Fitness & Workout Tracking App

A fitness-focused mobile application helps users track their workout routines and progress. Personal trainers can create and assign workout plans, while users can log their exercises and monitor progress. On the server side, at least the following details are maintained:

- **Id** - The internal workout ID. Integer value greater than zero.
- **Name** - A string representing the name of the workout.
- **Trainer** - A string representing the trainer's name.
- **Description** - A string containing workout details (e.g., duration, exercises, etc.).
- **Status** - A string representing the workout status. E.g., "planned," "in progress," "completed."
- **Participants** - An integer representing the number of users following the workout.
- **Type** - The workout type (e.g., "strength training," "cardio," "yoga").
- **Duration** - An integer representing the estimated duration in minutes.

Application Features (Available Without Restarting the App)

Trainer Section (Separate Activity/Screen)

A. **(1p)** Create a new workout plan using `POST /workout` by specifying all workout details. Available both online and offline.

B. **(2p)** View all workout plans in a list using `GET /workouts`. The list should display at least the **id, name, trainer, and type**. 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 workout from the list to view all details. Use `GET /workout` with the workout ID. Once retrieved, data should persist on the device even after restarts or when offline.

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

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

A. **(1p)** View all available workouts currently "in progress" using `GET /allWorkouts`. The list should display **name, duration, status, and participants**. Note that the filter operation will be performed on the client.

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

A. **(1p)** Using again `GET /allWorkouts` generate the **top 5 most followed workouts**, sorted **by status (ascending) and number of participants (descending)**.

Additional Features

- **(1p)** When a new workout is added, the server sends a **WebSocket notification** to all connected clients with the workout details. The app displays the name, trainer, and description 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.