

• Links

- ✓ <https://github.com/WasiUrRehmanQamar/MobileApplicationDevelopment>
- ✓ <https://mad-assignment-q1-wasi1130.web.app/#/>
- ✓ <https://mad-assignment-q2-wasi1130.web.app/#/>
- ✓ <https://mad-assignment-q3-wasi1130.web.app/#/>

• Task 1

```
// ignore_for_file: prefer_const_constructors, deprecated_member_use, annotate_overrides, use_key_in_widget_constructors
```

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

```
void main() => runApp(Game());
```

```
class Game extends StatelessWidget {  
  Widget build(BuildContext context) {  
    return MaterialApp(  
      theme: ThemeData.dark(),  
      home: StoryPage(),  
    );  
  }  
}
```

```
StoryBrain storyBrain = StoryBrain();
```

```
class StoryPage extends StatefulWidget {  
  _StoryPageState createState() => _StoryPageState();  
}
```

```
class _StoryPageState extends State<StoryPage> {  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      body: Container(  
        decoration: BoxDecoration(  
          image: DecorationImage(  
            image: AssetImage("Assets/Images/background.png"),
```

```

        fit: BoxFit.cover,
    ),
),
padding: EdgeInsets.symmetric(vertical: 50.0, horizontal: 15.0),
constraints: BoxConstraints.expand(),
child: SafeArea(
    child: Column(
        crossAxisAlignment: CrossAxisAlignment.stretch,
        children: <Widget>[
            Expanded(
                flex: 12,
                child: Center(
                    child: Text(
                        storyBrain.getStory(),
                        style: TextStyle(
                            fontSize: 25.0,
                        ),
                    ),
                ),
            ),
            Expanded(
                flex: 2,
                child: FlatButton(
                    onPressed: () {
                        setState(() {
                            storyBrain.nextStory(1);
                        });
                    },
                    color: Colors.red,
                    child: Text(
                        storyBrain.getChoice1(),
                        style: TextStyle(
                            fontSize: 20.0,
                        ),
                    ),
                ),
            ),
            SizedBox(
                height: 20.0,
            ),
            Expanded(
                flex: 2,
                child: Visibility(
                    visible: storyBrain.buttonShouldBeVisible(),
                    child: FlatButton(
                        onPressed: () {
                            setState(() {
                                storyBrain.nextStory(2);
                            });
                        },
                    ),
                ),
            ),
        ],
    ),
),

```

```

        color: Colors.blue,
        child: Text(
          storyBrain.getChoice2(),
          style: TextStyle(
            fontSize: 20.0,
          ),
        ),
      ),
    ),
  ],
),
),
);
}
}

```

```
// ignore_for_file: file_names
```

```

class Story {
  String? storyTitle;
  String? choice1;
  String? choice2;
  int choice1NextStory;
  int choice2NextStory;
  Story(
    {this.storyTitle,
    this.choice1,
    this.choice2,
    this.choice1NextStory = 0,
    this.choice2NextStory = 0});
}

```

```
// ignore_for_file: file_names, non_constant_identifier_names, prefer_final_fields
```

```
import 'Story.dart';
```

```

class StoryBrain {
  int _storyNumber = 0;

  List<Story> _storyData = [
    Story(
      storyTitle:
        'Your car has blown a tire on a winding road in the middle of nowhere with no
        cell phone reception. You decide to hitchhike. A rusty pickup truck rumbles to a stop next to
        you. A man with a wide brimmed hat with soulless eyes opens the passenger door for you and
        asks: "Need a ride, boy?".',
      choice1: "I'll hope in. Thanks for help.",
      choice2: "Better ask him if he is a murderer first.",
    ),
  ],
)

