System Design Document

Promedio

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CRC Cards

FRONTEND

Class Name: App Page

Parent Class (If Any):

Sub Class (If Any): All pages (Home, Login, Signup, Welcome)

Responsibilities / Collaborators:

- Is the main entry point for the router of the app

- Controls the logged in state (whether the user in logged in)
- Navigates to home page if logged in, welcome page if not

Class Name: Home page

Parent Class (If Any): App Page

Sub Class (If Any):

Responsibilities / Collaborators:

- Main entry point for logged in users

- All main features will go here or be routed from here

Class Name: Login Page

Parent Class (If Any): App Page

Sub Class (If Any):

Responsibilities / Collaborators:

- This is the page where a user can input their email and password into the form and login
- Makes a request to the backend
- Controls form input
- Tells its parent component if a login was successful or not, and the user is navigated based on that.

Class Name: Signup Page

Parent Class (If Any): App Page

Sub Class (If Any):

Responsibilities / Collaborators:

- A user can input their name, gpa, email, password and create an account
- Makes a request to the backend
- Controls form input for these fields
- Tells parent component if the signup was successful or not, and the user is navigated based on that.

Class Name: Welcome

Parent Class (If Any): App page

Sub Class (If Any):

Responsibilities / Collaborators:

- This is the main landing page for our application when a user is logged out
- It contains imagery, quick links to login or signup, and eventually relevant copy.
- It is meant to be a brief showcase of our app.

BACKEND

Class Name: UserController

Parent Class (If Any): N/A

Sub Class (If Any): CalculatorController, AuthController, UpdateController

Responsibilities: Main controller for our application that controls other controllers such as CalculatorController, AuthController, UpdateController. Will determine what type of response to send back to a user upon request.

Collaborators: Preyansh Dutta, Gabriel Vainer

Class Name: CalculatorController

Parent Class (If Any): UserController

Sub Class (If Any): N/A

Responsibilities: Responsible for calculating and sending back the responses of the key computations

such as cGPA, major GPA, grade required for X grade, and semester GPA.

Collaborators: Preyansh Dutta, Gabriel Vainer

Class Name: AuthController

Parent Class (If Any): UserController

Sub Class (If Any): N/A

Responsibilities: Responsible for encrypting the password and controlling the login and register for the user. Generates a JWT token to make sure the server knows the user is logged in and expires in a reasonable amount of time. Sends the correct responses i.e. errors and success codes to frontend.

Collaborators: Prevansh Dutta, Gabriel Vainer

Class Name: Semester Model

Parent Class (If Any): N/A

Sub Class (If Any): N/A

Responsibilities: Defines the Models & Schemas for Courses and Semesters. Incorporates some request handling for GET & POST, to be separated and extended into a new controller class in the future (i.e. SemesterController which may also include PUT, PATCH & DELETE request handling).

Collaborators: Alejandro Iglesias Llobet

Class Name: User Model

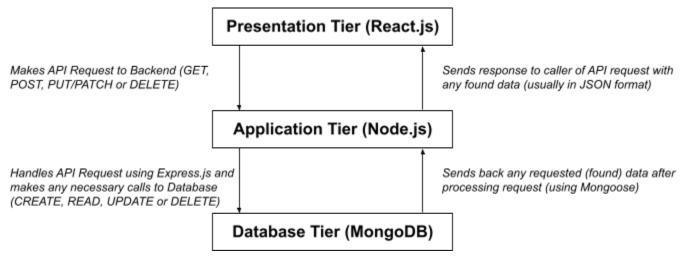
Parent Class (If Any): N/A

Sub Class (If Any): N/A

Responsibilities: Defines the Model & Schema for Users. Handling already incorporated in User

Controller (open for further extension). **Collaborators:** Alejandro Iglesias Llobet

System Architecture Diagram



Collaborators: Alejandro Iglesias Llobet