Code Inspection Checklist

1. Java & Typescript

General Review

Checklist

Reviewer: Kamal Zrein
Reviewed File:useIsUserLoggedIn.ts, useLogout.ts, HelpPopup.tsx , useSignup.ts, useDeleteFile.ts, usePredictFiles.ts

1. Variable Declaration

- ☑ Are variable names informative
  - Yes
- ☑ Are variable names unique (not confusing or similar)?
  - Most times
- ☑ Are variable names following chosen capitalization conventions (camel case)?
  - HelpPopup.tsx title doesn't.
- ☑ Are variables properly initialized?
  - Yes
- ☑ Are variables labelled as private or public based on their use?
  - N/A
- ☑ 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
- ☑ Is there a high cohesion between the methods within the same class?

- Yes

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?
  - Yes
- ☑ 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?
  - Yes
- ☑ Are there checks for edge cases (out of bounds) for For loops?
  - Yes
- ☑ Are there else blocks used for every if condition to ensure no case goes unhandled?
  - Yes, there only one missing one in the help popup (its an else if)

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.
  - yes
- ☑ Are Expensive operations minimized (shallow object copies replacing deep ones if possible)
  - NA
- ☑ Are generics used where possible to improve code readability & reduce complexity?
  - Yes

Typescript Review Checklist

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

Rollbar Review Checklist

- ☑ Is Rollbar being used consistently?
    - Yes

2. Front End (TS & ReactJS)

- ☑ 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?
    - NA
- ☑ Are unnecessary re-renders avoided?
    - NA
- ☑ Are local component states prioritized for UI-specific state matters?
    - NA

General Additional Notes:

useIsUserLoggedIn.ts - UseGetUploadedFiles.ts:

Both files are short however, they do manage errors correctly and follow our coding conventions.