```

```

        choice1NextStory: 2,
        choice2NextStory: 1),
    Story(
        storyTitle: 'He nods slowly, unphased by the question.',
        choice1: 'At least he is honest. I will climb in.',
        choice2: 'Wait, I know how to change a tire.',
        choice1NextStory: 2,
        choice2NextStory: 3),
    Story(
        storyTitle:
            'As you begin to drive, the stranger starts talking about his relationship with
his mother. He gets angrier and angrier by the minute. He asks you to open the glovebox.
Inside you find a bloody knife, two severed fingers, and a cassette tape of Elton John. He
reaches for the glove box.',
        choice1: 'I love Elton John! Hand him the cassette tape.',
        choice2: 'It is him or me! You take the knife and stab him.',
        choice1NextStory: 5,
        choice2NextStory: 4),
    Story(
        storyTitle:
            'What? Such a cop out! Did you know traffic accidents are the second leading
cause of accidental death for most adult age groups?',
        choice1: 'Restart',
        choice2: ''),
    Story(
        storyTitle:
            'As you smash through the guardrail and careen towards the jagged rocks below you
reflect on the dubious wisdom of stabbing someone while they are driving a car you are in.',
        choice1: 'Restart',
        choice2: ''),
    ),
    Story(
        storyTitle:
            'You bond with the murderer while crooning verses of "Can you feel the love
tonight". He drops you off at the next town. Before you go he asks you if you know any good
places to dump bodies. You reply: "Try the pier."',
        choice1: 'Restart',
        choice2: ''),
    )
];

String getStory() {
    return _storyData[_storyNumber].storyTitle.toString();
}

dynamic getChoice1() {
    return _storyData[_storyNumber].choice1;
}

String getChoice2() {

```

```

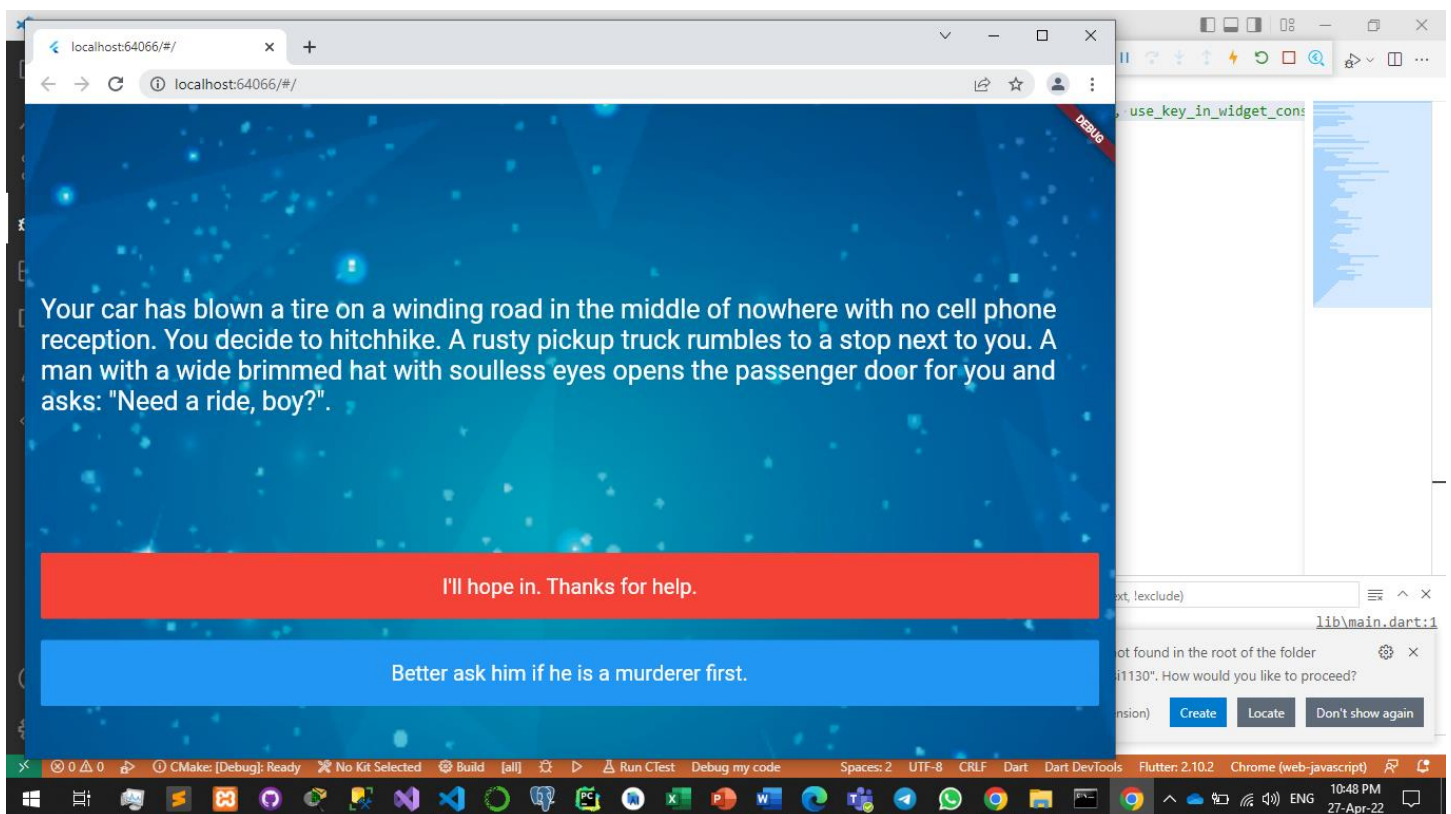
    return _storyData[_storyNumber].choice2.toString();
}

void Restart() {
  _storyNumber = 0;
}

void nextStory(int choiceNumber) {
  if (_storyNumber == 3 || _storyNumber == 4 || _storyNumber == 5) {
    Restart();
  } else if (choiceNumber == 1) {
    _storyNumber = _storyData[_storyNumber].choice1NextStory;
  } else {
    _storyNumber = _storyData[_storyNumber].choice2NextStory;
  }
}

bool buttonShouldBeVisible() {
  return _storyNumber == 0 || _storyNumber == 1 || _storyNumber == 2;
}
}

