Book Reading & Review Tracking App

A mobile application helps users track their reading progress and share reviews. Book enthusiasts can log their reading activities, while book club organizers can create and manage book discussions.

On the server side, at least the following details are maintained:

- **Id** - The internal book ID. Integer value greater than zero.
- **Title** - A string representing the book title.
- **Author** - A string representing the book's author.
- **Genre** - A string representing the book genre (e.g., "fiction," "non-fiction," "mystery").
- **Status** - A string representing the reading status (e.g., "not started," "reading," "completed").
- **ReviewCount** - An integer representing the number of reviews for the book.
- **AvgRating** - A floating-point value representing the book's average rating (out of 5).

Application Features (Available Without Restarting the App)

Book Club Organizer Section (Separate Activity/Screen)

A. **(1p)** Add a new book to the system using POST /book, specifying all book details. Available both online and offline.

B. **(2p)** View all books in the system in a list using GET /books. The list should display at least **id, title, author, and genre**. If offline, an error message and retry option should be provided. Once retrieved, the data should be available regardless of network status or restarts.

C. **(1p)** Select a book from the list to view all details. Use GET /book with the book ID. Once retrieved, data should persist on the device even after restarts or when offline.

D. **(1p)** Update book details using PUT /book with all details. Available only online.

Reader Section (Separate Activity/Screen) - Available Online Only

A. **(1p)** View all books marked as "reading" using GET /allBooks. The list should display **title, author, status, and review count**. Note that the filter operation will be performed on the client.

Analytics Section (Separate Activity/Screen) - Available Online Only

A. **(1p)** Using again GET /allBooks generate a **top 5 highest-rated books**, sorted **by rating (descending) and review count (descending)**.

Additional Features

- **(1p)** When a new book is added, the server sends a **WebSocket notification** to all connected clients with the book details. The app displays the title, author, and the status using a toast, snackbar, or dialog.
- **(0.5p)** A progress indicator appears on all server or DB operations.
- **(0.5p)** All server or DB errors are displayed using a toast or snackbar, and a log message is recorded.