

### Project and Developer Details:

The main aim of the project is to develop a backend admin for Learners Academy, so that the application will keep tracks of classes, subjects, handling faculty and the students and also do the CRUD operation whenever required. It was developed by **NIKKIL KUMAR PC** using Jsp, servlets, Jstl, Jdbc, core Java, MySQL.

### Sprints And Tasks:

#### Product Backlog:

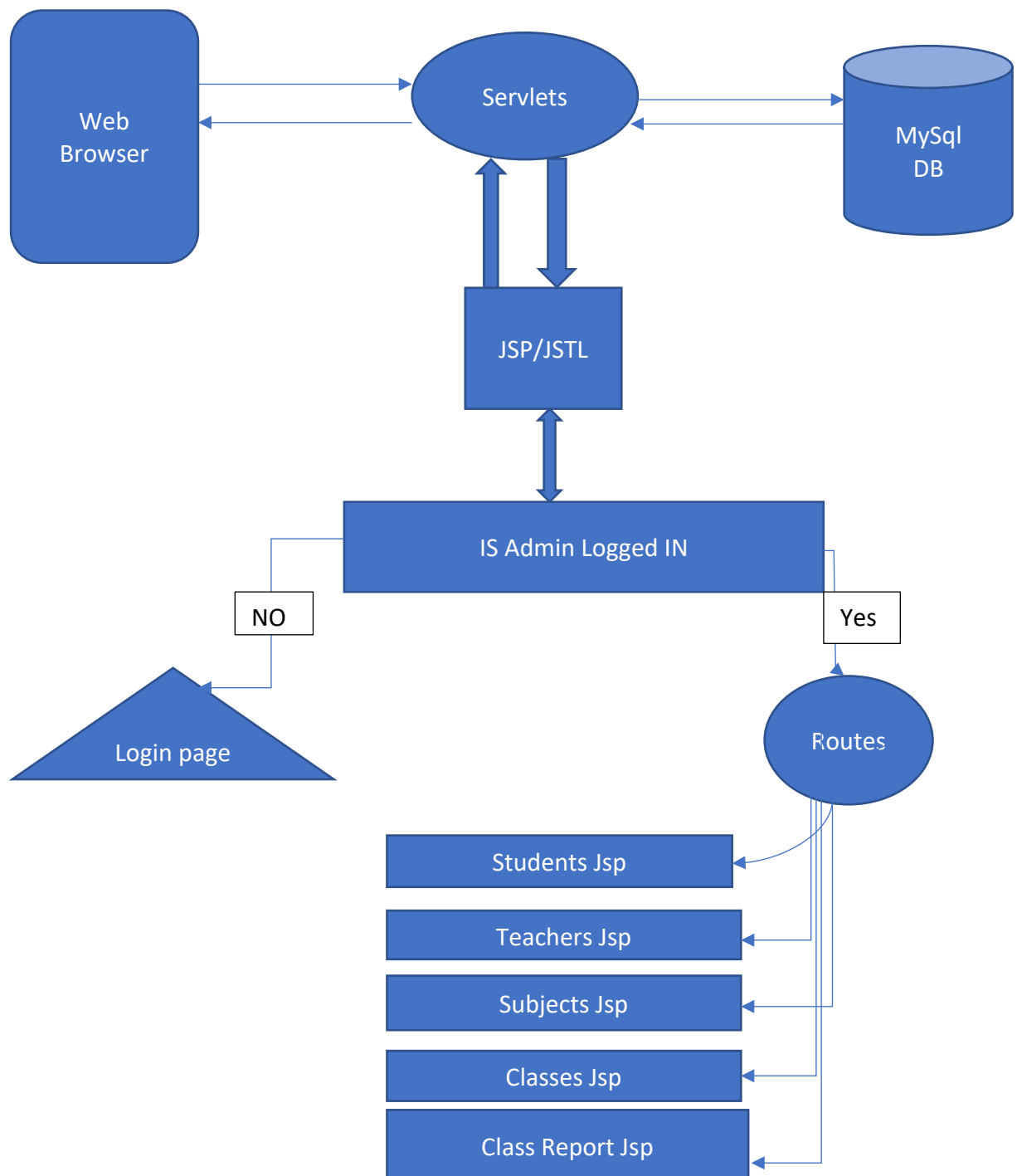
1. Setting up the MySQL db and developing architectural flow for table and schemas.
2. Creating a table for admin which will store his username and password for login and other purposes.
3. Setting up each individual tables for students, teachers, Class, and Subjects.
4. Provided a method to add students for master list using JSP, Servlet and Scriptlets and core Java.
5. Adding few more enhancements to student Jsp by giving features for editing existing student and provided a delete option.
6. Developed JSP and Servlet for handling CRUD operation for teachers list.
7. Developed Subjects servlet and jsp with similar crud operation followed earlier with addition features like allowing drop down to choose faculty for a subject and checkboxes to add class rooms.
8. Developed a class report for each individual classes with number of students in class with number of subjects and with the teacher name handling those classes also added report to showcase other classes handled by faculty.
9. Developed Admin login module , Cookie is used here to check whether admin is logged IN or not , if cookie expires he will be automatically logged off and sent to login screen even he tries to access any other route by manually entering in address bar of browser

SPRINTS	TASKS	DAYS
Sprint 1	<ul style="list-style-type: none"><li>• Setting up Database and architectural flow</li><li>• Setting up tables for admin, student, teachers, classes</li></ul>	5
Sprint 2	<ul style="list-style-type: none"><li>• Adding CRUD operation to all jsp pages such as students, teachers ,classes</li><li>• Provided feature to pick one faculty for a subject for multiple class room</li></ul>	7
Sprint 3	<ul style="list-style-type: none"><li>• Used Bootstrap to design the web pages</li><li>• Made some improvements to login page with CSS</li></ul>	5

Technologies and concepts used:

1. JSP
2. JSTL
3. JDBC
4. Servlets
5. HTML
6. CSS
7. Bootstrap
8. Core Java Concepts – Inheritance , data abstraction , Collections , Lists
9. MY SQL – sql queries, mySql workbench
10. Apache Tomcat for server deployment

Flow Chart:



CoreConcepts used in Project:

- Exception handling – so that application does not break anywhere
- Object-Oriented- used to create and model objects for all my servlet and dao classes
- List – array list is used to store and handle list of values from Db.
- DataStructures – Arrays used mainly.

Unique selling Point of this application:

Has an option to Create, Read, Update and Delete from the browser for all the master lists like Students, Teachers, Subjects and Classes.

Github Repo Link:

<https://github.com/nikkilkum26/learnersAcademy>