2025

Internship Week – 4, 5, 6

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DHC – 679
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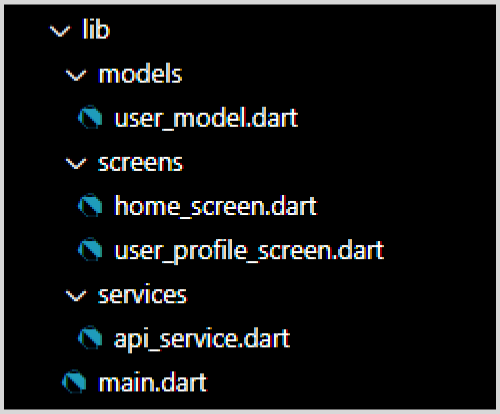
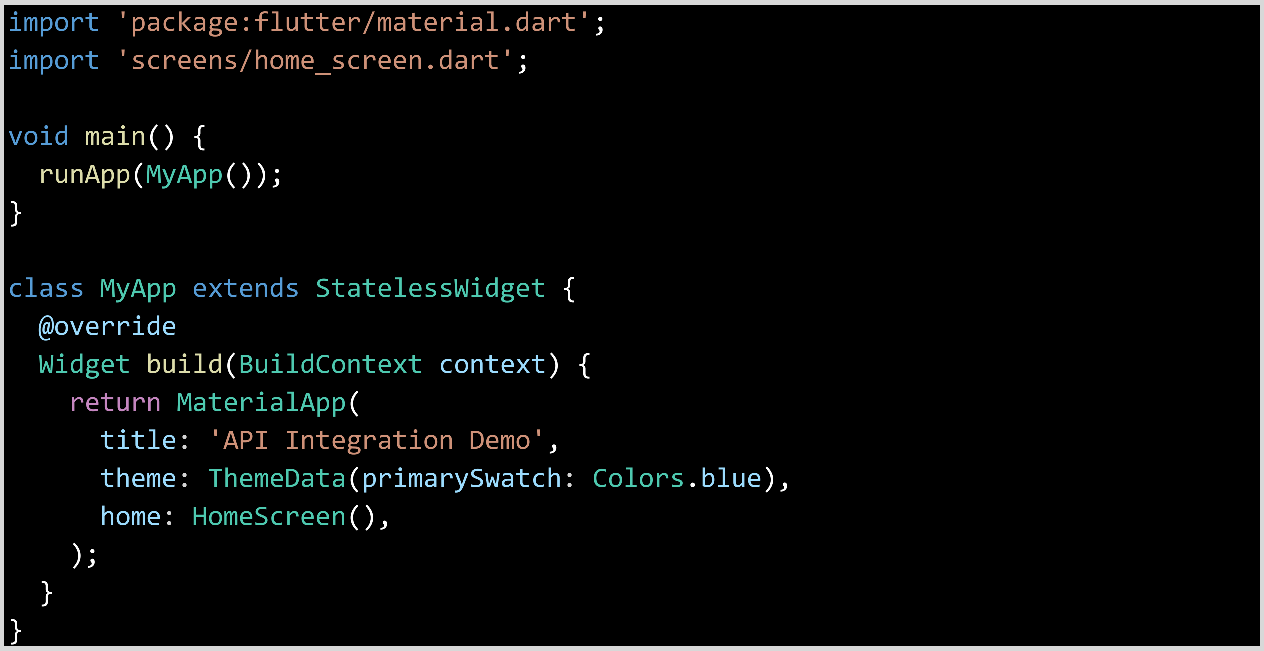
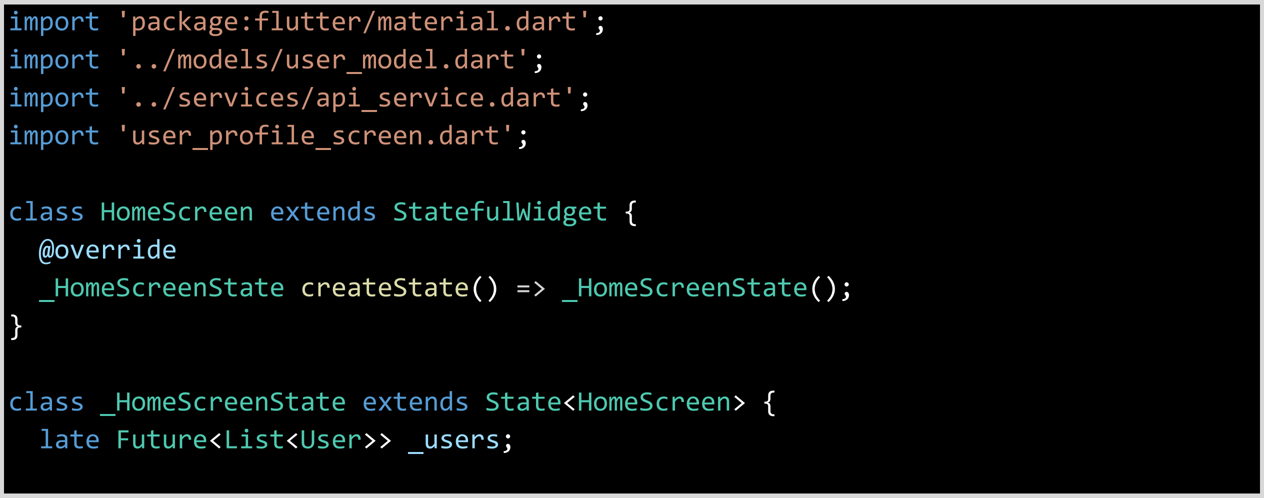
Week 4


```
lib
  models
    user_model.dart
  screens
    home_screen.dart
    user_profile_screen.dart
  services
    api_service.dart
  main.dart
```


```dart
import 'package:flutter/material.dart';
import 'screens/home_screen.dart';

void main() {
  runApp(MyApp());
}

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'API Integration Demo',
      theme: ThemeData(primarySwatch: Colors.blue),
      home: HomeScreen(),
    );
  }
}
```

