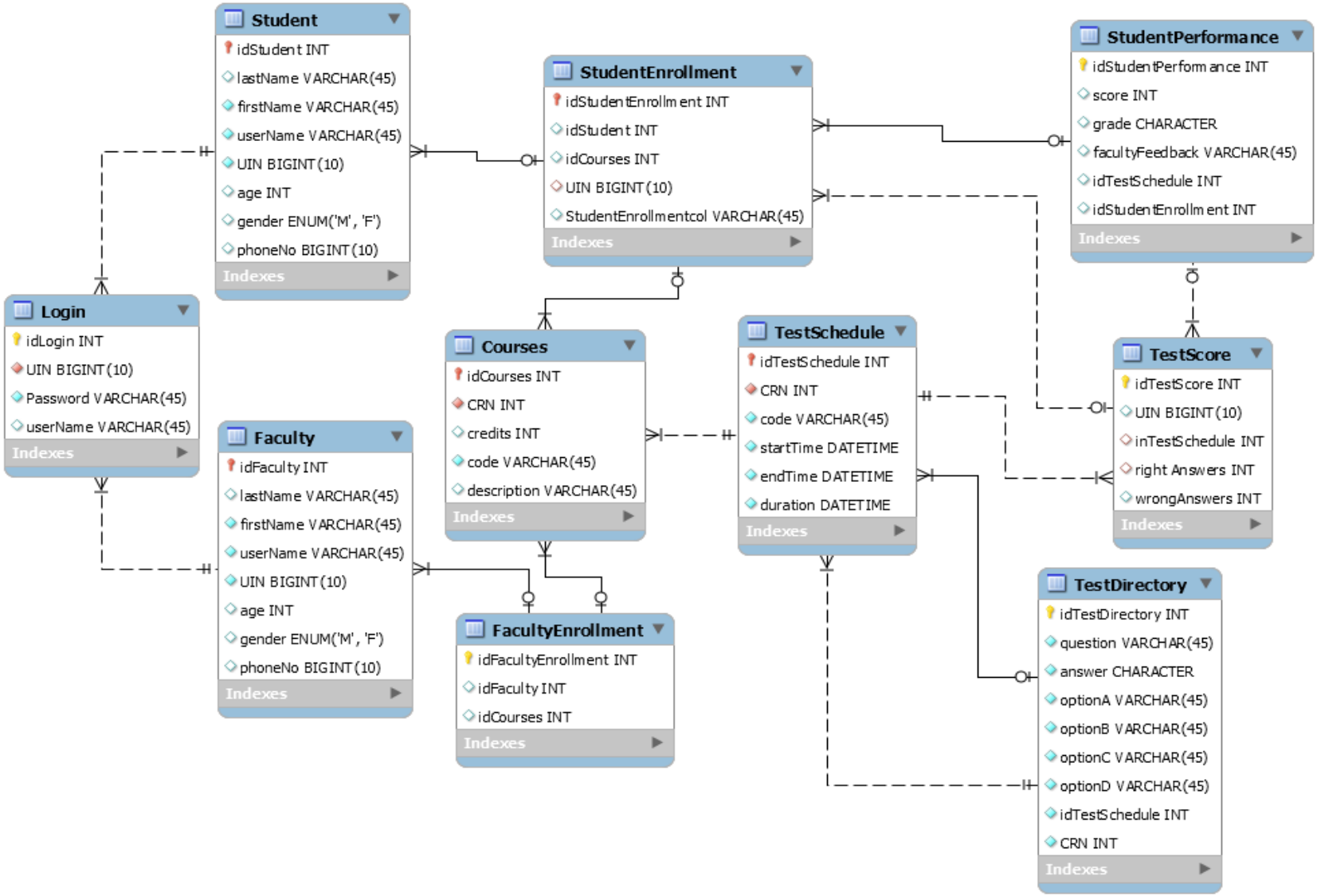
c. **Deploying Locally, Virtualized or on the Cloud:** This type refers on how to deploy enterprise applications to different computing models:
   - Local machines
   - Virtualized machines
   - Cloud instances

d. **Deployment by Stack**: This type refers on how to deploy enterprise applications on a common technology stack like J2EE, OpenStack and LAMP.

