**Project report on**

**Developing a Backend Admin for Learner’s Academy.**

This document contains sections for:

* [Sprint planning and Task completion](#Sprint_plan)
* [Core concepts used in project](#Core_concepts)
* [Flow of the Application](#Flow).

## **Sprints planning and Task completion:**

The project is planned to be completed in 2 sprint. Tasks assumed to be completed in the sprints are:

* Creating the flow of the application
* Initializing git repository to track changes as development progresses.
* Writing the Java program to fulfill the requirements of the project.
* Testing the Java program with different kinds of User input
* Pushing code to GitHub.
* Creating this specification document highlighting application capabilities, appearance, and user interactions.

## **Core concepts used in project:**

• Object-Oriented: used to create and model objects for users and their credentials.

• Databases: used to store and retrieve data.

• Data Sources: used to define a set of properties required to identify and access the database.

• Collections: used some collections such arraylist to store collection of data.

• Exception Handling: used to catch problems that arises in the code especially in I/O blocks.

• Cookies: to store log-in data on the client browser.

**Technologies Used:**

Servlet: to do the business logic and works a controller for the project.

• JSP: to handle the presentation view.

• SQL: to create and manage the database.

• JDBC: to make operations on the database for the project.

• Eclipse: to write and run the code.

• Tomcat: to run and deploy servlet application.

**Project Users Stories : ( Agile and Scrum )**

The project is planned to be completed in 3 sprints. Tasks assumed to be completed in the sprint are:

* Creating the flow of the application
* Initializing git repository to track changes as development progresses.
* Writing the Java program to fulfill the requirements of the project.
* Testing the Java program with different kinds of User input
* Pushing code to GitHub.

1) As an admin I can Set up a master list of all the subjects for all the classes

2) As an admin I can Set up a master list of all the teachers

3) As an admin I can Set up a master list of all the classes

4) As an admin I can Assign classes for subjects from the master list

5) As an admin I can Assign teachers to a class for a subject (A teacher can be assigned to different classes for different subjects)

6) As an admin I can Get a master list of students (Each student must be assigned to a single class).

7) As an admin I can create an option to view a Class Report which will show all the information about the class, such as the list of students, subjects, and teacher.

The goal of the company is to deliver a high-end quality product as early as possible.

**Sprint 1**

1) As an admin I can Set up a master list of all the subjects for all the classes

2) As an admin I can Set up a master list of all the teachers

3) As an admin I can Set up a master list of all the classes

**Sprint 2**

4) As an admin I can Assign classes for subjects from the master list

5) As an admin I can Assign teachers to a class for a subject (A teacher can be assigned to different classes for different subjects)

6) As an admin I can Get a master list of students (Each student must be assigned to a single class).

**Sprint 3**

7) As an admin I can create an option to view a Class Report which will show all the information about the class, such as the list of students, subjects, and teacher.

The goal of the company is to deliver a high-end quality product as early as possible