

## Phase 2 Project

### **Backend Admin for Learner's Academy**

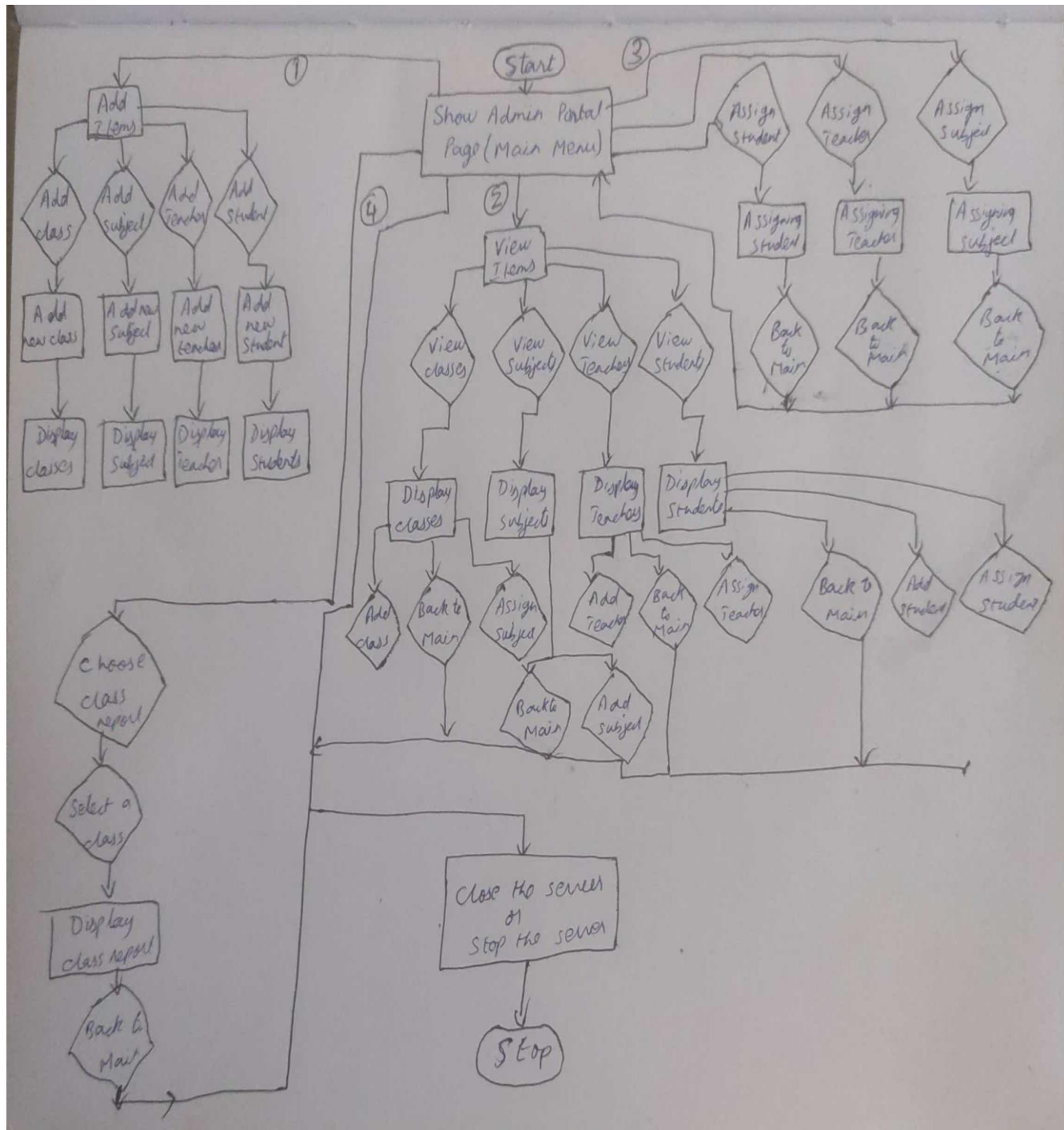
#### **Problem Statement :**

Learner's Academy is a school that has an online management system. The system keeps track of its classes, subjects, students, and teachers. It has a back-office application with a single administrator login.

#### **Core concepts used:**

- 1) Servlet
- 2) Hibernate
- 3) JSP
- 4) JDBC
- 5) MySql
- 6) Collections - List
- 7) Exception handling

# Application Flow Chart



## **Algorithm :**

### **1) Models**

- Number of classes created : Classes, Student, Subject, Teacher.
- These classes will have getter and setter methods and also have annotation for mapping with url and making relations with other tables.

### **2) Controllers**

- The servlets AddClass, AddSubject, AddStudent, AddTeacher will have steps to get the details from user and create the session to start the transaction to commit it and close the session respectively
- The servlets assignStudent, assignSubject, assignTeacher will have the steps to get the details from user and create session to alter the table i.e commit the transaction and close it.

### **3) Mapping**

- The xml file hibernate.cfg.xml file will have the properties to connection with the MySql driver and also have the properties to create and update the queries.

## **4) View and display**

- For display the page to the user we have used html and jsp files.
- The jsp file index.jsp will display the welcome admin portal page.
- The html files addClasses, addSubject, addStudent, addTeacher which will the input from user and send it controller.
- The jsp files viewClass, viewStudent, viewSubject, viewTeacher will display the master list of peoples respectively.
- The jsp files assign's will have the option to assign specific person to specific field.
- The jsp files chooseClassReport and ClassReport will display all the information of the class.

## **Flow of the application:**

- 1) Create a maven project and add the required dependencies.
- 2) The application will be start from the index jsp file which will display the welcome admin portal page which contains links

to add items, view items, assigning links and choose class report.

- 3) If we click on add items which display html files of specific add items and there is a box to enter the input which provoke the specific controller to trigger the query to add record to database.
- 4) After submit the value, it will display the specific models list i,e after submitting it will redirect to view jsp files.
- 5) Also this page contains link to back to main menu , add more items and specific assigning links.
- 6) If we click on view items it will display the specific models list that is provoking specific view jsp files.
- 7) If we click on any of the assinging links it will redirect assigning jsp files which call the specific controller to assging the specific to records (that is alter the tables using the relations like one to one , one to many).
- 8) This page will have drop down option select the values and also have the link to bring back to main menu.
- 9) If we click on the choose class report the link will display the same jsp file name which have a drop down menu option to select which class should be display.
- 10)It will redirect class report which will display all information the selected classes that is what are subjects are there , how

many students are there, what are teachers are taking the subject.

11)If we stop the server the application will stopped.

Gitlink:

<https://github.com/Priyakumar11/Simplilearn-Projects>