UML DIAGRAM

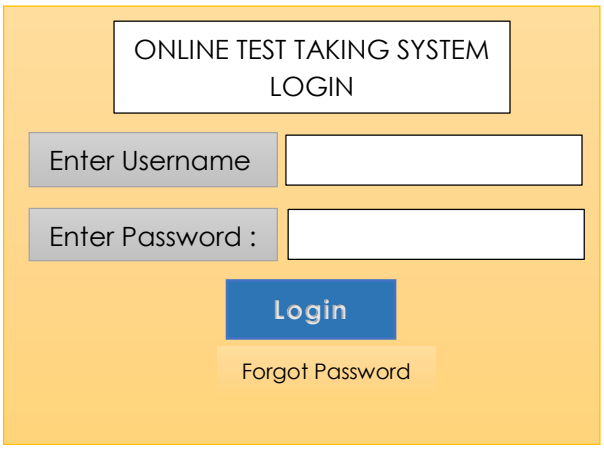

Controller
+ doGet()
+ doPost()
Courses
- CRN : int
- code : String
- description : String
- credits : int
TestSchedule
- testID : int
- CRN : int
- startTime : String
- endTime : String
- Duration : String
+ getType()
Faculty
- UIN : double
- lastName : String
- firstName : String
- userName : String
- password : String
- age : int
- gender : Char
- phoneNo: double
+ prepareTestPaper()
+ setStartDate()
+ setEndDate()
+ setDuration()
+ declareScores()
Student
- UIN : double
- lastName : String
- firstName : String
- userName : String
- password : String
- age : int
- gender : char
- phoneNo: double
+ registerForTest()
+ giveTest()
+ checkScores()
attempts
TestPaper
- testID : int
- Question : String
- OptionA : String
- OptionB : String
- OptionC : String
- OptionD : String
sets
TestScores
- testID : int
- UIN : double
- rightAnswers : int
- wrongAnswers: int
+ calculateTestScores()
shows
Results
- testID : int
- UIN : double
- testScore : int
- grade : Char
+ numSeats() : int
checks
declares

ENTITY RELATIONSHIP DIAGRAM (ER)

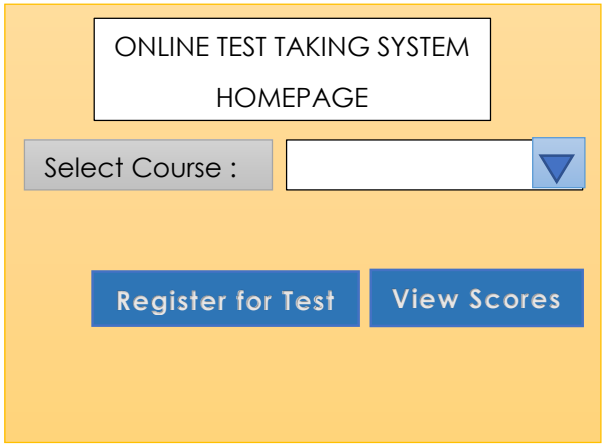


VIEW COMPONENTS

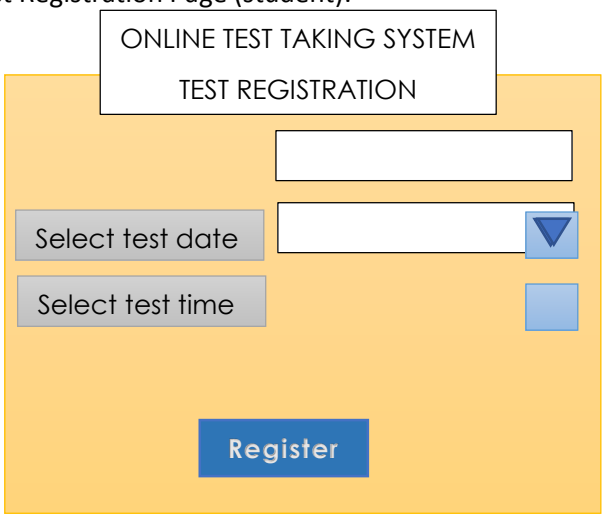
Login Page (Student):



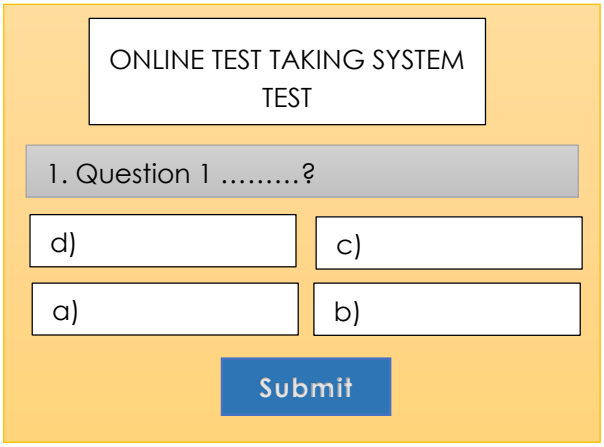
HomePage (Student):