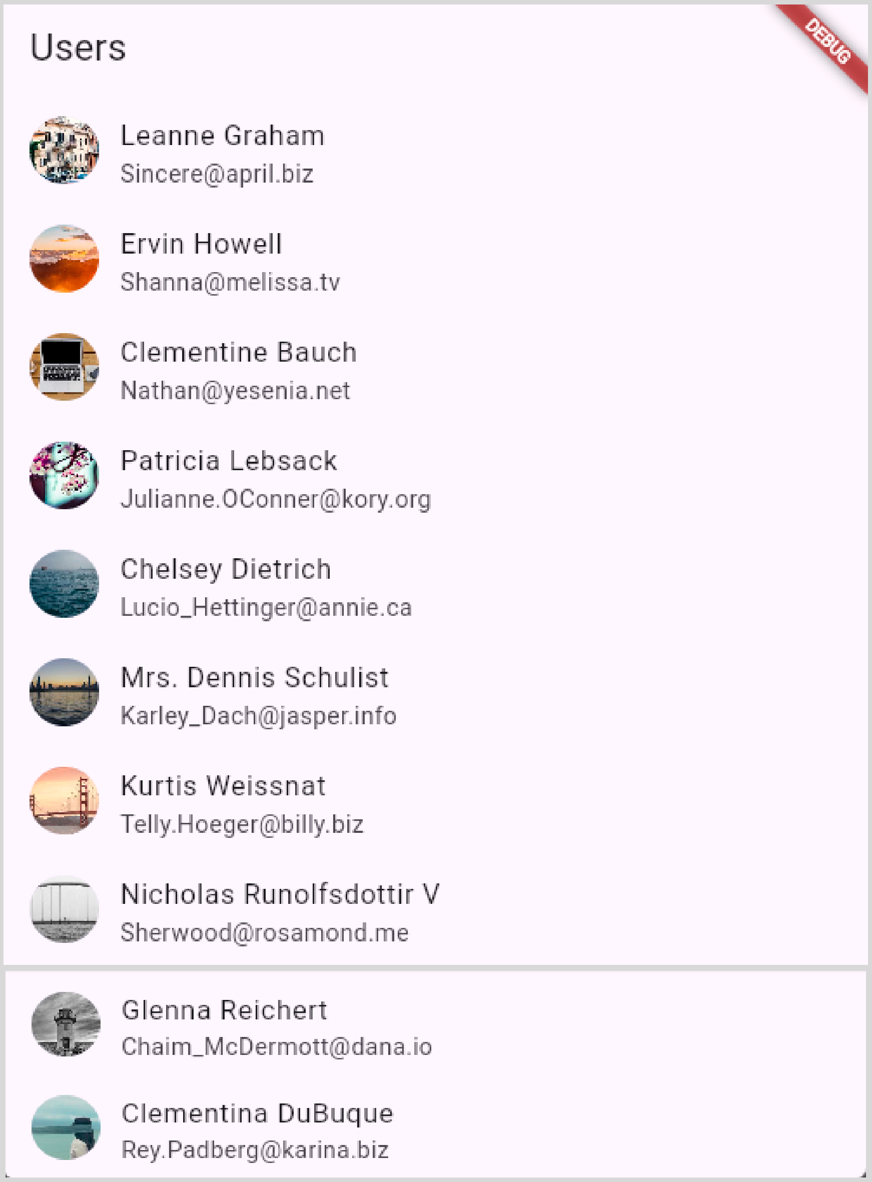

```dart
import 'package:flutter/material.dart';
import '../models/user_model.dart';
import '../services/api_service.dart';
import 'user_profile_screen.dart';

class HomeScreen extends StatefulWidget {
  @override
  _HomeScreenState createState() => _HomeScreenState();
}

class _HomeScreenState extends State<HomeScreen> {
  late Future<List<User>> _users;
  @override
  void initState() {
    super.initState();
    _users = ApiService.fetchUsers();
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text("Users")),
      body: FutureBuilder<List<User>>(
        future: _users,
        builder: (context, snapshot) {
          if (snapshot.connectionState == ConnectionState.waiting) {
            return Center(child: CircularProgressIndicator());
          } else if (snapshot.hasError) {
            return Center(child: Text("Error: ${snapshot.error}"));
          } else if (!snapshot.hasData || snapshot.data!.isEmpty) {
            return Center(child: Text("No users found"));
          }

          return ListView.builder(
            itemCount: snapshot.data!.length,
            itemBuilder: (context, index) {
              final user = snapshot.data![index];
              return ListTile(
                leading: CircleAvatar(backgroundImage:
NetworkImage(user.avatar)),
                title: Text(user.name),
                subtitle: Text(user.email),
                onTap: () => Navigator.push(
                  context,
                  MaterialPageRoute(builder: (_) => UserProfileScreen(user:
user)),
                ),
              );
            },
          );
        },
      ),
    );
  }
}
import 'package:flutter/material.dart';
import '../models/user_model.dart';
```

```dart

class UserProfileScreen extends StatelessWidget {
  final User user;

  UserProfileScreen({required this.user});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text(user.name)),
      body: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          children: [
            CircleAvatar(radius: 50, backgroundImage: NetworkImage(user.avatar)),
            SizedBox(height: 16),
            Text(user.name, style: TextStyle(fontSize: 24)),
            SizedBox(height: 8),
            Text(user.email, style: TextStyle(color: Colors.grey[600])),
          ],
        ),
      ),
    );
  }
}
```

```dart
import 'package:flutter/material.dart';
import '../models/user_model.dart';

class UserProfileScreen extends StatelessWidget {
  final User user;

  UserProfileScreen({required this.user});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text(user.name)),
      body: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(
          children: [
            CircleAvatar(radius: 50, backgroundImage: NetworkImage(user.avatar)),
            SizedBox(height: 16),
            Text(user.name, style: TextStyle(fontSize: 24)),
            SizedBox(height: 8),
            Text(user.email, style: TextStyle(color: Colors.grey[600])),
          ],
        ),
      ),
    );
  }
}
```

```dart
import 'dart:convert';
import 'package:http/http.dart' as http;
import '../models/user_model.dart';

class ApiService {
  static const String url = 'https://jsonplaceholder.typicode.com/users';

  static Future<List<User>> fetchUsers() async {
    final response = await http.get(Uri.parse(url));

    if (response.statusCode == 200) {
      List jsonData = json.decode(response.body);
      return jsonData.map((user) => User.fromJson(user)).toList();
    } else {
      throw Exception('Failed to load users');
    }
  }
}
```

```yaml
name: week5
description: "A new Flutter project."
# The following line prevents the package from being accidentally published to
# pub.dev using `flutter pub publish`. This is preferred for private packages.
publish_to: 'none' # Remove this line if you wish to publish to pub.dev

# The following defines the version and build number for your application.
# A version number is three numbers separated by dots, like 1.2.43
# followed by an optional build number separated by a +.
# Both the version and the builder number may be overridden in flutter
# build by specifying --build-name and --build-number, respectively.
# In Android, build-name is used as versionName while build-number used as
versionCode.
# Read more about Android versioning at
https://developer.android.com/studio/publish/versioning
# In iOS, build-name is used as CFBundleShortVersionString while build-number is
used as CFBundleVersion.
# Read more about iOS versioning at
#
https://developer.apple.com/library/archive/documentation/General/Reference/InfoP
listKeyReference/Articles/CoreFoundationKeys.html
# In Windows, build-name is used as the major, minor, and patch parts
# of the product and file versions while build-number is used as the build
suffix.
version: 1.0.0+1

environment:
  sdk: ^3.7.2

# Dependencies specify other packages that your package needs in order to work.
# To automatically upgrade your package dependencies to the latest versions
# consider running `flutter pub upgrade --major-versions`. Alternatively,
# dependencies can be manually updated by changing the version numbers below to
# the latest version available on pub.dev. To see which dependencies have newer
# versions available, run `flutter pub outdated`.
dependencies:
  flutter:
    sdk: flutter

  # The following adds the Cupertino Icons font to your application.
  # Use with the CupertinoIcons class for iOS style icons.
  cupertino_icons: ^1.0.8
  firebase_core: ^3.15.1
  firebase_auth: ^5.6.2
  cloud_firestore: ^5.6.11
  firebase_app_check: ^0.3.2+9
  firebase_crashlytics: ^4.3.9

dev_dependencies:
  flutter_test:
    sdk: flutter

  # The "flutter_lints" package below contains a set of recommended lints to
  # encourage good coding practices. The lint set provided by the package is
  # activated in the `analysis_options.yaml` file located at the root of your
  # package. See that file for information about deactivating specific lint
  # rules and activating additional ones.
  flutter_lints: ^5.0.0

# For information on the generic Dart part of this file, see the
# following page: https://dart.dev/tools/pub/pubspec

# The following section is specific to Flutter packages.
flutter:

  # The following line ensures that the Material Icons font is
  # included with your application, so that you can use the icons in
  # the material Icons class.
  uses-material-design: true

  # To add assets to your application, add an assets section, like this:
  # assets:
  #   - images/a_dot_burr.jpeg
  #   - images/a_dot_ham.jpeg

  # An image asset can refer to one or more resolution-specific "variants", see
  # https://flutter.dev/to/resolution-aware-images

  # For details regarding adding assets from package dependencies, see
  # https://flutter.dev/to/asset-from-package

  # To add custom fonts to your application, add a fonts section here,
  # in this "flutter" section. Each entry in this list should have a
  # "family" key with the font family name, and a "fonts" key with a
  # list giving the asset and other descriptors for the font. For
  # example:
  # fonts:
  #   - family: Schyler
  #     fonts:
  #       - asset: fonts/Schyler-Regular.ttf
  #       - asset: fonts/Schyler-Italic.ttf
  #         style: italic
  #   - family: Trajan Pro
  #     fonts:
  #       - asset: fonts/TrajanPro.ttf
  #       - asset: fonts/TrajanPro_Bold.ttf
  #         weight: 700
  #
  # For details regarding fonts from package dependencies,
  # see https://flutter.dev/to/font-from-package
```



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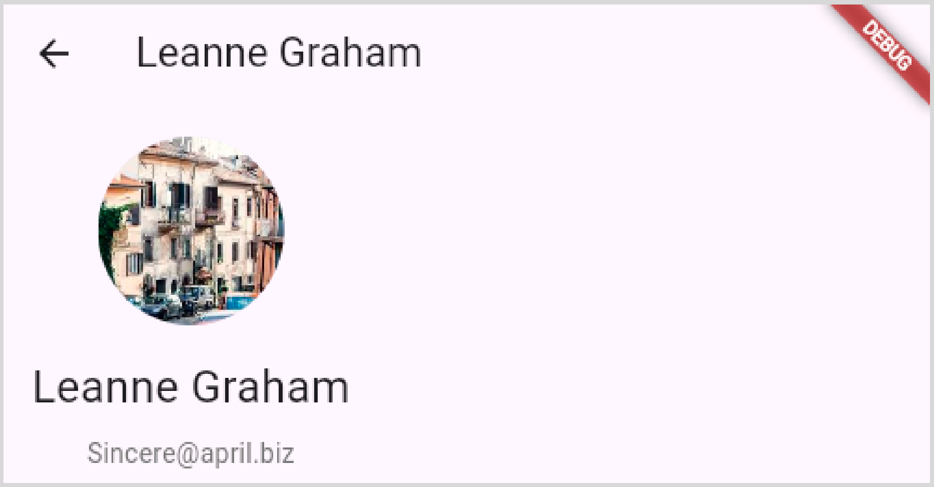

