Code Inspection Checklist

1. Java & Typescript

General Review

Checklist

Reviewer: Juan Arguello Reviewed File: Api.ts

- 1. Variable Declaration
- Are variable names informative
 - Yes
- Are variable names unique (not confusing or similar)?
 - Yes
- Are variable names following chosen capitalization conventions (camel case)?
 - Yes
- Are variables properly initialized?
 - Yes
- Are variables labelled as private or public based on their use?
 - NA
- Is every declared variable used?
 - Yes
- Is there excessive use of unnecessary temporary variables?
 - No
- 2. Methods and method signatures including return and input types
- Do method names reflect method functionalities?
 - Yes
- Do method expected return values match the intended use of the return value?
 - Yes
- Do methods have safeguards for problematic/unexpected input?

- Yes (consistent use of try-catch blocks)
- Is there a high cohesion between the methods within the same class?
 - NA
- 3. Class definitions and grouping into packages (Java)
- Do object classes reflect the required elements of the program?
 - NA
- Are classes placed in the appropriate packages reflecting the nature of their use?
 - NA
- Are classes in different packages loosely coupled?
 - NA
- 4. Control flow Defects
- Are Switch cases used instead of if/else blocks when appropriate?
 - NA
- Are While loops successfully terminated to avoid infinite loops?
 - NA
- Are control flows used efficiently in the handling of erroneous input?
 - Yes

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

Typescript Review Checklist

- Are type annotations and inference used?
 - NA
- Are strict Null checks in place?
 - NA

Use type inference, type annotation, and generics.

Rollbar Review Checklist

- Is Rollbar being used consistently?
 - o NA

2. Front End (TS & ReactJS)

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

General Additional Notes:

Api.ts:

File handles all possible errors in a correct way.