```



• Task 2

```
// ignore_for_file: prefer_const_constructors, prefer_const_literals_to_create_immutables,  
unused_local_variable, prefer_final_fields, unused_field, non_constant_identifier_names,  
missing_required_param
```

```
import 'Calculate.dart';  
import 'Result.dart';  
import 'package:flutter/material.dart';  
import 'package:font_awesome_flutter/font_awesome_flutter.dart';
```

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

```
enum Gender {  
  female,  
  male,  
}
```

```
class MyApp extends StatelessWidget {  
  const MyApp({Key? key}) : super(key: key);
```

```
  @override  
  Widget build(BuildContext context) {  
    const primaryColor = Color(0xff1c2135);  
    return MaterialApp(  
      theme: ThemeData(  
        primaryColor: primaryColor,  
      ),  
      home: Scaffold(  
        appBar: AppBar(  
          centerTitle: true,  
          backgroundColor: primaryColor,  
          title: Text('BMI CALCULATOR'),  
        ),  
        body: MyHomePage(),  
      ));  
  }  
}
```

```
class MyHomePage extends StatefulWidget {  
  const MyHomePage({Key? key}) : super(key: key);  
  
  @override  
  State<MyHomePage> createState() => _MyHomePageState();  
}
```

```

class _MyHomePageState extends State<MyHomePage> {
  Gender? SelectedGender;
  int height = 180;
  double _currentSliderValue = 20;
  int Weight = 80;
  int Age = 30;
  @override
  Widget build(BuildContext context) {
    const primaryColor = Color(0xff1c2135);

    return SingleChildScrollView(
      child: Center(
        child: Container(
          color: primaryColor,
          child: Padding(
            padding: const EdgeInsets.all(10),
            child: Column(children: [
              Row(
                children: [
                  Expanded(
                    child: GestureDetector(
                      onTap: () {
                        setState(() {
                          SelectedGender = Gender.male;
                        });
                      },
                    ),
                  Container(
                    decoration: BoxDecoration(
                      color: SelectedGender == Gender.male
                        ? Color.fromARGB(15, 206, 192, 194)
                        : Color(0xff24263b),
                      borderRadius: BorderRadius.only(
                        topLeft: Radius.circular(10),
                        topRight: Radius.circular(10),
                        bottomLeft: Radius.circular(10),
                        bottomRight: Radius.circular(10)),
                      boxShadow: [
                        BoxShadow(
                          color: Color(0xff24263b).withOpacity(0.5),
                          spreadRadius: 5,
                          blurRadius: 7,
                          offset: Offset(0, 3),
                        ),
                      ],
                    ),
                ],
              ),
              Padding(
                padding: const EdgeInsets.fromLTRB(15, 30, 15, 30),
                child: Column(children: [
                  Icon(