Leanne Graham

Leanne Graham

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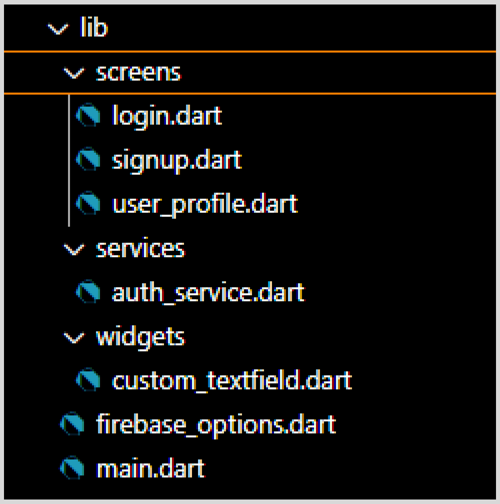
Week 5



```
lib
  screens
    login.dart
    signup.dart
    user_profile.dart
  services
    auth_service.dart
  widgets
    custom_textfield.dart
  firebase_options.dart
  main.dart
```

```
import 'package:firebase_core/firebase_core.dart';
import 'package:flutter/material.dart';
import 'firebase_options.dart';
import 'screens/login.dart';

void main() async {
  WidgetsFlutterBinding.ensureInitialized();
  await Firebase.initializeApp(options: DefaultFirebaseOptions.currentPlatform);
  runApp(MyApp());
}

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
```

```dart
      title: 'Week 5 - Firebase Auth',
      theme: ThemeData(primarySwatch: Colors.deepPurple),
      home: LoginScreen(),
      debugShowCheckedModeBanner: false,
    );
  }
}
```

```dart
import 'package:flutter/material.dart';
import 'package:week5/widgets/custom_textfield.dart';
import 'package:firebase_auth/firebase_auth.dart';
import 'package:cloud_firestore/cloud_firestore.dart';

class SignupScreen extends StatefulWidget {
  @override
  _SignupScreenState createState() => _SignupScreenState();
}

class _SignupScreenState extends State<SignupScreen> {
  final emailController = TextEditingController();
  final passwordController = TextEditingController();
  final nameController = TextEditingController();

  bool isLoading = false;

  void signupUser() async {
    setState(() {
      isLoading = true;
    });

    try {
      if (emailController.text.isEmpty ||
          passwordController.text.isEmpty ||
          nameController.text.isEmpty) {
        ScaffoldMessenger.of(context).showSnackBar(
          SnackBar(content: Text("Please fill all fields")),
        );
        return;
      }

      // Firebase Auth - Signup
      UserCredential userCredential = await FirebaseAuth.instance
          .createUserWithEmailAndPassword(
        email: emailController.text.trim(),
        password: passwordController.text.trim(),
      );

      // Firestore - Save user info
      await FirebaseFirestore.instance
          .collection('users')
          .doc(userCredential.user!.uid)
          .set({
        'name': nameController.text.trim(),
        'email': emailController.text.trim(),
        'uid': userCredential.user!.uid,
        'createdAt': Timestamp.now(),
      });

      ScaffoldMessenger.of(context).showSnackBar(
        SnackBar(content: Text("Signup successful!")),
      );

      Navigator.pop(context); // Go back to login screen

    } on FirebaseAuthException catch (e) {
      String message = "Signup failed.";
      if (e.code == 'email-already-in-use') {
        message = "Email already in use.";
      } else if (e.code == 'weak-password') {
        message = "Password should be at least 6 characters.";
      }

      ScaffoldMessenger.of(context).showSnackBar(
        SnackBar(content: Text(message)),
      );
    } catch (e) {
      print("Signup Error: $e");
      ScaffoldMessenger.of(context).showSnackBar(
        SnackBar(content: Text("An unexpected error occurred.")),
      );
    } finally {
      setState(() {
        isLoading = false;
      });
    }
  }

  @override
```

```dart
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text("Sign Up")),
      body: Padding(
        padding: const EdgeInsets.all(20.0),
        child: SingleChildScrollView(
          child: Column(
            children: [
              CustomTextField(
                hintText: 'Name',
                controller: nameController,
              ),
              CustomTextField(
                hintText: 'Email',
                controller: emailController,
              ),
              CustomTextField(
                hintText: 'Password',
                controller: passwordController,
                isPassword: true,
              ),
              SizedBox(height: 20),
              isLoading
                  ? CircularProgressIndicator()
                  : ElevatedButton(
                      onPressed: signupUser,
                      child: Text("Sign Up"),
                    ),
            ],
          ),
        ),
      ),
    );
  }
}
```

```dart
import 'package:flutter/material.dart';
import 'package:firebase_auth/firebase_auth.dart';
import 'package:week5/screens/user_profile.dart';
import 'package:week5/screens/signup.dart';
import 'package:week5/widgets/custom_textfield.dart';

class LoginScreen extends StatefulWidget {
  @override
  _LoginScreenState createState() => _LoginScreenState();
}

class _LoginScreenState extends State<LoginScreen> {
  final emailController = TextEditingController();
  final passwordController = TextEditingController();

  void loginUser() async {
    try {
      await FirebaseAuth.instance.signInWithEmailAndPassword(
        email: emailController.text.trim(),
        password: passwordController.text.trim(),
      );

      Navigator.pushReplacement(
        context,
        MaterialPageRoute(builder: (context) => ProfileScreen()),
      );
    } catch (e) {
      print("Login Error: $e");
      ScaffoldMessenger.of(context).showSnackBar(
        SnackBar(content: Text("Login failed.")),
      );
    }
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text("Login")),
      body: Padding(
        padding: const EdgeInsets.all(20.0),
        child: Column(
          children: [
            CustomTextField(
              hintText: 'Email',
              controller: emailController,
            ),
            CustomTextField(
              hintText: 'Password',
              controller: passwordController,
              isPassword: true,
            ),
            SizedBox(height: 20),
            ElevatedButton(
              onPressed: loginUser,
              child: Text("Login"),
            ),
            SizedBox(height: 10),
            TextButton(
              onPressed: () {
                Navigator.push(
                  context,
                  MaterialPageRoute(builder: (_) => SignupScreen()),
                );
              },
              child: Text("Don't have an account? Sign Up"),
            ),
          ],
        ),
      ),
    );
  }
}
```

```dart
import 'package:flutter/material.dart';
import '../services/auth_service.dart';
import 'login.dart';

class ProfileScreen extends StatefulWidget {
  @override
  State<ProfileScreen> createState() => _ProfileScreenState();
}

class _ProfileScreenState extends State<ProfileScreen> {
  final auth = AuthService();
  String? name;
  String? email;

  @override
  void initState() {
    super.initState();
    loadUser();
  }

  void loadUser() async {
    final data = await auth.getUserData();
    setState(() {
      name = data?['name'];
      email = data?['email'];
    });
  }

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Profile'),
        actions: [
          IconButton(
            icon: Icon(Icons.logout),
            onPressed: () async {
              await auth.logout();
              Navigator.pushReplacement(context, MaterialPageRoute(builder: (_)
=> LoginScreen()));
            },
          )
        ],
      ),
      body: name == null
          ? Center(child: CircularProgressIndicator())
          : Padding(
              padding: const EdgeInsets.all(20),
              child: Column(
                children: [
                  CircleAvatar(radius: 40, child: Icon(Icons.person, size: 50)),
                  SizedBox(height: 20),
                  Text("Name: $name", style: TextStyle(fontSize: 20)),
                  SizedBox(height: 10),
                  Text("Email: $email", style: TextStyle(fontSize: 16)),
                ],
              ),
            ),
    );
  }
}
```

```
import 'package:cloud_firestore/cloud_firestore.dart';
import 'package:firebase_auth/firebase_auth.dart';
```

```dart
class AuthService {
  final FirebaseAuth _auth = FirebaseAuth.instance;
  final FirebaseFirestore _db = FirebaseFirestore.instance;

  Future<String?> signUp(String name, String email, String password) async {
    try {
      UserCredential cred = await _auth.createUserWithEmailAndPassword(
        email: email,
        password: password,
      );
      await _db.collection('users').doc(cred.user!.uid).set({
        'name': name,
        'email': email,
      });
      return null;
    } catch (e) {
      return e.toString();
    }
  }

  Future<String?> login(String email, String password) async {
    try {
      await _auth.signInWithEmailAndPassword(email: email, password: password);
      return null;
    } catch (e) {
      return e.toString();
    }
  }

  Future<void> logout() async {
    await _auth.signOut();
  }

  Future<Map<String, dynamic>?> getUserData() async {
    final uid = _auth.currentUser?.uid;
    if (uid != null) {
      DocumentSnapshot doc = await _db.collection('users').doc(uid).get();
      return doc.data() as Map<String, dynamic>?;
    }
    return null;
  }
}
```

```dart
import 'package:flutter/material.dart';

class CustomTextField extends StatelessWidget {
  final String hintText;
  final TextEditingController controller;
  final bool isPassword;

  const CustomTextField({
    Key? key,
    required this.hintText,
    required this.controller,
    this.isPassword = false,
  }) : super(key: key);

  @override
  Widget build(BuildContext context) {
    return Padding(
      padding: const EdgeInsets.symmetric(vertical: 8.0),
      child: TextField(
        controller: controller,
        obscureText: isPassword,
        decoration: InputDecoration(
          hintText: hintText,
          border: OutlineInputBorder(
            borderRadius: BorderRadius.circular(12),
          ),
          filled: true,
          fillColor: Colors.grey[200],
          contentPadding: const EdgeInsets.symmetric(horizontal: 16, vertical:
12),
        ),
      ),
    );
  }
}
```

