

Code Inspection Checklist

1.Java & Typescript

General Review

Checklist

Reviewer: Jozua Villegas

Reviewed Files: FileDropzone.tsx, ProtectedRoute.tsx, useAuth.tsx

1. Variable Declaration

- ☒ Are variable names informative
 - Yes, variable names are informative.
- ☒ Are variable names unique (not confusing or similar)?
 - Yes, they are unique and distinct.
- ☒ Are variable names following chosen capitalization conventions (camel case)?
 - Yes, the variable names follow camel case.
- ☒ Are variables properly initialized?
 - Yes, the variables are properly initialized.
- ☒ Are variables labelled as private or public based on their use?
 - No, there is no use of private or public.
- ☒ Is every declared variable used?
 - Yes, every declared variable is in use.
- ☒ Is there excessive use of unnecessary temporary variables?
 - No, the use of variables is appropriate for the purpose of the code.

2. Methods and method signatures including return and input types

- ☒ Do method names reflect method functionalities?
 - Yes, the method names are descriptive.

- ☒ Do method expected return values match the intended use of the return value?
 - Yes, all return values are as expected.
- ☒ Do methods have safeguards for problematic/unexpected input?
 - No, there is not sufficient error-handling and error feedback.
- ☒ Is there a high cohesion between the methods within the same class?
 - Yes, there is an appropriate amount of cohesion within this class.

3. Class definitions and grouping into packages (Java)

- ☒ Do object classes reflect the required elements of the program?
 - Yes, the classes represent the corresponding functionalities.
- ☒ Are classes placed in the appropriate packages reflecting the nature of their use?
 - Yes, the hierarchy is properly organized.
- ☒ Are classes in different packages loosely coupled?
 - Yes, they are loosely coupled.

4. Control flow Defects

- ☒ Are Switch cases used instead of if/else blocks when appropriate?
 - N/A
- ☒ Are While loops successfully terminated to avoid infinite loops?
 - N/A
- ☒ Are control flows used efficiently in the handling of erroneous input?
 - N/A

- ☒ Are loop variables declared properly so that their scopes are only as big as necessary?
 - N/A
 - ☒ Are there checks for edge cases (out of bounds) for For loops?
 - N/A
 - ☒ Are there else blocks used for every if condition to ensure no case goes unhandled?
 - Yes, every if condition is paired with a corresponding else block to handle every case.
5. Code style & practices
- ☒ Is code consistently indented, spaced, and formatted?
 - Yes
 - ☒ Code is well documented using inline comments and docstrings.
 - Yes, there are inline comments and docstrings. Could be more detailed.
 - ☒ Are Expensive operations minimized (shallow object copies replacing deep ones if possible)
 - N/A
 - ☒ Are generics used where possible to improve code readability & reduce complexity?
 - Yes, generics are used when possible.

Typescript Review Checklist

- ☒ Are type annotations and inference used?
 - Yes
- ☒ Are strict Null checks in place?
 - No

Use type inference, type annotation, and generics.

Rollbar Review Checklist

- ☒ Is Rollbar being used consistently?
 - No, there is only one instance of rollbar being used in these files.

2. Front End (TS & ReactJS)

- ☒ Is the single responsibility principle applied to react components?
 - Yes
- ☒ Are container components used strictly for managing state and business logic?
 - N/A
- ☒ Are presentational components used for UI rendering and logic strictly?
 - Yes
- ☒ Are related components, styles, and assets grouped within same directory?
 - Yes
- ☒ Are functional components used instead of class components if possible?
 - Yes
- ☒ Are React hooks used to manage & control state & effects in functional components?
 - Yes, React hooks are present.
- ☒ Are hooks called at the top level of functional components?
 - Yes
- ☒ Are unnecessary re-renders avoided?
 - Yes
- ☒ Are local component states prioritized for UI-specific state matters?
 - N/A

General Additional Notes: