Android application development in Kotlin

Fitness Training App - BuffBuddy

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Introduction:

Project Overview:
The Fitness Training App is designed to help users create and manage their fitness routines.
The app allows users to search for exercises, create custom workouts, and track their progress.
The app uses the MVVM architecture and integrates with a backend API to fetch exercise data.

Implementation:

- **Technologies Used**: Kotlin, Android SDK, Retrofit, Room, LiveData, Flow, ViewModel
- **Architecture**: Model-View-ViewModel (MVVM)
- **Features**:
  - Exercise Search: Users can search for exercises based on various filters like body part, equipment, and target muscle.
  - Exercise Creation: Users can create new exercises and add them to the app.
  - Workout Creation: Users can create custom workouts by selecting exercises.
  - Workout Management: Users can edit, delete, and view details of their workouts.
  - Calendar Integration: A weekly calendar view to track workout schedules.
  - Workout Alarms/Reminders: Users can set alarms or reminders for their workouts to stay on track with their fitness routine.

Conclusions:

- **Achieved Goals**: Successfully implemented the core functionalities of searching for exercises, creating and managing workouts, and integrating a calendar view.
- **Results**: The app provides a seamless user experience with a clean and intuitive interface. All major functionalities were tested and verified.

Discussion:

- **Future Development**:
  - Integration with wearable devices for real-time tracking.
  - Addition of social features to share workouts with friends.
  - Enhanced analytics for better workout insights.