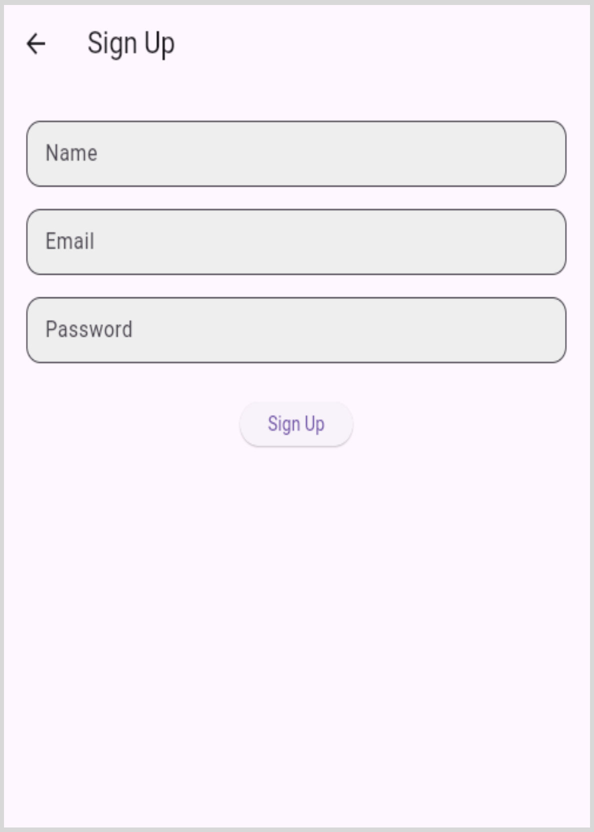
```dart
// File generated by FlutterFire CLI.
// ignore_for_file: type=lint
import 'package:firebase_core/firebase_core.dart' show FirebaseOptions;
import 'package:flutter/foundation.dart'
    show defaultTargetPlatform, kIsWeb, TargetPlatform;

/// Default [FirebaseOptions] for use with your Firebase apps.
```

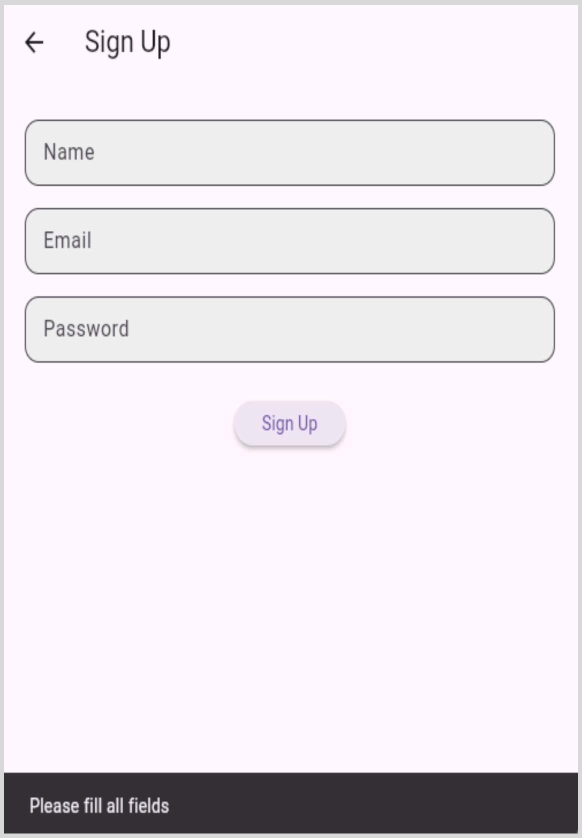
```dart
///
/// Example:
/// ```dart
/// import 'firebase_options.dart';
/// // ...
/// await Firebase.initializeApp(
///   options: DefaultFirebaseOptions.currentPlatform,
/// );
/// ```
class DefaultFirebaseOptions {
  static FirebaseOptions get currentPlatform {
    if (kIsWeb) {
      return web;
    }
    switch (defaultTargetPlatform) {
      case TargetPlatform.android:
        return android;
      case TargetPlatform.iOS:
        return ios;
      case TargetPlatform.macOS:
        return macos;
      case TargetPlatform.windows:
        return windows;
      case TargetPlatform.linux:
        throw UnsupportedError(
          'DefaultFirebaseOptions have not been configured for linux - '
          'you can reconfigure this by running the FlutterFire CLI again.',
        );
      default:
        throw UnsupportedError(
          'DefaultFirebaseOptions are not supported for this platform.',
        );
    }
  }

  static const FirebaseOptions web = FirebaseOptions(
    apiKey: 'AIzaSyDLYuidKb74NS2e8ZRhBzi6eFQODhoUJyc',
    appId: '1:598435078298:web:0c1cb9676c5e128b06bf23',
    messagingSenderId: '598435078298',
    projectId: 'fir-auth-d52a7',
    authDomain: 'fir-auth-d52a7.firebaseapp.com',
    storageBucket: 'fir-auth-d52a7.firebasestorage.app',
    measurementId: 'G-R5N6P4KD6M',
  );
```

```dart
  static const FirebaseOptions android = FirebaseOptions(
    apiKey: 'AIzaSyCCAiJJerq5BZhz1uUNztlydRsZgqRxuho',
    appId: '1:598435078298:android:d13be18dd1859ee806bf23',
    messagingSenderId: '598435078298',
    projectId: 'fir-auth-d52a7',
    storageBucket: 'fir-auth-d52a7.firebasestorage.app',
  );

  static const FirebaseOptions ios = FirebaseOptions(
    apiKey: 'AIzaSyCVEtsLaQuyl1XT5A6Cnq8WY_HPGEp1hts',
    appId: '1:598435078298:ios:f6f552261ae8c98a06bf23',
    messagingSenderId: '598435078298',
    projectId: 'fir-auth-d52a7',
    storageBucket: 'fir-auth-d52a7.firebasestorage.app',
    iosBundleId: 'com.example.week5',
  );

  static const FirebaseOptions macos = FirebaseOptions(
    apiKey: 'AIzaSyCVEtsLaQuyl1XT5A6Cnq8WY_HPGEp1hts',
    appId: '1:598435078298:ios:f6f552261ae8c98a06bf23',
    messagingSenderId: '598435078298',
    projectId: 'fir-auth-d52a7',
    storageBucket: 'fir-auth-d52a7.firebasestorage.app',
    iosBundleId: 'com.example.week5',
  );

  static const FirebaseOptions windows = FirebaseOptions(
    apiKey: 'AIzaSyDLYuidKb74NS2e8ZRhBzi6eFQODhoUJyc',
    appId: '1:598435078298:web:be4b7d675f32fbeb06bf23',
    messagingSenderId: '598435078298',
    projectId: 'fir-auth-d52a7',
    authDomain: 'fir-auth-d52a7.firebaseapp.com',
    storageBucket: 'fir-auth-d52a7.firebasestorage.app',
    measurementId: 'G-LN11GQV67X',
  );
}
```