```

```
Icons.male,  
    size: 50,  
    color: Colors.white,  
),  
    SizedBox(  
      height: 20,  
    ),  
    Text(  
      'MALE',  
      style: TextStyle(color: Colors.white),  
    )  
  ],  
),  
),  
),  
  
SizedBox(  
  width: 20,  
),  
Expanded(  
  child: GestureDetector(  
    onTap: () {  
      setState(() {  
        SelectedGender = Gender.female;  
      });  
    },  
  ),  
  child: Container(  
    decoration: BoxDecoration(  
      color: SelectedGender == Gender.female  
        ? Color.fromARGB(15, 206, 192, 194)  
        : Color(0xff24263b),  
      borderRadius: BorderRadius.only(  
        topLeft: Radius.circular(10),  
        topRight: Radius.circular(10),  
        bottomLeft: Radius.circular(10),  
        bottomRight: Radius.circular(10)),  
      boxShadow: [  
        BoxShadow(  
          color: Color(0xff24263b).withOpacity(0.5),  
          spreadRadius: 5,  
          blurRadius: 7,  
          offset: Offset(0, 3),  
        ),  
      ],  
    ),  
    child: Padding(  
      padding: const EdgeInsets.fromLTRB(15, 30, 15, 30),  
      child: Column(children: [  
        Icon(  
          Icons.female,
```



```

        size: 50,
        color: Colors.white,
      ),
      SizedBox(
        height: 20,
      ),
      Text(
        'FEMALE',
        style: TextStyle(color: Colors.white),
      )
    ]),
  ),
),
),
),
],
),
SizedBox(
  height: 30,
),
Row(
  children: [
    Expanded(
      child: Container(
        decoration: BoxDecoration(
          color: Color(0xff24263b),
          borderRadius: BorderRadius.only(
            topLeft: Radius.circular(10),
            topRight: Radius.circular(10),
            bottomLeft: Radius.circular(10),
            bottomRight: Radius.circular(10)),
        boxShadow: [
          BoxShadow(
            color: Color(0xff24263b).withOpacity(0.5),
            spreadRadius: 5,
            blurRadius: 7,
            offset: Offset(0, 3),
          ),
        ],
      ),
    ),
    child: Padding(
      padding: const EdgeInsets.fromLTRB(15, 30, 15, 30),
      child: Column(children: [
        Text(
          'HEIGHT',
          style: TextStyle(color: Colors.white),
        ),
        SizedBox(
          height: 5,
        ),
      ],
    ),
  ],
),

```

```

Row(
  mainAxisAlignment: MainAxisAlignment.center,
  crossAxisAlignment: CrossAxisAlignment.baseline,
  textBaseline: TextBaseline.alphabetic,
  children: [
    Text(
      height.toString(),
      style: TextStyle(
        fontSize: 40.0,
        fontWeight: FontWeight.w900,
        color: Colors.white),
    ),
    Text(
      ' CM',
      style: TextStyle(color: Colors.white),
    )
  ],
),
Slider(
  value: height.toDouble(),
  min: 80,
  max: 220,
  activeColor: Colors.pink,
  onChanged: (double value) {
    setState(() {
      height = value.round();
    });
  },
),
]),
),
),
)
],
),
SizedBox(
  height: 30,
),
Row(
  children: [
    Expanded(
      child: GestureDetector(
        onTap: () {
          setState(() {});
        },
      ),
      child: Container(
        decoration: BoxDecoration(
          color: Color(0xff24263b),
          borderRadius: BorderRadius.only(
            topLeft: Radius.circular(10),

```

```

        topRight: Radius.circular(10),
        bottomLeft: Radius.circular(10),
        bottomRight: Radius.circular(10)),
    boxShadow: [
      BoxShadow(
        color: Color(0xff24263b).withOpacity(0.5),
        spreadRadius: 5,
        blurRadius: 7,
        offset: Offset(0, 3),
      ),
    ],
  ),
  child: Padding(
    padding: const EdgeInsets.fromLTRB(15, 30, 15, 30),
    child: Column(children: [
      Text(
        'WEIGHT',
        style: TextStyle(color: Colors.white),
      ),
      SizedBox(
        height: 10,
      ),
      Text(
        Weight.toString(),
        style: TextStyle(
          color: Colors.white,
          fontSize: 35,
        ),
      ),
      SizedBox(
        height: 10,
      ),
      Column(
        children: [
          Row(
            mainAxisAlignment: MainAxisAlignment.center,
            children: [
              RawMaterialButton(
                child: Icon(
                  FontAwesomeIcons.plus,
                  color: Colors.white,
                ),
                onPressed: () {
                  setState(() {
                    Weight++;
                  });
                },
                elevation: 0.0,
                constraints: BoxConstraints.tightFor(
                  width: 40.0,