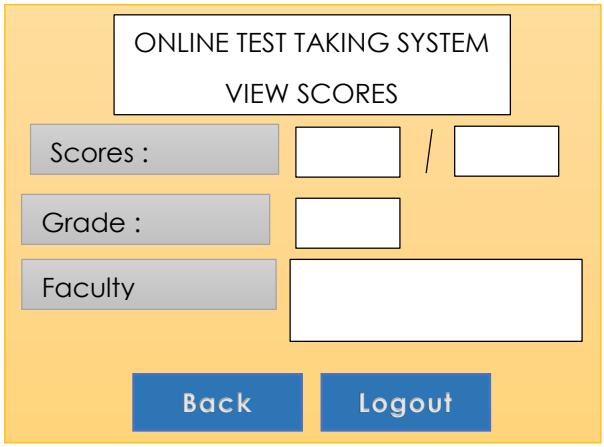
Test Registration Page (student):



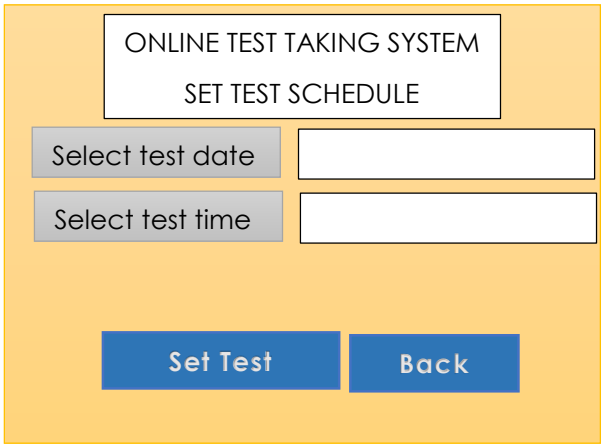
Test Page (Student):



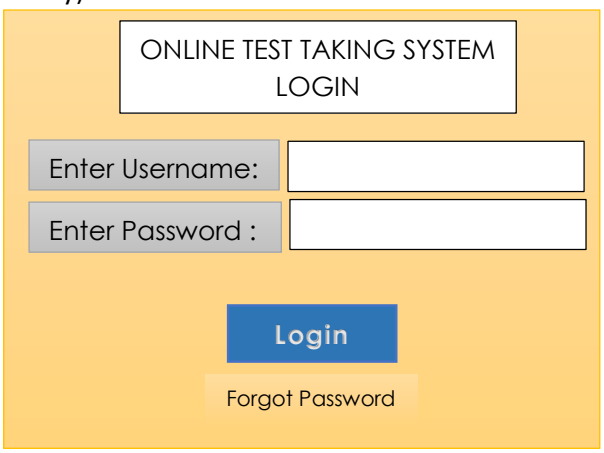
View Scores Page (Student):



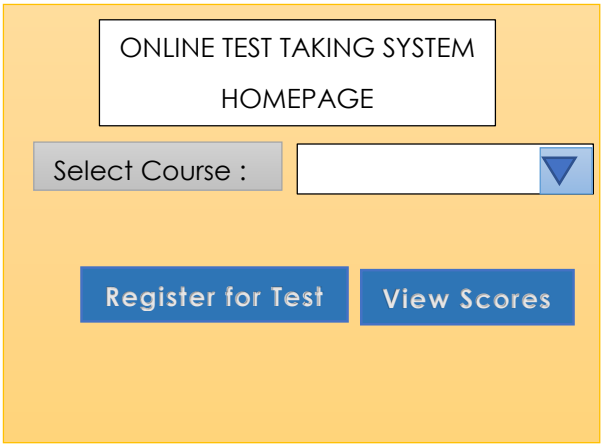
Set Test Paper Page (Faculty):



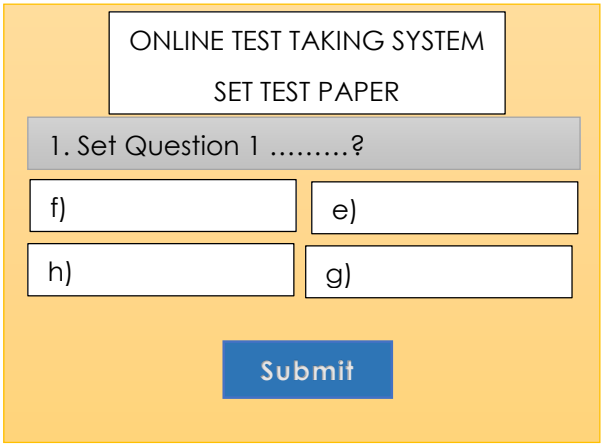
Login (Faculty):



