Mobile Applications and Web Development - IS4904(Practical)		
Student Name:	**Student ID:**	**Section:**
Assignment (Flutter Application Development)		
Date: 23 April 2024	**Max Points:**	

Assignment: Flutter Application Development

Objective: Develop a Flutter application using Dart programming language that incorporates various widgets including Scaffold, Container, Column, ElevatedButton, OutlinedButton, and TextButton. The application should implement functionalities such as submitting data, canceling actions, and any additional features you deem suitable.

Requirements:

1. **Scaffold:** Utilize the Scaffold widget as the main structure for your application. This should include an AppBar with a title relevant to your application.
2. **Container:** Implement at least one Container widget within your application. This could be used for layout purposes or to contain other widgets.
3. **Column:** Utilize the Column widget to arrange multiple widgets vertically within your application. This could be used for organizing user interface elements.
4. **ElevatedButton:** Incorporate at least one ElevatedButton widget. This button should trigger a function such as submitting data or navigating to another screen.
5. **OutlinedButton:** Include at least one OutlinedButton widget. This button could be used for actions like canceling an operation or resetting a form.
6. **TextButton:** Implement at least one TextButton widget. This button could be used for additional actions or navigating to specific screens.
7. **Functionality:** Ensure that each button you implement calls a relevant function within your application. For example, the ElevatedButton might submit a form, the OutlinedButton might cancel an action, and the TextButton might navigate to another screen.

Additional Guidelines:

- Use appropriate widget properties and styling to enhance the visual appearance of your application.
- Ensure that your code is well-structured and follows best practices for Flutter development.
- Test your application thoroughly to ensure that all functionalities work as intended.
- Provide comments in your code to explain the purpose of each widget and function.

Submission:

Submit your Flutter project by [deadline date] to the designated platform(Blackboard).. You can either share your project files via a version control system (e.g., GitHub.

Grading Criteria:

Your assignment will be evaluated based on the following criteria:

- Implementation of required widgets (Scaffold, Container, Column, ElevatedButton, OutlinedButton, TextButton)
- Functionality and usability of the application
- Code quality, including organization, readability, and adherence to best practices
- Creativity and originality in design and implementation

Explorer

- helloworld
  - android
  - ios
  - lib
    - main.dart
  - test
  - web
  - .metadata
  - analysis_options.yaml
  - pubspec.yaml
  - README.md

- Dependencies
  - async (2.11.0)
  - boolean_selector (2.1.1)
  - characters (1.3.0)
  - clock (1.1.1)
  - collection (1.18.0)

`main.dart`

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

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

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter App',
      theme: ThemeData(
        primarySwatch: Colors.blue,
      ), // ThemeData
      home: MyHomePage(),
    ); // MaterialApp
  }
}

class MyHomePage extends StatelessWidget {
  void submitData() {
    // Function to submit data
    print('Data submitted');
  }

  void cancelAction() {
    // Function to cancel action
    print('Action canceled');
  }
```

Flutter App

Welcome to my Flutter App!

Submit

Cancel

Navigate

Explorer

`main.dart`

```dart
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Flutter App'),
      ), // AppBar
      body: Center(
        child: Column(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [
            Container(
              margin: EdgeInsets.symmetric(vertical: 10),
              child: Text(
                'Welcome to my Flutter App!',
                style: TextStyle(fontSize: 20),
              ), // Text
            ), // Container
            ElevatedButton(
              onPressed: submitData,
              child: Text('Submit'),
            ), // ElevatedButton
            OutlinedButton(
              onPressed: cancelAction,
              child: Text('Cancel'),
            ), // OutlinedButton
            TextButton(
              onPressed: navigateToScreen,
              child: Text('Navigate'),
```

Flutter App

Welcome to my Flutter App!

Submit

Cancel

Navigate

Outputs | Analyzer | Tools | Pub Commands | Tests | Run | Git History

Fix my Error | AI Assistant | Documentation

Flutter Outline