**Specification Document**

Learner's Academy . Ltd Demo Admin API.

Programmer: **Luis A. Silva Soto**

**Use case Definition:**

* As a user of the system, I want to Admin page in which to perform several tasks for the Academy management.
* As a user of the system, I want to be able to add Teachers into the management system.
* As a user of the system, I want to add Students into the management system.
* As a user of the system, I want to add Classes into the management system. In the context of this project, the understanding is that Classes equals physical classrooms in a building.
* As a user of the system, I want to add Subjects into the management system.
* As a user of the system, I want to be able to assign classes for subjects from the list of subjects.
* As a user of the system I want to add Teachers to a class for a subject, with the teachers being able to be in several classes for different subjects.
* As a user of the system I want to be able to view a list of all the Students.
* As a user of the system, I want to be able to view a class report, which includes the list of students, subjects and teachers.

**Github Repository URL:** [Java-FSD-Full-Stack-Luis-Adalberto-Silva-Soto-26145802/Phase1/CompanyLocker/bin/phase1 at main · luisadas29/Java-FSD-Full-Stack-Luis-Adalberto-Silva-Soto-26145802 (github.com)](https://github.com/luisadas29/Java-FSD-Full-Stack-Luis-Adalberto-Silva-Soto-26145802/tree/main/Phase1/CompanyLocker/bin/phase1)

Steps taken to upload into github:

* Created a folder : Java FSD Full Stack-Luis Adalberto Silva Soto-26145802 ( With my Full Name and my Employee ID).
* Navigated to the Folder location in the command line, then started GIT -> git init
* The I configured globally the Username and email ID -> git config --global user.email “[luisadas1@hotmail.com](mailto:luisadas1@hotmail.com)” and git config --global user.name “Luis”
* Added remote server (Github) into git -> git remote add origin <https://PersonalToken@github.com/luisadas29/Java-FSD-Full-Stack-Luis-Adalberto-Silva-Soto-26145802.git>
* I renamed the branch name to Main -> git branch -M main
* Add the file into the staging area and commit them with comment ->git commit -m "Final Project"
* Lastly I pushed the commits to github -> git push --set-upstream origin main

**Sprint Planning**

Two sprints where planned if 1 week and half each.

1)The first Sprint

- Included the Development of the Diagram Flow to understand the intended flow program.

- Decision to create a MVP Web dynamic project -> then converting into a Maven project to handle the Artifacts.

- Decision on the Entity Classes.

- Development of the Entity Classes.

- Creation of the Artifacts needed to use Hibernate.

- Development of the DB Resource class.

- Development of the DAO Classes.

- Developement of the Service Classes

2) The Second Sprint

- Development of the JSP for Teacher

- Development of the JSP for Classes.

- Developement of the JSP for Service.

- Development of the JSP for Subject.

- Exception handling was also coded in this sprint.

- Development of Hirbernate relationship schema for the requirements of the project.

- Testing of the application was done, finding some errors in the logic of the program and tackling them.

**Concepts used:**

- Hibernate / mysql database.

- MVP- Desing technique

- JSP creation for the frontend.

- Exception handling.

- Methods within a class.

- Maven Project creation to manage the Artifacts.

- Servlet for the main class of the program.

- Sorting techniches and collection framworks : Lists, sortedLists, Array Lists.

**Possible Enhancements to the Product**

- Creating a GUI to the program, with a more modern look.