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1. Project Name:

Learners Academy Management System

2. Project Details:

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.

3. Purpose

The purpose of this document is to capture the product details.

- Product's capabilities, appearance, and user interactions
- Project and developer details
- Sprints planned and the tasks achieved in them
- Algorithms and flowcharts of the application
- Core concepts used in the project

4. Product Capabilities

The product is a backend administrative portal for a school management system that provides a single administrator login with the capability to perform the following:

- Set up a master list of all the subjects for all the classes
- Set up a master list of all the teachers
- Set up a master list of all the classes
- Assign classes for subjects from the master list
- Assign teachers to a class for a subject
- Get a master list of students
- View Class Report which will show all the information about the class, such as the list of students, subjects, and teachers

5. Sprints

Number of Sprints planned: 3

Sprint Duration: 3 weeks

Sprint 1 Details: Functional Requirements Specification

Stakeholder engagement to gather application functions, requirements and specification

Product Specification

- a. Prototype should be a web Application with user interaction via forms and links.
- b. Application must have basic web navigation to switch to other pages for administrator operations.
- c. Dashboard Options
 - i. Set up list of subjects
 - ii. Set up list of teachers
 - iii. Set up list of classes
 - iv. Assign classes for subjects
 - v. Assign teacher to a class
 - vi. Get list of students
 - vii. View class report

Sprint 2 Details: Product Development

Design and develop databases and administrator operations:

- Database connectivity and database operations
- Development and scripting of web pages
- Input validation

Sprint 3 Details: Testing and Release

Deploy application in a test environment and allow for user testing, bug reporting and bug fixing. Check for and restore broken codes.

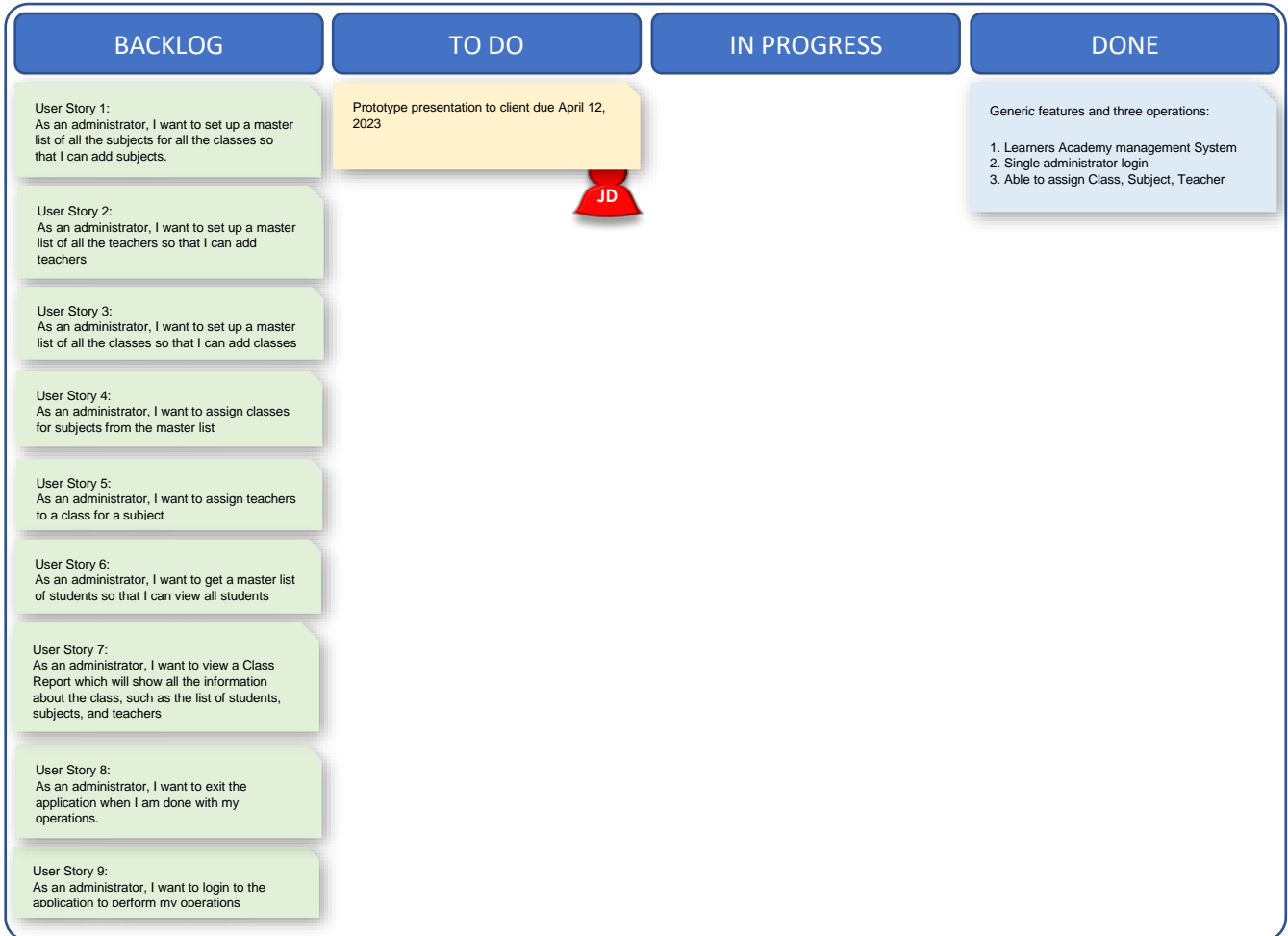
In release phase review menu switching and optimise memory handling in java.

