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

**Project Objective:**

As a Full Stack Developer, design and develop a backend administrative portal for the Learner’s Academy . Use the GitHub Repository to manage the project artifacts .

**Writeup**:

This Project is implemented in java programming language , HTML ,CSS . The main concept that is used in this project is Java Servlets . There will be only one user according to the given project problem statement which is admin . Firstly admin must log in into to admin portal with his log in credentials like username and password later he can view the operations that are allowed to perform by him . Operations that are performed by the admin are :

1. Add Teacher
2. Add Subject
3. Add Class
4. Assign Class For a Subject
5. Assign Teacher to a Class
6. List of Students
7. Class Report

Java Servlets are created for each and every operation that is mentioned above. These Servlets also have a database connection from MySQL . The name of the database is myDb and tables are present for Teacher , Student , Classes , Subjects . The Connection from the Java Servlet to MySQL server is established through init() method which has DriverManager function which takes parameters like database URL , database name , database password .To start the application we need run the login.html file which is run on a localhost server . The localhost server that is used in this project is apache Tomcat server version 9.0 . When admin clicks on the add teacher module it redirects to the AddTeacherServlet it is performed with the help of RequestDispatcher a function that is present in Java Servlets used forward the request to the another servlet . The changes made on the localhost server is applicable to the database in the MySQL . In the same way we add subjects and classes . For assigning a class for a subject we need to alter the class table and add two attributes to the table with initially as null values . So, when we click on the assign class it assigns to the null values . In the same way we need to alter the class table and add two attributes to it . Class Report is used view the data of students , classes , teachers and subjects after the changes made . As it is a Backend Application basic CSS is used . We can improve it by adding more Cascading Style Sheets to it .