

Android Development Assessment with Biometric Authentication

Objective

Develop any 1 out of 2 or can both Android applications in Java that demonstrate API integration, biometric authentication, secure token handling, and user-friendly interfaces.

Task 1: API Integration with Transactions

1. Requirements:

- Authenticate using POST <https://api.prepstripe.com/login>.
- Fetch and display transactions from GET <https://api.prepstripe.com/transactions>.
- Implement Biometric Authentication for secure access on subsequent launches.
- Use EncryptedSharedPreferences for secure token storage.
- Provide a logout option to clear the token and return to the login screen.

2. Bonus: (Not mandatory)

- Add Dark Mode, Offline Mode (using Room Database), and Search/Filter functionality.

Task 2: Real-Time Prices Tracker

1. Requirements:

- Authenticate using POST <https://api.prepstripe.com/login>.
- Fetch and display prices from GET <https://api.prepstripe.com/prices>.
- Implement Biometric Authentication for secure access on subsequent launches.
- Display real-time price changes in a RecyclerView.
- Add Firebase Cloud Messaging (FCM) to send price change notifications.
- Use MPAndroidChart for data visualization of price trends.
- Provide a logout option to clear the token and return to the login screen.

2. Bonus: (Not mandatory)

- Add Dark Mode, Offline Mode (using Room Database), and Search/Filter functionality.

Submission Guidelines

Deliverables

1. GitHub Repository:

- Create two separate repositories for each task:
 - task1-api-transactions

- task2-prices-tracker
- Each repository should include:
 - README.md with:
 - Project Overview.
 - Setup Instructions.
 - APK build instructions.
 - Bonus features implemented (if any).
 - Source Code:
 - Ensure proper project structure and modularity.
 - A release-ready APK file uploaded in the Releases section.

2. Submission:

- Share the GitHub repository links for both tasks.

Timeline

- Deadline: 2-3 Days

Credentials for Login

- **Username:** admin
- **Password:** A7ge#hu&dt(wer

Evaluation Criteria

1. Functionality:

- API integration, biometric authentication, secure token handling, and proper data display.

2. Code Quality:

- Modularity, readability, and adherence to best practices.

3. Security:

- Token storage using EncryptedSharedPreferences.
- Biometric implementation using BiometricPrompt API.