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|  | **Student Maintenance Application Development** |
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|  | ELF / HTD Training Programs  Java Full Stack - Use Cases |

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|  | Software Solutions |

 

**App Development Assessment Overview**

As part of this assessment you need to develop a spring boot application i.e. the application has to take input as JSON and give the output as JSON, and Angular as the frontend to make rest API request and display the result. As part of this assessment you need to use

* MySQL DB to store the Data
* Hibernate with JPA to interact with DB
* Spring boot to create ReST API
* Angular to create frontend application

**App Development - Assessment Description**

1. Create a database name “student\_db”
2. Create tables in as following

User\_Info

|  |  |
| --- | --- |
| userid | int (primary key) (auto generate) |
| email | varchar(255) |
| password | varchar(255) |
| name | varchar(255) |
| role | varchar(255) |

Student\_Info

|  |  |
| --- | --- |
| id | int (primary key) (auto generate) |
| userid | int (foreign key) (unique) |
| marks | Double |
| grade | varchar |

This project is aimed at developing Student Maintenance System. This is an Intranet based application that can be accessed throughout the organization. This system can be used to search for Student based on search condition, add individual student, modify an existing student details and display all student details within an organization. This is an integrated system that contains Student component, Trainer component and the Admin component.

1. Admin component operation
   1. Login | Logout
   2. Register Student | Trainer
   3. Delete Student | Trainer
   4. Search Student | Trainer
2. Teacher component operation
   1. Login | Logout
   2. Update Student marks (grade has to be generated in the backend)
3. Student component module
   1. Login | Logout
   2. See the marks and the grade they obtained

Marks Grade Structure

|  |  |
| --- | --- |
| Marks | Grade |
| 9.1 – 10 | A+ |
| 8.1 – 9.0 | A |
| 7.1 – 8.0 | B |
| 6.1 – 7.0 | C |
| 5.1 – 6.0 | D |
| 4.1 – 5.0 | E |
| Below 4.0 | Fail |