```

[illegible]

```

boxShadow: [
  BoxShadow(
    color: Color(0xff24263b).withOpacity(0.5),
    spreadRadius: 5,
    blurRadius: 7,
    offset: Offset(0, 3),
  ),
],
),
child: Padding(
  padding: const EdgeInsets.fromLTRB(15, 30, 15, 30),
  child: Column(children: [
    Text(
      'AGE',
      style: TextStyle(color: Colors.white),
    ),
    SizedBox(
      height: 10,
    ),
    Text(
      Age.toString(),
      style: TextStyle(
        color: Colors.white,
        fontSize: 35,
      ),
    ),
    SizedBox(
      height: 10,
    ),
    Column(
      children: [
        Row(
          mainAxisAlignment: MainAxisAlignment.center,
          children: [
            RawMaterialButton(
              child: Icon(
                FontAwesomeIcons.plus,
                color: Colors.white,
              ),
              onPressed: () {
                setState(() {
                  Age++;
                });
              },
              elevation: 0.0,
              constraints: BoxConstraints.tightFor(
                width: 40.0,
                height: 40.0,
              ),
              fillColor: Color(0xFF4C4F5F),
            ),

```

[illegible]


```

appBar: AppBar(
  centerTitle: true,
  backgroundColor: primaryColor,
  title: Text('BMI CALCULATOR'),
),
body: Container(
  child: Row(
    crossAxisAlignment: CrossAxisAlignment.stretch,
    children: [
      Expanded(
        child: Container(
          color: primaryColor,
          child: Column(
            children: [
              SizedBox(
                height: 20,
              ),
              Row(
                mainAxisAlignment: MainAxisAlignment.center,
                children: [
                  Padding(
                    padding: const EdgeInsets.all(15.0),
                    child: Text(
                      'RESULT',
                      style:
                        TextStyle(fontSize: 30, color: Colors.white),
                    ),
                  )
                ],
              ),
            ],
          ),
          Padding(
            padding: const EdgeInsets.all(15.0),
            child: Container(
              decoration: BoxDecoration(
                borderRadius: BorderRadius.all(Radius.circular(20)),
                color: Color(0xff24263b),
              ),
              child: Padding(
                padding: EdgeInsets.fromLTRB(0, 50, 0, 50),
                child: Column(
                  crossAxisAlignment: CrossAxisAlignment.stretch,
                  children: [
                    Center(
                      child: Text(
                        Status.toString(),
                        style: TextStyle(
                          fontSize: 18, color: Colors.green),
                      ),
                    ),
                  ],
                ),
                SizedBox(