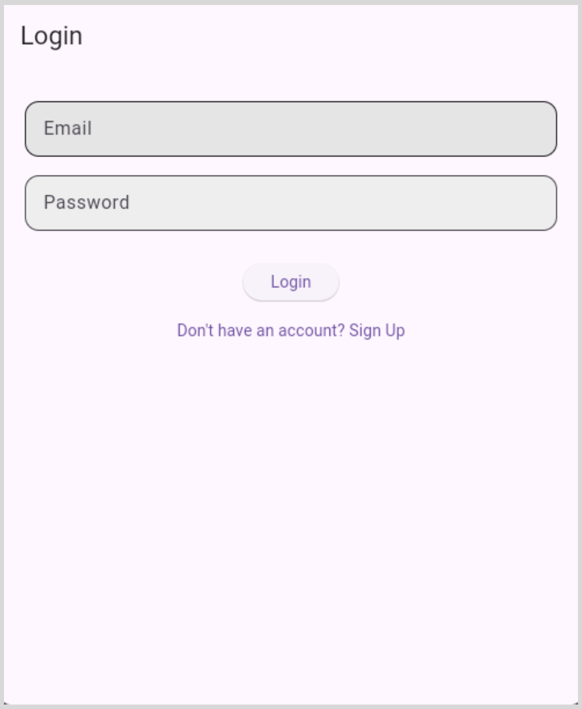
```yaml
name: week5
description: "A new Flutter project."
# The following line prevents the package from being accidentally published to
# pub.dev using `flutter pub publish`. This is preferred for private packages.
publish_to: 'none' # Remove this line if you wish to publish to pub.dev
```

```yaml
# The following defines the version and build number for your application.
# A version number is three numbers separated by dots, like 1.2.43
# followed by an optional build number separated by a +.
# Both the version and the builder number may be overridden in flutter
# build by specifying --build-name and --build-number, respectively.
# In Android, build-name is used as versionName while build-number used as
versionCode.
# Read more about Android versioning at
https://developer.android.com/studio/publish/versioning
# In iOS, build-name is used as CFBundleShortVersionString while build-number is
used as CFBundleVersion.
# Read more about iOS versioning at
#
https://developer.apple.com/library/archive/documentation/General/Reference/InfoP
listKeyReference/Articles/CoreFoundationKeys.html
# In Windows, build-name is used as the major, minor, and patch parts
# of the product and file versions while build-number is used as the build
suffix.
version: 1.0.0+1

environment:
  sdk: ^3.7.2

# Dependencies specify other packages that your package needs in order to work.
# To automatically upgrade your package dependencies to the latest versions
# consider running `flutter pub upgrade --major-versions`. Alternatively,
# dependencies can be manually updated by changing the version numbers below to
# the latest version available on pub.dev. To see which dependencies have newer
# versions available, run `flutter pub outdated`.
dependencies:
  flutter:
    sdk: flutter

  # The following adds the Cupertino Icons font to your application.
  # Use with the CupertinoIcons class for iOS style icons.
  cupertino_icons: ^1.0.8
  firebase_core: ^3.15.1
  firebase_auth: ^5.6.2
  cloud_firestore: ^5.6.11
  firebase_app_check: ^0.3.2+9
  firebase_crashlytics: ^4.3.9

dev_dependencies:
  flutter_test:
    sdk: flutter
  # The "flutter_lints" package below contains a set of recommended lints to
  # encourage good coding practices. The lint set provided by the package is
  # activated in the `analysis_options.yaml` file located at the root of your
  # package. See that file for information about deactivating specific lint
  # rules and activating additional ones.
  flutter_lints: ^5.0.0

# For information on the generic Dart part of this file, see the
# following page: https://dart.dev/tools/pub/pubspec

# The following section is specific to Flutter packages.
flutter:

  # The following line ensures that the Material Icons font is
  # included with your application, so that you can use the icons in
  # the material Icons class.
  uses-material-design: true

  # To add assets to your application, add an assets section, like this:
  # assets:
  #   - images/a_dot_burr.jpeg
  #   - images/a_dot_ham.jpeg

  # An image asset can refer to one or more resolution-specific "variants", see
  # https://flutter.dev/to/resolution-aware-images

  # For details regarding adding assets from package dependencies, see
  # https://flutter.dev/to/asset-from-package

  # To add custom fonts to your application, add a fonts section here,
  # in this "flutter" section. Each entry in this list should have a
  # "family" key with the font family name, and a "fonts" key with a
  # list giving the asset and other descriptors for the font. For
  # example:
  # fonts:
  #   - family: Schyler
  #     fonts:
  #       - asset: fonts/Schyler-Regular.ttf
  #       - asset: fonts/Schyler-Italic.ttf
  #         style: italic
  #   - family: Trajan Pro
  #     fonts:
  #       - asset: fonts/TrajanPro.ttf
  #       - asset: fonts/TrajanPro_Bold.ttf
  #         weight: 700
  #
  # For details regarding fonts from package dependencies,
  # see https://flutter.dev/to/font-from-package
```





Please fill all fields

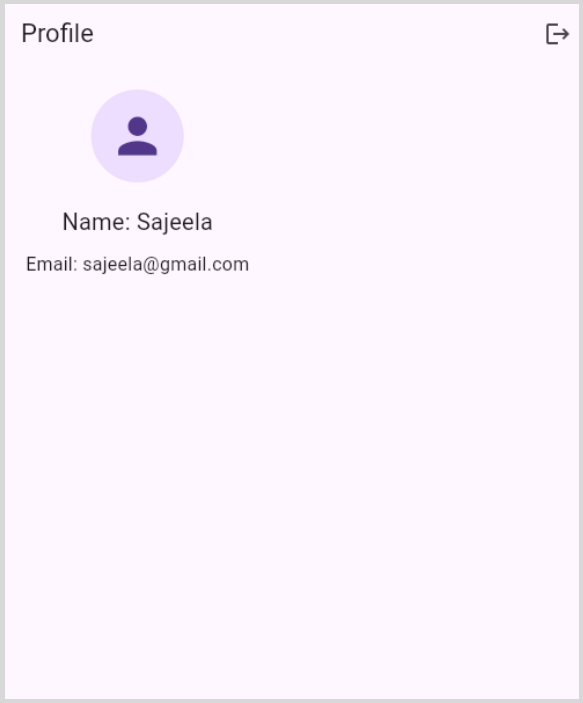

Login

Email

Password

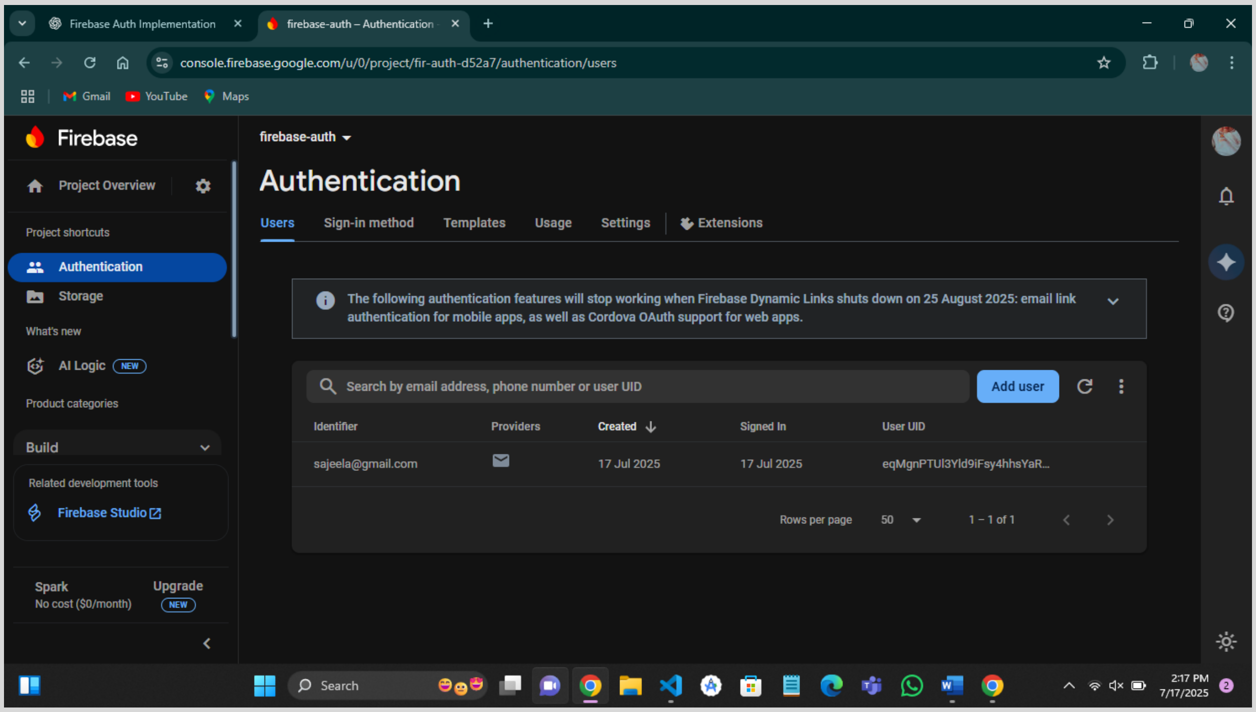
Login

Don't have an account? Sign Up


Profile

Name: Sajeela

Email: sajeela@gmail.com


Firebase Auth Implementation | firebase-auth – Authentication

console.firebase.google.com/u/0/project/fir-auth-d52a7/authentication/users

Firebase

firebase-auth

Project Overview

Project shortcuts

Authentication

Storage

What's new

AI Logic NEW

Product categories

Build

Related development tools

Firebase Studio

Spark
No cost ($0/month)

Upgrade NEW

Authentication

Users | Sign-in method | Templates | Usage | Settings | Extensions

The following authentication features will stop working when Firebase Dynamic Links shuts down on 25 August 2025: email link authentication for mobile apps, as well as Cordova OAuth support for web apps.

Search by email address, phone number or user UID

Add user

Identifier	Providers	Created	Signed In	User UID
sajeela@gmail.com	✉	17 Jul 2025	17 Jul 2025	eqMgnPTUl3Yld9iFsy4hhsYaR...