Enhanced or fine-tune features and dashboard menu interplay.

6. Java Concepts employed


- a. JSP
- b. Servlets
- c. SQL
- d. JDBC
- e. CSS

7. Kanban board



8. Screenshots

Figure 1: Login/ Index page

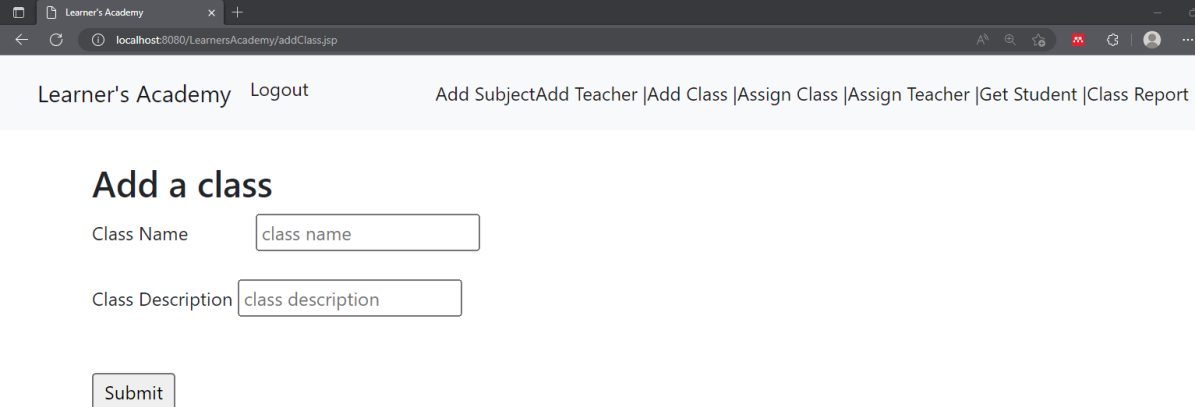


Learner's Academy Management System

Username

Password

Figure 2: Add a class to the master list



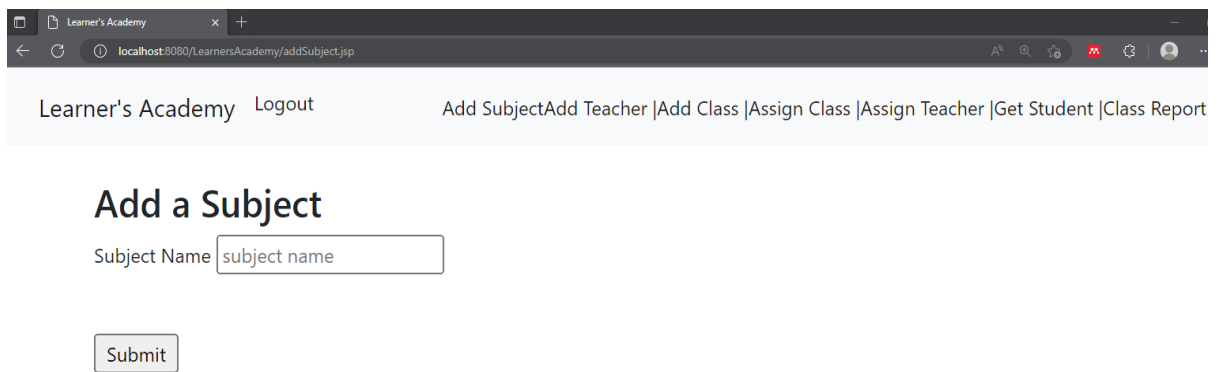
Learner's Academy [Logout](#) [Add Subject](#) [Add Teacher](#) [Add Class](#) [Assign Class](#) [Assign Teacher](#) [Get Student](#) [Class Report](#)

Add a class

Class Name

Class Description

Figure 3: Add a subject to the master list



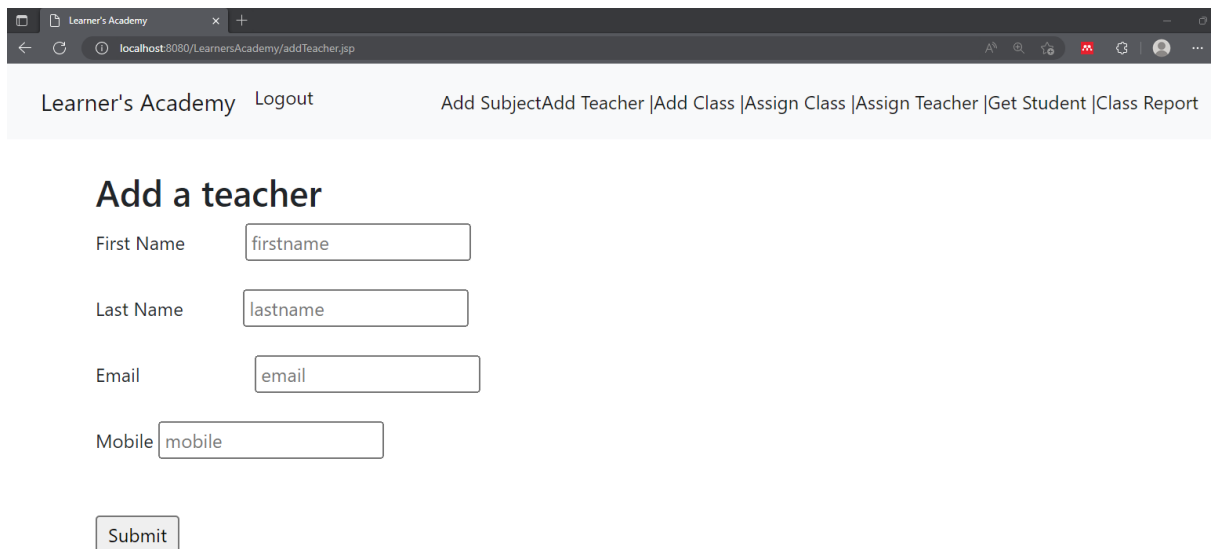
The screenshot shows a web browser window with the title 'Learner's Academy'. The address bar displays 'localhost:8080/LearnersAcademy/addSubject.jsp'. The page has a header with 'Learner's Academy' and a 'Logout' link. A navigation menu contains links: 'Add Subject', 'Add Teacher', 'Add Class', 'Assign Class', 'Assign Teacher', 'Get Student', and 'Class Report'. The main content area is titled 'Add a Subject' and features a form with a 'Subject Name' label and a text input field containing 'subject name'. Below the input field is a 'Submit' button.

