Flipr Hackathon X

Full Stack Web Development Task

Theme: Online Classroom

General Instructions :

1. From the use case feature list point 1 and 2 are compulsory. Implementation of all the features is not mandatory. However, each properly working feature will fetch some points.
2. All candidates are expected to submit the code on or **before 10:00 PM, 31st August 2021**.
3. Upload the code in any version control like Git, Bitbucket, etc (do not mention flipr in the repo name or inside the code. This is to avoid code duplicacy.)
4. Please provide GitHub, GitLab, or bitbucket repo URL for your assignment.
5. Add the instructions in your readme.md file to build and run the app.
6. Share all the files and links in this google form also make sure to make these files publicly available, any file that fails to open due to not being shared via a public link will not be considered as part of submission - Link to Form
7. You can refer to the Internet and Books but whatever you code you must understand because if you are going to be shortlisted for an interview then you must be able to explain to the company officials about your code.
8. For any queries regarding the project, you can mail at devops@flipr.ai

Problem Statement

Use Case:

You are expected to build a web application where teachers can take online classes for the students. You can take reference from google classroom. The reference link is given below:

Reference Link :- https://classroom.google.com/

Your application is expected to have certain features which are listed down below:

1. **Login and signup via (at least one, implement both for brownie points)***
    a. Username - password
    b. Gmail Sync (Login with Gmail option)
2. **Home Page showing the list of all the subjects of the logged in student.***
3. **Dashboard which shows all the assignments, upcoming tests and calendar schedule.** (further explained below)
4. **Assignment Page** (Showing the list of assignments done till now as well as the assignments to be done)
5. **Test Page** (Showing the list of past test results as well as upcoming tests)
6. **Calendar** (Showing the timetable for online lecture also giving the link to join the upcoming lectures)
7. **Video Conferencing Feature for attending online classes**

*Compulsory Features

Note :

- **There should be 2 types of user logins:**
    - **As the teacher**
        - This user has the right to create classes,upload the assignments, tests and can also share the link to join video lectures. He can also review the assignment and tests and give the marks on the platform itself. This user will be kind of an administrator.
    - **As a student**
        - This user will have the right to perform the assignments, attend the tests and join the lectures. He will also be able to see the timetable and test results as mentioned above.

- **The subject name should be there on the dashboard. The student will be able to select the subject by clicking on the subject name in the dashboard.**

Deployment :

1) Upload the code on any version control like github, gitlab, bitbucket
2) Deploy the frontend and backend code on any cloud platform like AWS, Microsoft Azure, Google Cloud, Heroku or any other platform.
3) For databases,you can use anything. However, we'll prefer the use of **free tier sandbox on MongoDB Atlas**.

*Compulsory Features