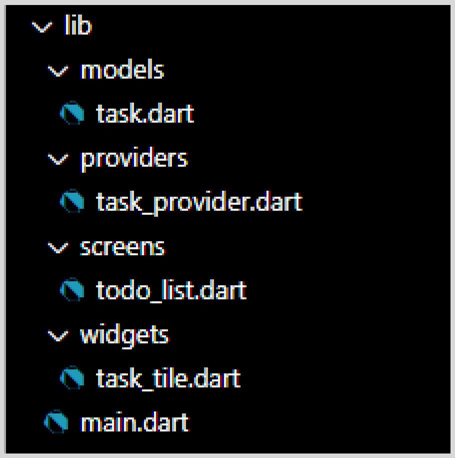
Rows per page 50 1 – 1 of 1

Search

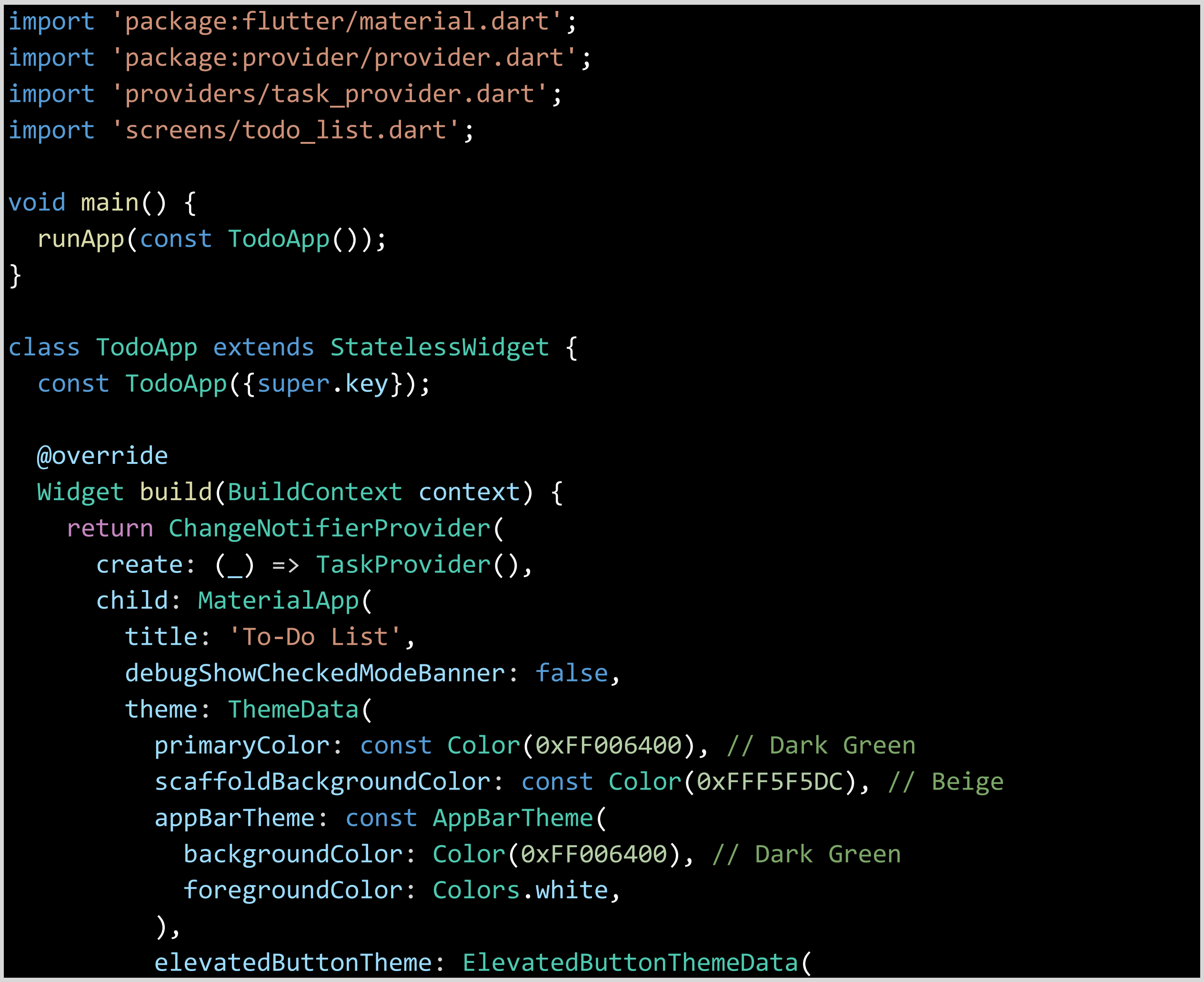
2:17 PM
7/17/2025

Week 6

To-Do List



```
lib
  models
    task.dart
  providers
    task_provider.dart
  screens
    todo_list.dart
  widgets
    task_tile.dart
  main.dart
```



```dart
import 'package:flutter/material.dart';
import 'package:provider/provider.dart';
import 'providers/task_provider.dart';
import 'screens/todo_list.dart';

void main() {
  runApp(const TodoApp());
}

class TodoApp extends StatelessWidget {
  const TodoApp({super.key});

  @override
  Widget build(BuildContext context) {
    return ChangeNotifierProvider(
      create: (_) => TaskProvider(),
      child: MaterialApp(
        title: 'To-Do List',
        debugShowCheckedModeBanner: false,
        theme: ThemeData(
          primaryColor: const Color(0xFF006400), // Dark Green
          scaffoldBackgroundColor: const Color(0xFFF5F5DC), // Beige
          appBarTheme: const AppBarTheme(
            backgroundColor: Color(0xFF006400), // Dark Green
            foregroundColor: Colors.white,
          ),
          elevatedButtonTheme: ElevatedButtonThemeData(
            style: ElevatedButton.styleFrom(
              backgroundColor: const Color(0xFF006400), // Dark Green
              foregroundColor: Colors.white,
              shape: RoundedRectangleBorder(
                borderRadius: BorderRadius.circular(10),
              ),
            ),
          ),
          inputDecorationTheme: InputDecorationTheme(
            filled: true,
            fillColor: Colors.white,
            labelStyle: const TextStyle(color: Colors.black87),
            enabledBorder: OutlineInputBorder(
              borderSide: const BorderSide(color: Colors.black26),
              borderRadius: BorderRadius.circular(12),
            ),
            focusedBorder: OutlineInputBorder(
              borderSide: const BorderSide(color: Colors.black),
              borderRadius: BorderRadius.circular(12),
            ),
          ),
          iconTheme: const IconThemeData(color: Colors.black),
        ),
        home: const TodoListPage(),
      ),
    );
  }
}
import 'package:flutter/material.dart';
import 'package:provider/provider.dart';
import '../providers/task_provider.dart';
import '../widgets/task_tile.dart';

class TodoListPage extends StatelessWidget {
  const TodoListPage({super.key});

  @override
  Widget build(BuildContext context) {
    final taskProvider = Provider.of<TaskProvider>(context);
    final taskController = TextEditingController();

    void _addTask() {
      final task = taskController.text.trim();
      if (task.isNotEmpty) {
        taskProvider.addTask(task);
        taskController.clear();
      }
    }

    return Scaffold(
      appBar: AppBar(title: const Text('To-Do List')),
      body: Column(
        children: [
          Padding(
            padding: const EdgeInsets.all(16),
            child: Row(
              children: [
                Expanded(
                  child: TextField(
                    controller: taskController,
                    decoration: const InputDecoration(
                      labelText: 'Enter new task',
                    ),
                    onSubmitted: (_) => _addTask(),
                  ),
                ),
                const SizedBox(width: 10),
                ElevatedButton(
                  onPressed: _addTask,
                  child: const Text('Add'),
                ),
              ],
            ),
          ),
          Expanded(
            child: Consumer<TaskProvider>(
              builder: (context, provider, child) {
                final tasks = provider.tasks;
                return tasks.isEmpty
                    ? const Center(
                        child: Text(
                          'No tasks added yet.',
                          style: TextStyle(fontSize: 18, color: Colors.black54),
                        ),
                      )
                    : ListView.separated(
                        itemCount: tasks.length,
                        separatorBuilder: (_, __) => const SizedBox(height: 4),
                        itemBuilder: (context, index) => Padding(
                          padding: const EdgeInsets.symmetric(
                              horizontal: 16, vertical: 4),
                          child: TaskTile(
                            task: tasks[index],
                            onDelete: () => provider.removeTask(index),
                          ),
                        ),
                      );
              },
            ),
          ),
        ],
      ),
    );
  }
}
```

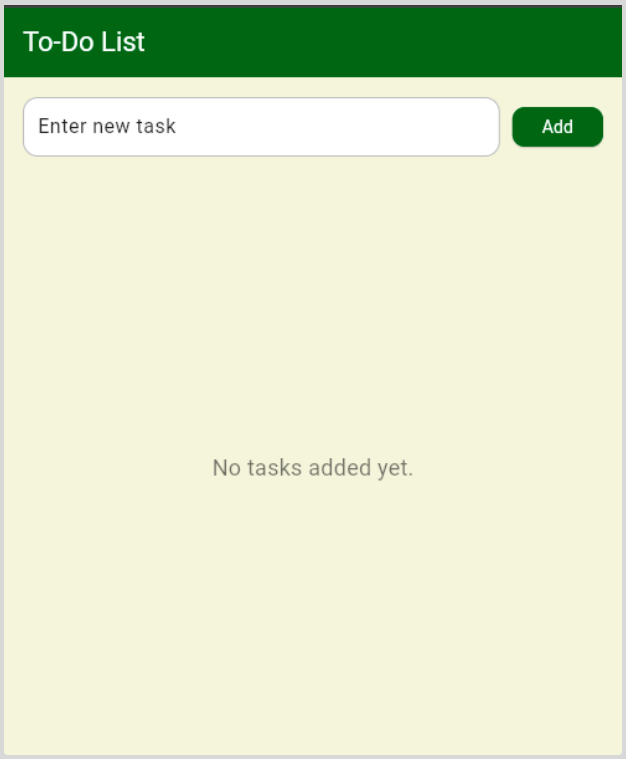
```
import 'package:flutter/material.dart';

class TaskTile extends StatelessWidget {
  final String task;
  final VoidCallback onDelete;

  const TaskTile({super.key, required this.task, required this.onDelete});

  @override
  Widget build(BuildContext context) {
    return Card(
      color: Colors.white,
      elevation: 1,
      shape: RoundedRectangleBorder(
        borderRadius: BorderRadius.circular(10),
      ),
      child: ListTile(
        title: Text(task),
        trailing: IconButton(
          icon: const Icon(Icons.delete),
          onPressed: onDelete,
        ),
      ),
    );
  }
}
```