Learner's Academy Logout Add SubjectAdd Teacher |Add Class |Assign Class |Assign Teacher |Get Student |Class Report

Add a Subject

Subject Name

Figure 4: Add a teacher to the master list



The screenshot shows a web browser window with the title 'Learner's Academy'. The address bar displays 'localhost:8080/LearnersAcademy/addTeacher.jsp'. The page has a header with 'Learner's Academy' and a 'Logout' link. A navigation menu contains links: 'Add Subject', 'Add Teacher', 'Add Class', 'Assign Class', 'Assign Teacher', 'Get Student', and 'Class Report'. The main content area is titled 'Add a teacher' and features a form with four labels and text input fields: 'First Name' (firstname), 'Last Name' (lastname), 'Email' (email), and 'Mobile' (mobile). Below the input fields is a 'Submit' button.

Learner's Academy Logout Add SubjectAdd Teacher |Add Class |Assign Class |Assign Teacher |Get Student |Class Report

Add a teacher

First Name

Last Name

Email

Mobile

Figure 5: Assign classes with subjects from the master list

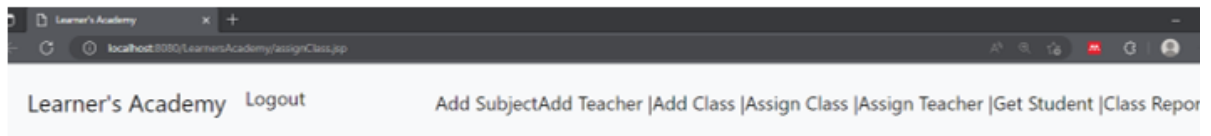
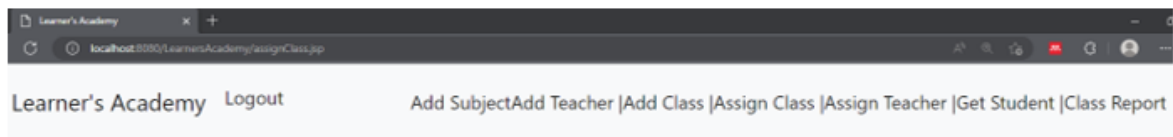
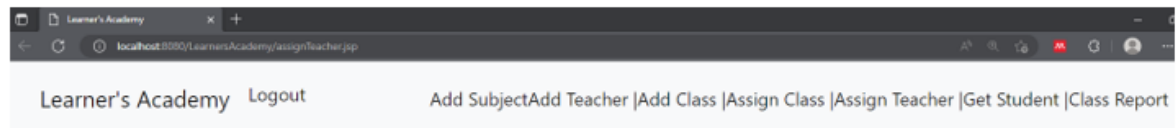
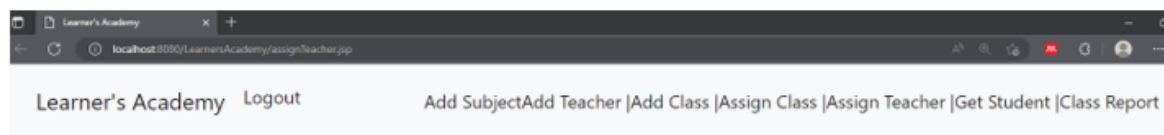


