

Assignment: Biometric Authentication Flow in Flutter

Objective:

Build a Flutter app that demonstrates biometric authentication using **Flutter packages** with BLoC pattern. The app should support both **Face ID Android(Compulsory) and (iOS)(Optional)** and **Fingerprint (Android & iOS)** authentication methods and navigate to a **Dashboard screen** upon successful authentication.

Please do the assignment by Monday(14th-July)

The assignment is given to understand how the developer implements functionality with **quality and clarity**. The focus is on:

- **Code structure**
- **Architecture decisions**
- **Error handling**
- **Best practices**

Requirements:

1. UI Design: Authentication Screen

Create a visually appealing authentication screen with:

- **Title:** "Secure Login"
- **Two buttons:**
 - **Unlock with Face ID**
 - **Unlock with Biometric Fingerprint**
- Use icons (**Icons.face**, **Icons.fingerprint**) appropriately
- Ensure UI is responsive and styled for both Android and iOS

2. Biometric Authentication Logic

Use **Flutter package** available or any updated alternative to:

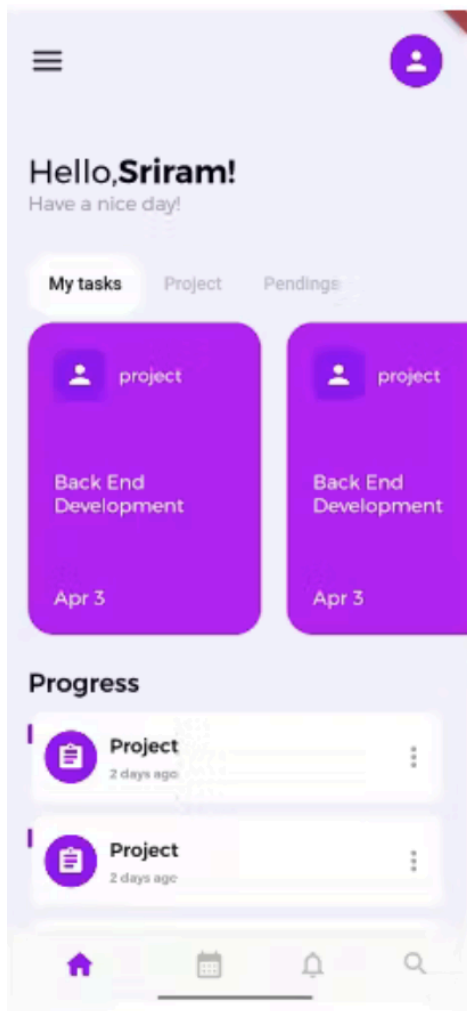
- Check device support for biometric authentication
- Handle Face ID on iOS and Fingerprint on supported platforms
- Show appropriate error or fallback messages if not supported continue as guest

3.Flutter BLoC Implementation

- Define Events: `FaceIdRequested`, `FingerprintRequested` or other
- Define States: `AuthInitial`, `AuthLoading`, `AuthSuccess`, `AuthFailure` or other
- Implement full BLoC pattern with separation of concerns

4. Navigation

- After successful authentication, navigate to a `DashboardScreen` that simply shows:



5. Project Structure

Follow a modular architecture:

css

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lib/

├─ blocs/

```
|— screens/  
|— widgets/  
|— services/  
|— main.dart
```

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6. Extra Credit (Optional)

- Use animations for button taps and transitions
- Reusability of components
- The Assignment Submission time will be considered
- The Design should be Responsive and supported for mobile and tablets

✓ Evaluation Criteria:

- Correct use of BLoC
 - Clean and scalable Flutter architecture
 - Code readability and best practices
 - Platform compatibility (FaceID on iOS, fingerprint on Android)
 - UI/UX design quality
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