# Add dependencies

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| pubspec.yaml |
| dependencies:  flutter:  sdk: flutter  **path: ^1.8.3  sqflite: ^2.3.0cupertino\_icons: ^1.0.8** |

# Create the User model: user.dart

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| user.dart |
| class User {  final int? id;  final String name;  final int age;  final String country;  final String? email;  User({this.id, required this.name, required this.age, required this.country, this.email});  User.**fromMap**(Map<String, dynamic> res)  : id = res["id"],  name = res["name"],  age = res["age"],  country = res["country"],  email = res["email"];  Map<String, Object?> toMap() {  **return** {  'id': id,  'name': name,  'age': age,  'country': country,  'email': email,  };  }  } |

# Create DatabaseHandler class

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| database\_handler.dart |
| **import 'package:sqflite/sqflite.dart';**  **import 'package:path/path.dart';**  **import 'user.dart';**  class DatabaseHandler {  Future<Database> initializeDB() async {  String path = await getDatabasesPath();  return openDatabase(  join(path, '**example.db**'),  **onCreate**: (database, version) async {  await database.execute(  "**CREATE TABLE users(id INTEGER PRIMARY KEY AUTOINCREMENT, name TEXT NOT NULL, age INTEGER NOT NULL, country TEXT NOT NULL, email TEXT)**",  );  },  version: 1,  );  }  Future<int> **insertUser(List<User> users)** async {  int result = 0;  final Database db = await initializeDB();  for (var user in users) {  result = await db.insert('users', user.toMap());  }  return result;  }  Future<List<User>> **retrieveUsers()** async {  final Database db = await initializeDB();  final List<Map<String, Object?>> queryResult = await db.query('users');  return queryResult.map((e) => User.fromMap(e)).toList();  }  Future<void> **deleteUser(int id)** async {  final db = await initializeDB();  await db.delete(  'users',  where: "id = ?",  whereArgs: [id],  );  }  } |

# Create the User List Screen (HomeScreen)

replace the content with the following code to display a list of users and delete them.

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| main.dart |
| **import 'package:flutter/material.dart'; import 'add\_user\_screen.dart'; import 'database\_handler.dart'; import 'user.dart';**  void main() {  runApp(const MyApp()); }  class MyApp extends StatelessWidget {  const MyApp({super.key});   @override  Widget build(BuildContext context) {  return MaterialApp(  title: 'Flutter SQLite CRUD',  theme: ThemeData(primarySwatch: Colors.*blue*),  home: const HomeScreen(),  );  } }  class HomeScreen extends StatefulWidget {  const HomeScreen({super.key});   @override  State<HomeScreen> createState() => \_HomeScreenState(); }  class \_HomeScreenState extends State<HomeScreen> {  late DatabaseHandler **handler**;   @override  void initState() {  super.initState();  handler = **DatabaseHandler()**;  }   @override  Widget build(BuildContext context) {  return Scaffold(  appBar: AppBar(title: const Text("User List")),  body: FutureBuilder(  future: handler.retrieveUsers(),  builder: (BuildContext context, AsyncSnapshot<List<User>> snapshot) {  if (snapshot.hasData) {  return ListView.builder(  itemCount: snapshot.data?.length,  itemBuilder: (BuildContext context, int index) {  return Card(  child: **ListTile**(  **title**: Text("Name - ${snapshot.dataindex].name}"),  **subtitle**: Text("Age - ${snapshot.data![index].age}"),  **trailing**: **IconButton**(  icon: const Icon(Icons.*delete*),  **onPressed**: () {  handler.deleteUser(snapshot.data![index].id!);  **setState(() {  snapshot.data!.removeAt(index);  });**  },  ),  ),  );  },  );  } else {  return const Center(child: CircularProgressIndicator());  }  },  ),  **floatingActionButton**: FloatingActionButton(  child: const Icon(Icons.*add*),  **onPressed**: () async {  final result = await Navigator.*push*(  context,  MaterialPageRoute(builder: (context) => **const AddUserScreen()**),  );  if (result == true) {  **setState(() {});** // This will refresh the user list  }  },  ),  );  } } |

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# Add User Screen

Create a new file add\_user\_screen.dart

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| add\_user\_screen.dart |
| **import 'package:flutter/material.dart'; import 'database\_handler.dart'; import 'user.dart';**  class AddUserScreen extends StatefulWidget {  const AddUserScreen({super.key});   @override  State<AddUserScreen> createState() => \_AddUserScreenState(); }  class \_AddUserScreenState extends State<AddUserScreen> {  late DatabaseHandler **handler**;  final TextEditingController **nameTextController** = TextEditingController();  final TextEditingController **ageTextController** = TextEditingController();  final TextEditingController **countryTextController** = TextEditingController();   @override  void initState() {  super.initState();  handler = DatabaseHandler();  }   @override  Widget build(BuildContext context) {  return Scaffold(  appBar: AppBar(title: const Text("Add User")),  body: Padding(  padding: const EdgeInsets.all(20.0),  child: **Column**(  children: [  **TextFormField**(  controller: nameTextController,  decoration: const InputDecoration(labelText: 'Name'),  ),  const SizedBox(height: 20.0),  **TextFormField**(  controller: ageTextController,  decoration: const InputDecoration(labelText: 'Age'),  keyboardType: TextInputType.*number*,  ),  const SizedBox(height: 20.0),  **TextFormField**(  controller: countryTextController,  decoration: const InputDecoration(labelText: 'Country'),  ),  const SizedBox(height: 20.0),  **ElevatedButton**(  **onPressed**: () async {  await handler.**initializeDB()**;  User newUser = **User(  name: nameTextController.text,  age: int.*parse*(ageTextController.text),  country: countryTextController.text,  );**  await handler.**insertUser([newUser])**;  **Navigator.*pop*(context, true);** // Return success  },  child: const **Text**("Save"),  ),  ],  ),  ),  );  } } |