Figure 6: Assign teaches to class from the master list



Outputs

Figure 7: Dashboard with menu

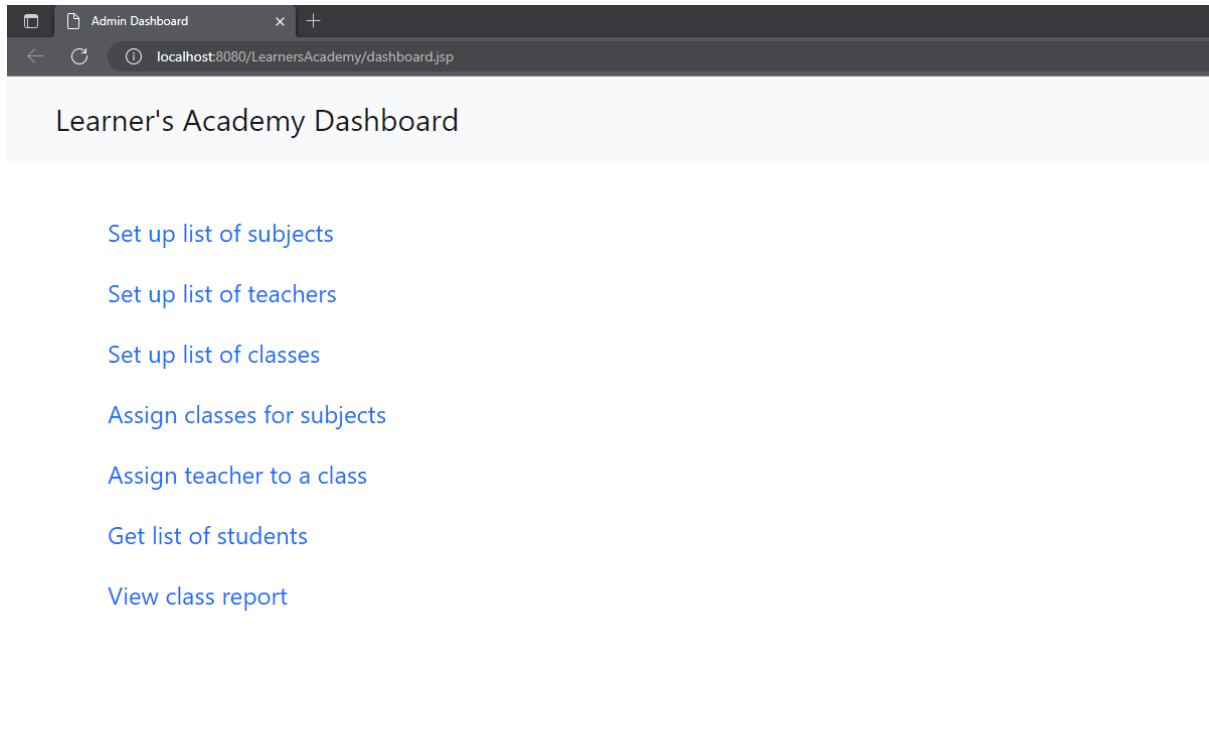


Figure 8: Output of list of subjects

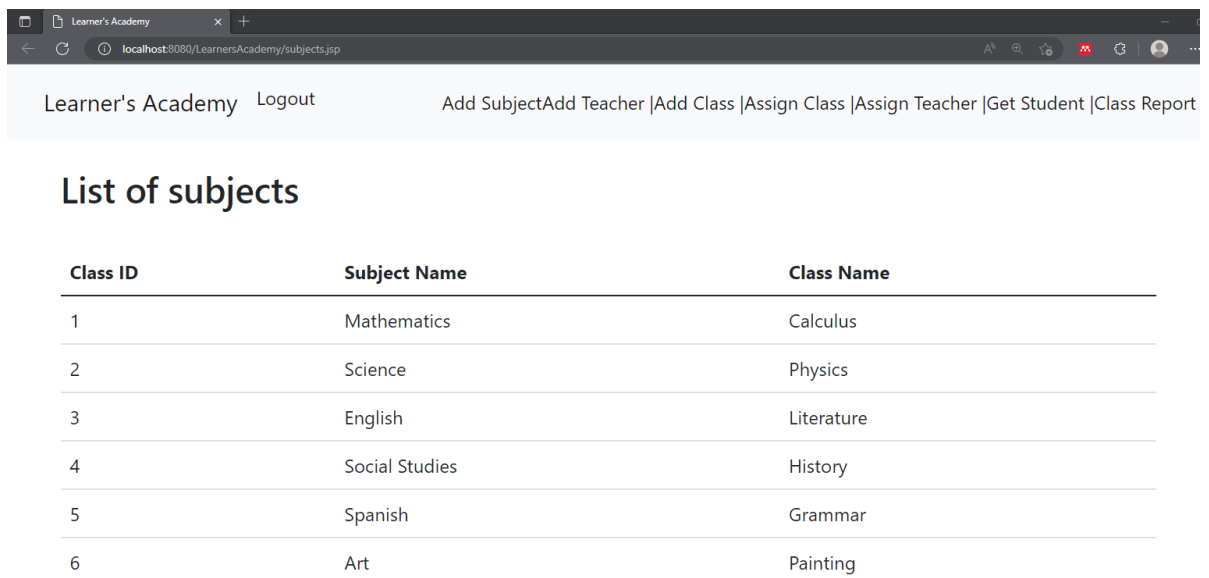