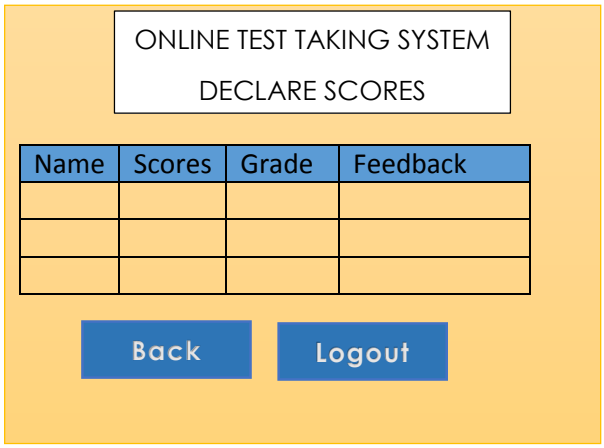
HomePage (Faculty):



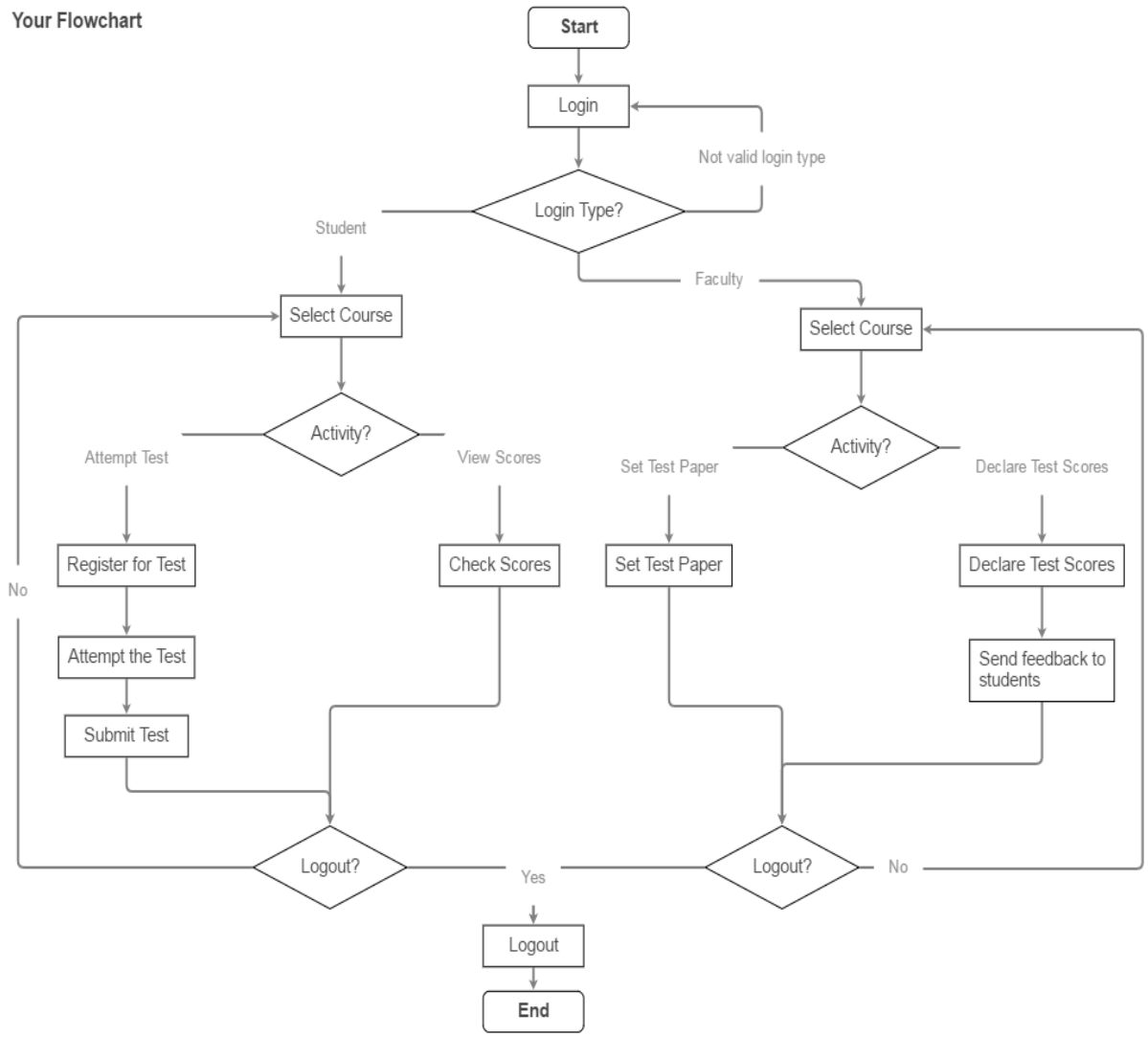
Set Test Page (Faculty):



Declare Scores Page (Faculty):



FLOW CHART DIAGRAM



REFERENCES

http://electric-cloud.com/wiki/display/releasemanagement/Enterprise+Application+Deployment#EnterpriseApplicationDeployment-Howto