

GRADING APPLICATION

IIHT

Time To Complete: 2 hr

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1 PROBLEM STATEMENT

"Grading Application" is a Single Page Application (SPA) that empowers teachers to list out all students along with a record of all grades for all students. It also has facility to update and delete any record also.

2 PROPOSED GRADING APPLICATION WIREFRAME

UI needs improvisation and modification as per given use case and to make test cases passed.

2.1 WELCOME PAGE

localhost:8081/

Welcome to Your Grading Application

Add Student

Add a Student

Name: Grade:

Students List

Filter by Name:

- **Name:** John Doe
Grade: AC
- **Name:** Jane Smith
Grade: B
- **Name:** Alice Johnson
Grade: C
- **Name:** Bob Williams
Grade: A

SCREEN SHOTS

Welcome to Your Grading Application

Add Student

Edit Student

Name: Grade:

Students List

Filter by Name:

- **Name:** John Doe
Grade: AC
- **Name:** Jane Smith
Grade: B
- **Name:** Alice Johnson
Grade: C
- **Name:** Bob Williams
Grade: A

3 BUSINESS-REQUIREMENT:

As an application developer, develop the Grading Application (Single Page App) with below guidelines:

| User Story # | User Story Name | User Story |
|--------------|-----------------|--|
| US_01 | Welcome Page | <p>As a user I should be able to visit the welcome page as default page.</p> <p>Acceptance criteria:</p> <ol style="list-style-type: none">1. Users should be able to see a form to add a new student and his/her grade.2. Users should be able to see the list of all students with grades.3. It must have Name & Grade fields along with an Add Student button.4. List should have an Edit and Delete button to edit and delete a student respectively. |

4 VALIDATIONS

- All required fields must be fulfilled with valid data.
- In the starting "Add Student" button should be disabled.
- Only after validating fields, "Add Student" button should be enabled.
- Once we click on "Add Student", a new student must be added to the list.

5 CONSTRAINTS

- You should be able to press the "TAB" key and "SHIFT + TAB" to navigate from top field to bottom field and vice-versa.
- On clicking the "Add Student" button, a new student must be added with entered fields.
- "Add Student" button will be disabled until all validations are fulfilled.

6 MANDATORY ASSESSMENT GUIDELINES

1. All actions like build, compile, running application, running test cases will be through Command Terminal.
2. To open the command terminal the test takers, need to go to Application menu (Three horizontal lines at left top) -> Terminal ->New Terminal.
3. This editor Auto Saves the code.
4. If you want to exit(logout) and continue the coding later anytime (using Save & Exit option on Assessment Landing Page) then you need to use CTRL+Shift+B-command compulsorily on code IDE. This will push or save the updated contents in the internal git/repository. Else the code will not be available in the next login.
5. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
6. To test any Restful application, the last option on the left panel of IDE, you can find ThunderClient, which is the lightweight equivalent of POSTMAN.
7. This is a web-based application, to run the application on a browser, use the internal browser in the workspace. Click on the second last option on the left panel of IDE, you can find Browser Preview, where you can launch the application.

Note: The application will not run in the local browser

8. You can follow series of command to setup React environment once you are in your project-name folder:
 - a. npm install -> Will install all dependencies -> takes 10 to 15 min
 - b. npm run start -> To compile and deploy the project in browser. You can press <Ctrl> key while clicking on localhost:8080/8081 to open project in browser -> takes 2 to 3 min
 - c. npm run json-start -> As we are using a json server to mimic our db.json file as a database. So, this command is useful to start a json server.
 - a. npm run jest -> to run all test cases and see the summary. It takes 5 to 6 min to run.

- d. `npm run test` -> to run all test cases. **It is mandatory to run this command before submission of workspace** -> takes 5 to 6 min
9. You may also run “`npm run jest`” while developing the solution to re-factor the code to pass the test-cases.
10. Once you are done with development and ready with submission, you may navigate to the previous tab and submit the workspace. It is mandatory to click on **“Submit Assessment”** after you are done with code.
11. You need to use `CTRL+Shift+B` - command compulsorily on code IDE, before final submission as well. This will push or save the updated contents in the internal git/repository, and will be used to evaluate the code quality.