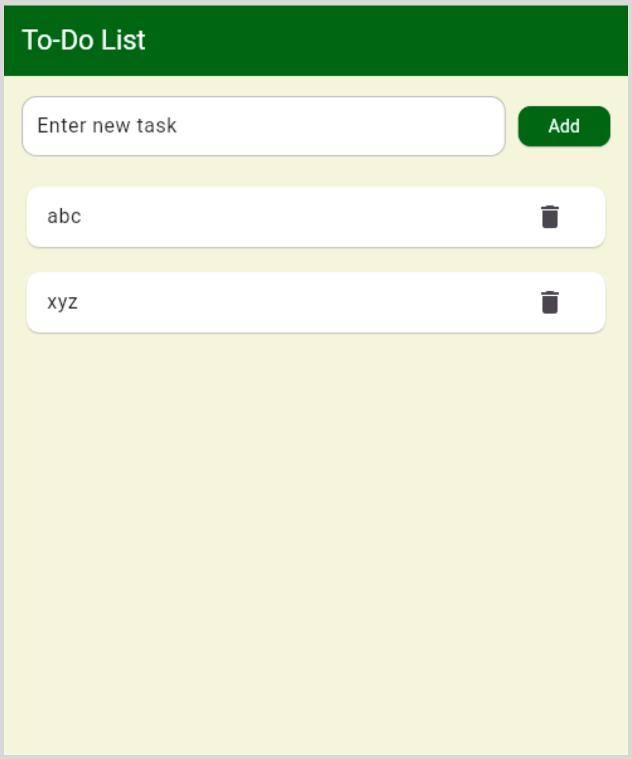
```dart
import 'package:flutter/foundation.dart';
import 'package:shared_preferences/shared_preferences.dart';

class TaskProvider with ChangeNotifier {
  final List<String> _tasks = [];
  List<String> get tasks => _tasks;

  static const String tasksKey = 'tasks';

  TaskProvider() {
    _loadTasks();
  }

  Future<void> _loadTasks() async {
    final prefs = await SharedPreferences.getInstance();
    final savedTasks = prefs.getStringList(tasksKey);
    if (savedTasks != null) {
      _tasks.addAll(savedTasks);
      notifyListeners();
    }
  }

  Future<void> _saveTasks() async {
    final prefs = await SharedPreferences.getInstance();
    await prefs.setStringList(tasksKey, _tasks);
  }

  void addTask(String task) {
    _tasks.add(task);
    _saveTasks();
    notifyListeners();
  }

  void removeTask(int index) {
    _tasks.removeAt(index);
    _saveTasks();
    notifyListeners();
  }
}
```

```dart
class TodoTask {
  String title;
  bool isDone;

  TodoTask({required this.title, this.isDone = false});

  // For saving to shared_preferences
  Map<String, dynamic> toJson() => {
        'title': title,
        'isDone': isDone,
      };

  factory TodoTask.fromJson(Map<String, dynamic> json) => TodoTask(
        title: json['title'],
        isDone: json['isDone'],
      );
}
```

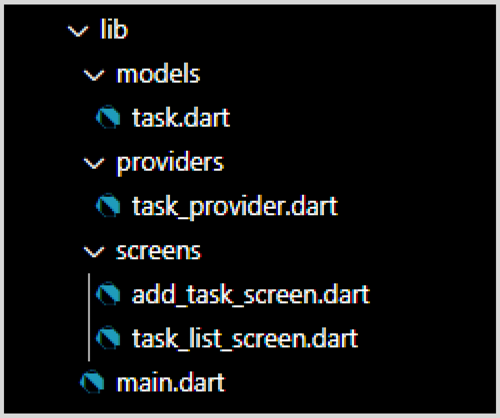
```yaml
name: to_do_list_app
description: "A new Flutter project."
# The following line prevents the package from being accidentally published to
# pub.dev using `flutter pub publish`. This is preferred for private packages.
publish_to: 'none' # Remove this line if you wish to publish to pub.dev

# The following defines the version and build number for your application.
# A version number is three numbers separated by dots, like 1.2.43
# followed by an optional build number separated by a +.
# Both the version and the builder number may be overridden in flutter
# build by specifying --build-name and --build-number, respectively.
# In Android, build-name is used as versionName while build-number used as
versionCode.
# Read more about Android versioning at
https://developer.android.com/studio/publish/versioning
# In iOS, build-name is used as CFBundleShortVersionString while build-number is
used as CFBundleVersion.
# Read more about iOS versioning at
#
https://developer.apple.com/library/archive/documentation/General/Reference/InfoP
listKeyReference/Articles/CoreFoundationKeys.html
# In Windows, build-name is used as the major, minor, and patch parts
# of the product and file versions while build-number is used as the build
suffix.
version: 1.0.0+1
```

```yaml
environment:
  sdk: ^3.7.2

# Dependencies specify other packages that your package needs in order to work.
# To automatically upgrade your package dependencies to the latest versions
# consider running `flutter pub upgrade --major-versions`. Alternatively,
# dependencies can be manually updated by changing the version numbers below to
# the latest version available on pub.dev. To see which dependencies have newer
# versions available, run `flutter pub outdated`.
dependencies:
  flutter:
    sdk: flutter
  provider: ^6.1.1
  shared_preferences: ^2.2.2

  # The following adds the Cupertino Icons font to your application.
  # Use with the CupertinoIcons class for iOS style icons.
  cupertino_icons: ^1.0.8

dev_dependencies:
  flutter_test:
    sdk: flutter

  # The "flutter_lints" package below contains a set of recommended lints to
  # encourage good coding practices. The lint set provided by the package is
  # activated in the `analysis_options.yaml` file located at the root of your
  # package. See that file for information about deactivating specific lint
  # rules and activating additional ones.
  flutter_lints: ^5.0.0

# For information on the generic Dart part of this file, see the
# following page: https://dart.dev/tools/pub/pubspec

# The following section is specific to Flutter packages.
flutter:

  # The following line ensures that the Material Icons font is
  # included with your application, so that you can use the icons in
  # the material Icons class.
  uses-material-design: true

  # To add assets to your application, add an assets section, like this:
  # assets:
  #   - images/a_dot_burr.jpeg
  #   - images/a_dot_ham.jpeg
  # An image asset can refer to one or more resolution-specific "variants", see
  # https://flutter.dev/to/resolution-aware-images

  # For details regarding adding assets from package dependencies, see
  # https://flutter.dev/to/asset-from-package

  # To add custom fonts to your application, add a fonts section here,
  # in this "flutter" section. Each entry in this list should have a
  # "family" key with the font family name, and a "fonts" key with a
  # list giving the asset and other descriptors for the font. For
  # example:
  # fonts:
  #   - family: Schyler
  #     fonts:
  #       - asset: fonts/Schyler-Regular.ttf
  #       - asset: fonts/Schyler-Italic.ttf
  #         style: italic
  #   - family: Trajan Pro
  #     fonts:
  #       - asset: fonts/TrajanPro.ttf
  #       - asset: fonts/TrajanPro_Bold.ttf
  #         weight: 700
  #
  # For details regarding fonts from package dependencies,
  # see https://flutter.dev/to/font-from-package
```