```



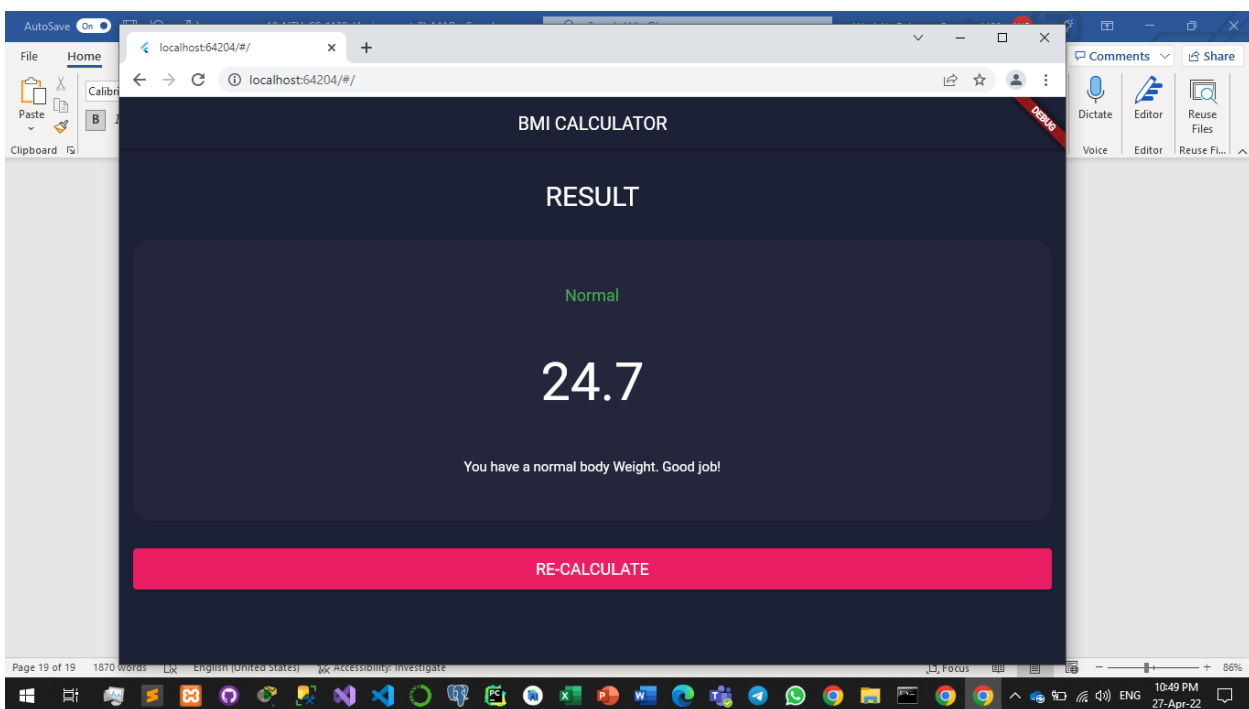
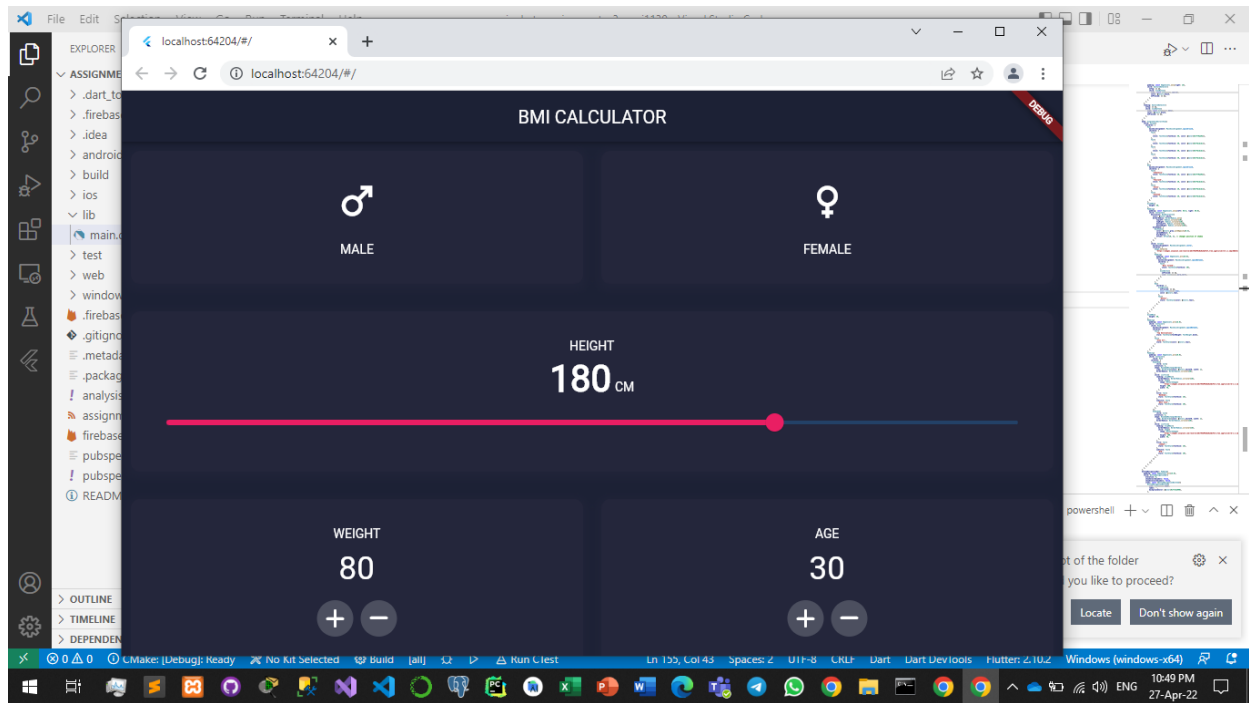
```
height: 50,  
),  
Center(  
  child: Text(  
    BMI.toString(),  
    style: TextStyle(  
      fontSize: 58, color: Colors.white),  
    ),  
  ),  
  SizedBox(  
    height: 50,  
  ),  
  Center(  
    child: Text(  
      Precaution.toString(),  
      style: TextStyle(  
        fontSize: 15, color: Colors.white),  
      ),  
    ),  
  ],  
),  
),  
),  
Padding(  
  padding: const EdgeInsets.all(15.0),  
  child: Row(  
    mainAxisAlignment: MainAxisAlignment.center,  
    children: [  
      Expanded(  
        child: GestureDetector(  
          onTap: () {},  
          child: ElevatedButton(  
            style: ElevatedButton.styleFrom(  
              primary: Colors.pink,  
              padding: EdgeInsets.symmetric(  
                horizontal: 30, vertical: 20),  
              textStyle: TextStyle(  
                fontSize: 18,  
              ),  
            ),  
            onPressed: () {  
              Navigator.push(  
                context,  
                MaterialPageRoute(  
                  builder: (context) => const MyApp()),  
              );  
            },  
            child: Text('RE-CALCULATE'),  
          ),  
        ),  
      ],  
    ),
```



```

    return 'You have a higher than a normal body Weight. Try to exercise more';
} else if (_BMI >= 18.5) {
    print('You have a normal body Weight. Good job!');
    return 'You have a normal body Weight. Good job!';
} else {
    print(
        'You have a lower than a normal body Weight. You can eat a bit more');
    return 'You have a lower than a normal body Weight. You can eat a bit more';
}
}
}