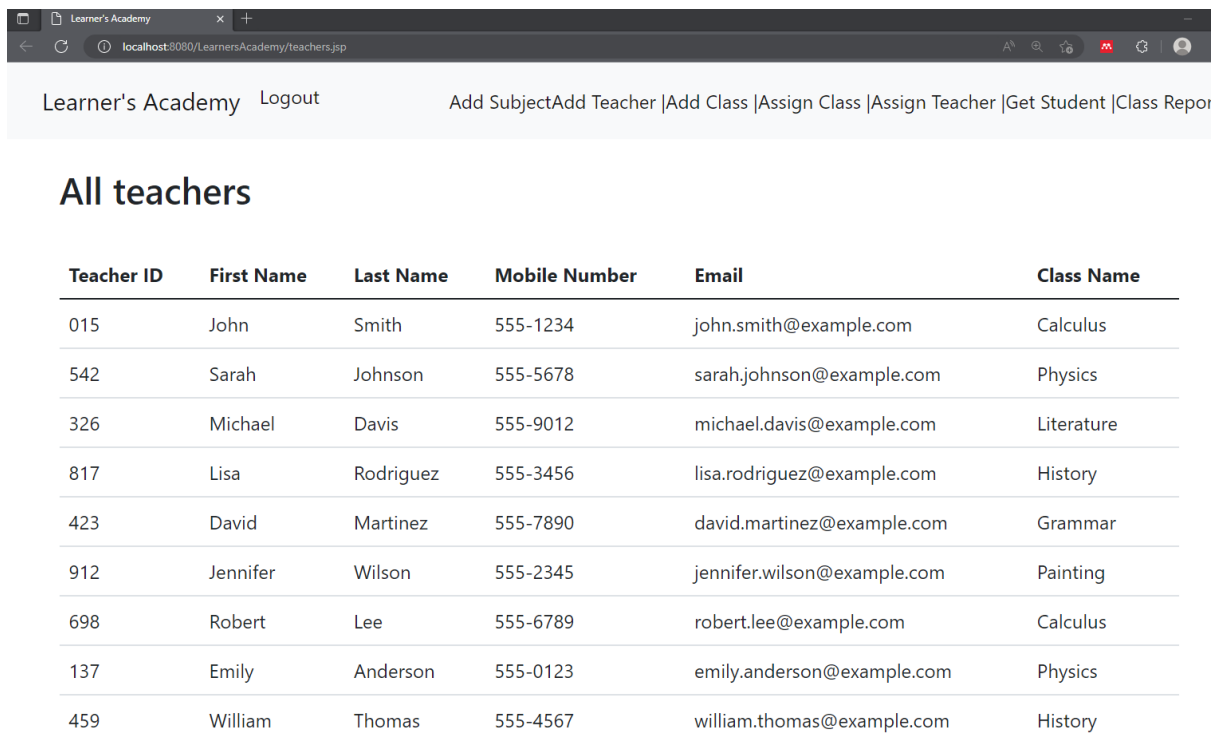
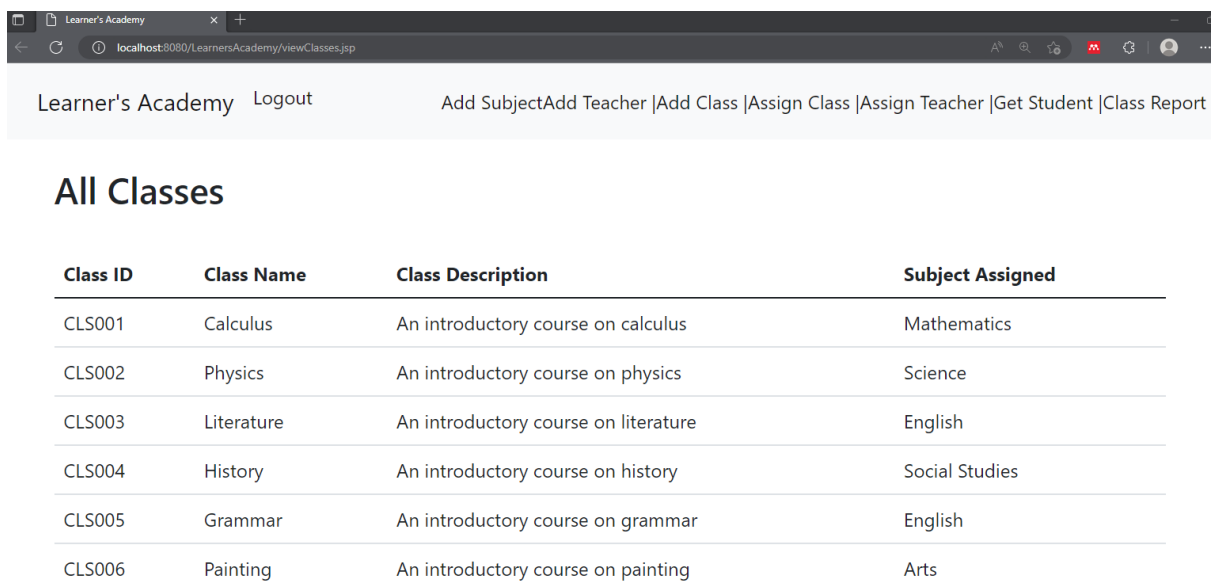