Task Management



```
lib
  models
    task.dart
  providers
    task_provider.dart
  screens
    add_task_screen.dart
    task_list_screen.dart
  main.dart
```

```
import 'package:flutter/material.dart';
import 'package:provider/provider.dart';
import 'providers/task_provider.dart';
import 'screens/task_list_screen.dart';

void main() {
  runApp(TaskApp());
}

class TaskApp extends StatelessWidget {
```

```dart
  @override
  Widget build(BuildContext context) {
    return ChangeNotifierProvider(
      create: (_) => TaskProvider(),
      child: MaterialApp(
        debugShowCheckedModeBanner: false,
        home: TaskListScreen(),
      ),
    );
  }
}
```

```dart
import 'package:flutter/material.dart';
import 'package:provider/provider.dart';
import '../providers/task_provider.dart';
import 'add_task_screen.dart';

class TaskListScreen extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    final taskProvider = Provider.of<TaskProvider>(context);

    return Scaffold(
      appBar: AppBar(title: const Text("Task Manager")),
      body: ListView.builder(
        itemCount: taskProvider.tasks.length,
        itemBuilder: (ctx, index) {
          final task = taskProvider.tasks[index];
          return ListTile(
            title: Text(
              task.title,
              style: TextStyle(
                decoration: task.isCompleted
                    ? TextDecoration.lineThrough
                    : TextDecoration.none,
              ),
            ),
            trailing: Row(mainAxisSize: MainAxisSize.min, children: [
              IconButton(
                icon: Icon(task.isCompleted ? Icons.check_box :
Icons.check_box_outline_blank),
                onPressed: () => taskProvider.toggleCompletion(task.id),
              ),
              IconButton(
                icon: const Icon(Icons.delete, color: Colors.red),
                onPressed: () => taskProvider.deleteTask(task.id),
              ),
            ]),
          );
        },
      ),
      floatingActionButton: FloatingActionButton(
        onPressed: () => Navigator.push(context,
            MaterialPageRoute(builder: (_) => AddTaskScreen())),
        child: const Icon(Icons.add),
      ),
    );
  }
}
```

```
import 'package:flutter/material.dart';
import 'package:provider/provider.dart';
import '../providers/task_provider.dart';

class AddTaskScreen extends StatelessWidget {
  final _controller = TextEditingController();

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: const Text("Add New Task")),
      body: Padding(
        padding: const EdgeInsets.all(16.0),
        child: Column(children: [
          TextField(
            controller: _controller,
            decoration: const InputDecoration(labelText: "Task Title"),
          ),
          const SizedBox(height: 20),
          ElevatedButton(
            onPressed: () {
              if (_controller.text.trim().isNotEmpty) {
                Provider.of<TaskProvider>(context, listen: false)
                    .addTask(_controller.text.trim());
                Navigator.pop(context);
              }
```

```dart
            },
            child: const Text("Add Task"),
          )
        ]),
      ),
    );
  }
}
```

```dart
import 'package:flutter/material.dart';
import '../models/task.dart';

class TaskProvider with ChangeNotifier {
  final List<Task> _tasks = [];

  List<Task> get tasks => _tasks;

  void addTask(String title) {
    _tasks.add(Task(id: DateTime.now().toString(), title: title));
    notifyListeners();
  }

  void deleteTask(String id) {
    _tasks.removeWhere((task) => task.id == id);
    notifyListeners();
  }

  void toggleCompletion(String id) {
    final task = _tasks.firstWhere((task) => task.id == id);
    task.isCompleted = !task.isCompleted;
    notifyListeners();
  }
}
```

```dart
class Task {
  String id;
  String title;
  bool isCompleted;

  Task({required this.id, required this.title, this.isCompleted = false});
}
```

```yaml
name: task_mng_app
description: "A new Flutter project."
# The following line prevents the package from being accidentally published to
# pub.dev using `flutter pub publish`. This is preferred for private packages.
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# Read more about Android versioning at
https://developer.android.com/studio/publish/versioning
# In iOS, build-name is used as CFBundleShortVersionString while build-number is
used as CFBundleVersion.
# Read more about iOS versioning at
#
https://developer.apple.com/library/archive/documentation/General/Reference/InfoP
listKeyReference/Articles/CoreFoundationKeys.html
# In Windows, build-name is used as the major, minor, and patch parts
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suffix.
version: 1.0.0+1

environment:
  sdk: ^3.7.2

# Dependencies specify other packages that your package needs in order to work.
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  #       - asset: fonts/Schyler-Italic.ttf
  #         style: italic
  #   - family: Trajan Pro
  #     fonts:
  #       - asset: fonts/TrajanPro.ttf
  #       - asset: fonts/TrajanPro_Bold.ttf
  #         weight: 700
  #
  # For details regarding fonts from package dependencies,
  # see https://flutter.dev/to/font-from-package

flutter_native_splash:
  color: "#ffffff"
  image: assets/splash.png
```
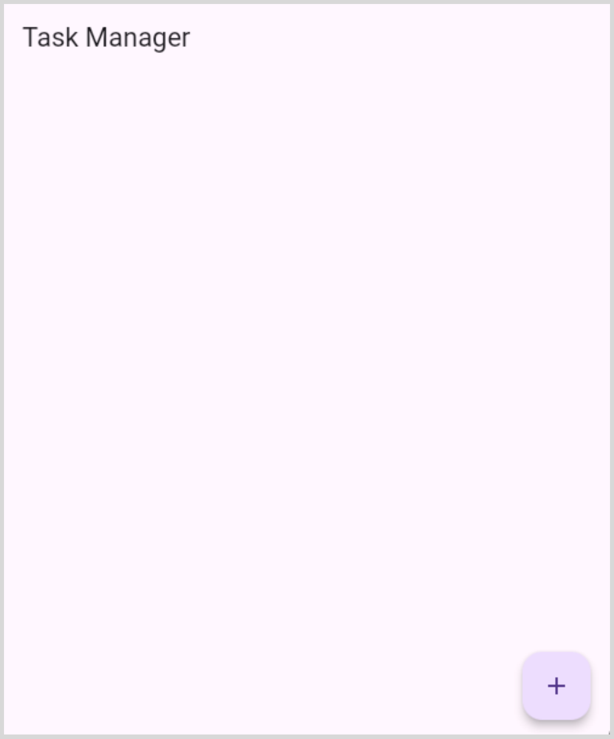
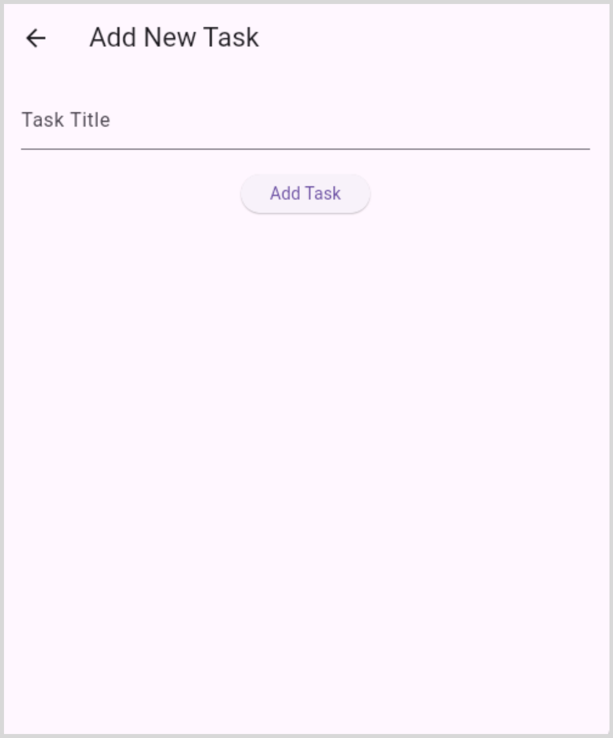
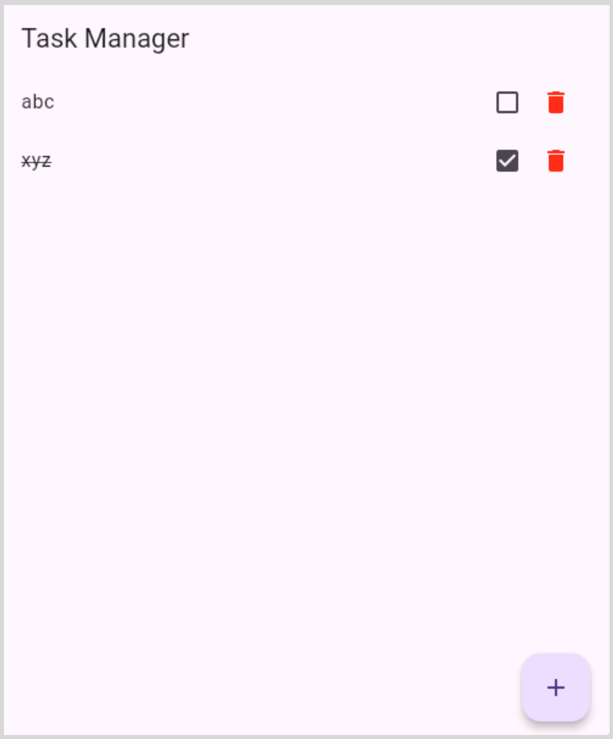
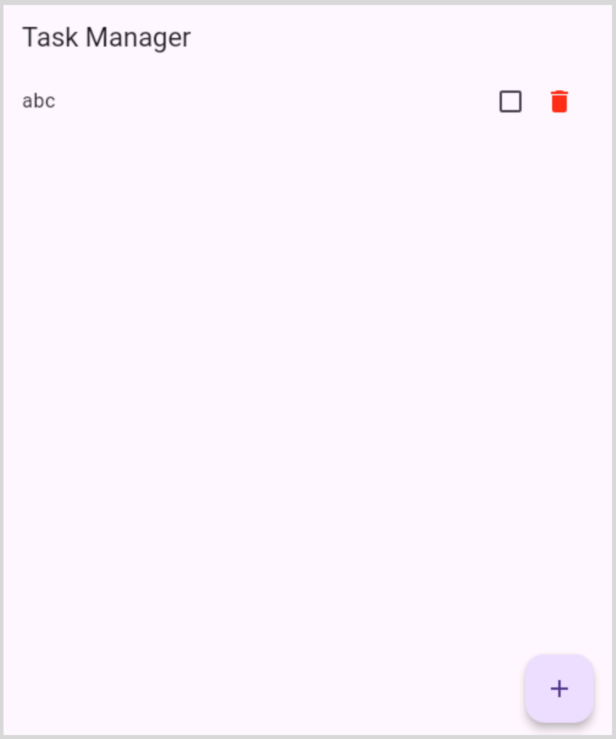






Task Manager

abc ☐

~~xyz~~ ✓


Task Manager

abc ☐