**ASSIGNMENT**

The following is the design:

1. Home Page: The home page contains the fallowing

* Add new student
* Add marks of student
* Report

1. Add a new student: The ‘Add student’ page will contain a form where user can add a new student. The fields in the forms will be

* Name
* Roll number
* Semester

1. Add marks of student: The ‘Add marks’ page contains a form where user can add marks of student. The fields in the form will be

* Name (list of all student)
* Semester (list of semesters)
* English marks
* Maths marks
* Science Marks

1. Report: The report page contains the fallowing

* Average Percentage of whole class in recent semester: This report will display the average percentage of whole class in most recent semester.
* Average marks of student in a subject: This report will display the average marks of student in a subject for a particular semester.
* Top 2 consistent student in a subject: This report will display the top 2 consistent student across all semesters, based on max average marks.

Local setup:

1. Elastic to store the data
2. Kibana to visualize data
3. Spring Boot with JSP for development
4. Bootstrap to design frontend

Once the installation is complete we can start developing application using spring boot with jsp and boot strap. We can create index in Elastic to store data and other index to store marks & use kibana to visualize data stored in elastic.

We can use RESTful APIs to communicate between front-end and back-end.

Once application is developed we can deploy on server and make it available for users to access.