Figure 9: Output of list of teachers



Teacher ID	First Name	Last Name	Mobile Number	Email	Class Name
015	John	Smith	555-1234	john.smith@example.com	Calculus
542	Sarah	Johnson	555-5678	sarah.johnson@example.com	Physics
326	Michael	Davis	555-9012	michael.davis@example.com	Literature
817	Lisa	Rodriguez	555-3456	lisa.rodriguez@example.com	History
423	David	Martinez	555-7890	david.martinez@example.com	Grammar
912	Jennifer	Wilson	555-2345	jennifer.wilson@example.com	Painting
698	Robert	Lee	555-6789	robert.lee@example.com	Calculus
137	Emily	Anderson	555-0123	emily.anderson@example.com	Physics
459	William	Thomas	555-4567	william.thomas@example.com	History

Figure 10: Output of list of classes



Class ID	Class Name	Class Description	Subject Assigned
CLS001	Calculus	An introductory course on calculus	Mathematics
CLS002	Physics	An introductory course on physics	Science
CLS003	Literature	An introductory course on literature	English
CLS004	History	An introductory course on history	Social Studies
CLS005	Grammar	An introductory course on grammar	English
CLS006	Painting	An introductory course on painting	Arts

Figure 11: Output of list of students

Learner's Academy

Logout

Add SubjectAdd Teacher |Add Class |Assign Class |Assign Teacher |Get Student |Class Report

All Students

Student ID	First Name	Last Name	Mobile	Email	Class Name
108	John	Doe	123-456-7890	johndoe@example.com	Calculus
109	Jane	Smith	234-567-8901	janesmith@example.com	Physics
110	Mike	Johnson	345-678-9012	mikejohnson@example.com	Literature
111	Sara	Lee	456-789-0123	saralee@example.com	History
112	David	Chen	567-890-1234	davidchen@example.com	Grammar
113	Amy	Liu	678-901-2345	amyliu@example.com	Painting

Figure 12: Output of Class Report

Learner's Academy

Logout

Add SubjectAdd Teacher |Add Class |Assign Class |Assign Teacher |Get Student |Class Report

Class Report

Class ID	Class Name	Class Description	Subject Name	Teacher Name	Student Name
C001	Calculus	An introductory course on calculus	Mathematics	John Doe	Jane Smith
C002	Physics	An introductory course on physics	Physics	Jane Smith	Mike Johnson
C003	Literature	An introductory course on literature	English	Mike Johnson	Sara Lee
C004	History	An introductory course on history	Social Studies	Sara Lee	David Chen
C005	Grammar	An introductory course on grammar	English	David Chen	Amy Liu
C006	Painting	An introductory course on painting	Visual Arts	Amy Liu	John Doe