```



• Task 3

```
// ignore_for_file: prefer_const_constructors, prefer_const_literals_to_create_immutables,  
avoid_unnecessary_containers, sized_box_for_whitespace
```

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

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

```
class MyApp extends StatelessWidget {  
  const MyApp({Key? key}) : super(key: key);
```

```
  @override  
  Widget build(BuildContext context) {  
    return MaterialApp(  
      debugShowCheckedModeBanner: false,  
      home: const MyHomePage(),  
    );  
  }  
}
```

```
class MyHomePage extends StatefulWidget {  
  const MyHomePage({  
    Key? key,  
  }) : super(key: key);  
  
  @override  
  State<MyHomePage> createState() => _MyHomePageState();  
}
```

```
class _MyHomePageState extends State<MyHomePage> {  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      backgroundColor: Colors.white,  
      appBar: AppBar(  
        backgroundColor: Colors.white,  
        foregroundColor: Colors.black,  
        elevation: 0,  
        title: Center(child: Text("Discover")),  
        actions: <Widget>[  
          Padding(  
            padding: const EdgeInsets.only(right: 15),  
            child: GestureDetector(  
              onTap: () {},  
              child: IconButton(  

```

```

        icon: const Icon(Icons.search),
        color: Colors.black,
        onPressed: () {},
      ),
    ),
  ],
  leading: GestureDetector(
    onTap: () {},
    child: IconButton(
      icon: const Icon(Icons.menu),
      color: Colors.black,
      onPressed: () {},
    ),
  ),
  body: SingleChildScrollView(
    child: Column(
      children: [
        Row(
          mainAxisAlignment: MainAxisAlignment.spaceAround,
          children: [
            Text(
              '...',
              style: TextStyle(fontSize: 40, color: Color(0xff79ae9e)),
            ),
            Text(
              '...',
              style: TextStyle(fontSize: 40, color: Color(0xffdcddcd)),
            ),
            Text(
              '...',
              style: TextStyle(fontSize: 40, color: Color(0xffdcddcd)),
            ),
            Text(
              '...',
              style: TextStyle(fontSize: 40, color: Color(0xffdcddcd)),
            ),
          ],
        ),
        Row(
          mainAxisAlignment: MainAxisAlignment.spaceAround,
          children: [
            Text(
              'Indonesia',
              style: TextStyle(fontSize: 20, color: Color(0xff79ae9e)),
            ),
            Text(
              'Thailand',
              style: TextStyle(fontSize: 20, color: Color(0xffdcddcd)),
            ),
          ],
        ),
      ],
    ),
  ),
),

```

```

    ),
    Text(
      'China',
      style: TextStyle(fontSize: 20, color: Color(0xffdcddcdc)),
    ),
    Text(
      'Vietnam',
      style: TextStyle(fontSize: 20, color: Color(0xffdcddcdc)),
    )
  ],
),
 SizedBox(
  height: 50,
),
 Padding(
  padding: const EdgeInsets.only(left: 50.0, right: 50.0),
  child: Container(
    decoration: BoxDecoration(
      color: Colors.white,
      borderRadius: BorderRadius.only(
        topLeft: Radius.circular(10),
        topRight: Radius.circular(10),
        bottomLeft: Radius.circular(10),
        bottomRight: Radius.circular(10)),
    boxShadow: [
      BoxShadow(
        color: Colors.grey.withOpacity(0.5),
        spreadRadius: 5,
        blurRadius: 7,
        offset: Offset(0, 3), // changes position of shadow
      ),
    ],
  ),
  child: Column(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Image.network(
        'https://images.unsplash.com/resize/3200x2400/photo-1517821792223-c8d10e837835?ixlib=rb-1.2.1&q=80&fm=jpg&crop=entropy&cs=tinsrrgb&w=1080&fit=max',
      ),
      Padding(
        padding: const EdgeInsets.all(10.0),
        child: Row(
          mainAxisAlignment: MainAxisAlignment.spaceBetween,
          children: [
            Text(
              'Bali Island',
              style: TextStyle(fontSize: 20),
            ),
            IconButton(

```

[illegible]

```

        child: Card(
          elevation: 5,
          shape: RoundedRectangleBorder(
            side: BorderSide(color: Colors.white70, width: 1),
            borderRadius: BorderRadius.circular(20),
          ),
          child: ListTile(
            leading: ClipRRect(
              borderRadius: BorderRadius.circular(18),
              child: Image(
                image: NetworkImage(
                  'https://images.unsplash.com/reserve/b0vf94dPRxWu0u3QsPjF_tree.
jpg?ixlib=rb-1.2.1&q=80&fm=jpg&crop=entropy&cs=tinysrgb&w=1080&fit=max'),
                height: 100,
                width: 70,
              ),
            ),
            title: Text(
              'Bandung',
              style: TextStyle(fontSize: 16),
            ),
            subtitle: Text(
              'West Java',
              style: TextStyle(fontSize: 10),
            ),
          ),
        ),
      ),
    Expanded(
      child: Card(
        elevation: 5,
        shape: RoundedRectangleBorder(
          side: BorderSide(color: Colors.white70, width: 1),
          borderRadius: BorderRadius.circular(20),
        ),
        child: ListTile(
          leading: ClipRRect(
            borderRadius: BorderRadius.circular(18),
            child: Image(
              image: NetworkImage(
                'https://images.unsplash.com/reserve/b0vf94dPRxWu0u3QsPjF_tree.
jpg?ixlib=rb-1.2.1&q=80&fm=jpg&crop=entropy&cs=tinysrgb&w=1080&fit=max'),
              height: 100,
              width: 70,
            ),
          ),
          title: Text(
            'Lombok',
            style: TextStyle(fontSize: 16),
          ),
          subtitle: Text(

```



```

        'NTB',
        style: TextStyle(fontSize: 10),
      ),
    ),
  ))
],
)),
),
],
),
),
bottomNavigationBar: Padding(
  padding: const EdgeInsets.all(15.0),
  child: BottomNavigationBar(
    elevation: 0,
    showSelectedLabels: false,
    showUnselectedLabels: false,
    items: const <BottomNavigationBarItem>[
      BottomNavigationBarItem(
        icon: Icon(Icons.home),
        label: '',
        backgroundColor: Color(0xff23a990),
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.navigation),
        label: '',
        backgroundColor: Colors.green,
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.star),
        label: '',
        backgroundColor: Colors.purple,
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.person),
        label: '',
        backgroundColor: Colors.pink,
      ),
    ],
  ),
),
);
}
}

```

