



Flutter App Development Course

DAY # 5

Task 1:

Source Code:

Main.dart

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

QuizBrain quizBrain = QuizBrain();

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

class MyApp extends StatelessWidget {
  // This widget is the root of your application.
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      home: QuizPage(),
    );
  }
}
```



```
}
```

```
// =====
```

```
class QuizPage extends StatefulWidget {  
  @override  
  _QuizPageState createState() => _QuizPageState();  
}
```

```
class _QuizPageState extends State<QuizPage> {
```

```
  List<Icon> scores = [];
```

```
  void checkAns(bool userPickedAns){
```

```
    bool correctAnswer = quizBrain.getCorrectAns();  
    setState(() {
```

```
      //TODO: Step 4 - Use IF/ELSE to check if we've reached the end of the quiz. If so,
```

```
      //On the next line, you can also use if (quizBrain.isFinished()) {}, it does the same thing.
```

```
      if (quizBrain.isFinished() == true) {
```

```
        //TODO Step 4 Part A - show an alert using rFlutter_alert,
```

```
        //This is the code for the basic alert from the docs for rFlutter Alert:
```

```
        //Alert(context: context, title: "RFLUTTER", desc: "Flutter is awesome.").show();
```

```
        //Modified for our purposes:
```

```
        Alert(  
          title: "RFLUTTER",  
          desc: "Flutter is awesome.",  
          context: context,  
          duration: Duration(seconds: 5),  
          type: AlertType.success,  
          icon: Icons.check,  
          actions: [  
            TextButton(
```



```
context: context,  
title: 'Complete !',  
desc: 'You have completed your quiz.',  
).show();
```

```
//TODO Step 4 Part C - reset the questionNumber,  
quizBrain.reset();  
scores = [];
```

```
//TODO Step 4 Part D - empty out the scoreKeeper.
```

```
}
```

```
else{  
if (userPickedAns == correctAnswer){  
print("User picked it Right!!");  
scores.add(Icon(Icons.check,color: Colors.green,size: 32,));
```

```
} else {  
print("User Picked it Wrong !!");  
scores.add(Icon(Icons.close,color: Colors.red,size: 32,));  
}
```

```
quizBrain.nextQuestion(); }  
});
```

```
}
```



```
// List <String> questions = [  
  // "Is Karachi the Biggest City of Pakistan ?",  
  // "Pakistan's Capital is Islamabad ?",  
  // "Pakistan Cricket Team has won 2 T20 Worldcups ?",  
  // "Is Munzesta Solution located in Pakistan ?",  
  // "Is Munzesta Solution giving their 100% to teach you ?",  
  // "Does Flutter support any other programming language other then dart ?",  
  
  // ];  
  
  // List <bool> answers = [true, true, false, true, true, false];  
  
  // List <Question> questionBank = [  
    // Question (q: "Is Karachi the Biggest City of Pakistan ", a: true ),  
    // Question (q: "Pakistan's Capital is Islamabad ?", a: true ),  
    // Question (q: "Pakistan Cricket Team has won 2 T20 Worldcups ?", a: false ),  
    // Question (q: "Is Munzesta Solution located in Pakistan ?", a: true ),  
    // Question (q: "Is Munzesta Solution giving their 100% to teach you ?", a: true ),  
    // Question (q: "Does Flutter support any other programming language other then dart ?", a: false ),  
  
    // ];  
  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      backgroundColor: Colors.black,  
      body: Stack(  
        children: [
```



children: [

Stack(

children: [

Positioned(

child: Container(margin: EdgeInsets.only(top:440) ,height: 330, width:
MediaQuery.of(context).size.width, alignment: Alignment.bottomCenter,

decoration: BoxDecoration(

gradient: LinearGradient(

begin: Alignment.topCenter , end: Alignment.bottomCenter ,

colors: [Colors.grey, Colors.grey[800]]),

borderRadius: BorderRadius.only(topRight: Radius.circular(120) , topLeft: Radius.circular(120))

),

),

)

],

),

Column(

children: [

//Question

Center(child: Container(margin: EdgeInsets.only(top: 40, bottom: 20), height: 330, width: 400,

decoration: BoxDecoration(



```
// shape;
// boxShadow: [BoxShadow(color: Colors.lime[10],blurRadius: 8,spreadRadius: 1),],
color: Colors.grey[800],
gradient: LinearGradient(
  begin: Alignment.topCenter , end: Alignment.bottomCenter ,
  colors: [Colors.grey[800], Colors.grey]),
borderRadius: BorderRadius.only( bottomLeft: Radius.circular(120) , bottomRight:
Radius.circular(120) )
),
child: Center(child: Padding(
  padding: const EdgeInsets.all(20.0),
  child: Text(quizBrain.getQuestionText(), style: TextStyle(fontSize: 20),
),
)),
)),

// Scores
Padding(
  padding: const EdgeInsets.only(bottom:15.0 , ),
  child: Row( mainAxisAlignment: MainAxisAlignment.center,
    children: scores,),
),

// True Btn
// Container(margin: EdgeInsets.only(top: 100),height: 60, width: 200,
// child: ElevatedButton(onPressed: (){
//   checkAns(true);

// }, child: Text("True"))),
```



```
Padding(  
  padding: const EdgeInsets.only(top:100, ),  
  child: Center(  
    child: Container(  
      // margin: EdgeInsets.only(top: 250, ),  
      width: 185, height: 55,  
      decoration: BoxDecoration(  
        boxShadow: [ BoxShadow(color: Colors.green[900], blurRadius: 8, spreadRadius: 1, offset: Offset(1,  
3))),  
        borderRadius: BorderRadius.circular(30),  
        gradient: LinearGradient(colors: [Colors.green[900], Colors.green[600],Colors.green[900] ])  
      ),  
  
      child: ElevatedButton(style: ElevatedButton.styleFrom(  
        shadowColor: Colors.transparent,  
        elevation: 0,  
        onPressed: Colors.white,  
        primary: Colors.transparent,  
        shape: RoundedRectangleBorder(  
          borderRadius: BorderRadius.circular(20)  
        )),  
        onPressed: (){  
          checkAns(true);  
        }, child:  
        Text("True", style: TextStyle(letterSpacing: 2 , fontWeight: FontWeight.bold)),  
      ),  
    ),  
  ),  
),
```



SHAHAB ALAM



```

    ),
  ),
),

// False btn

Container(margin: EdgeInsets.only(top: 40),height : 60, width: 200,
child: ElevatedButton(
style: ElevatedButton.styleFrom(

),

onPressed: (){
checkAns(false);

}, child: Text("False")
)),

Padding(
padding: const EdgeInsets.only(top:40 , ),
child: Center(
child: Container(
margin: EdgeInsets.only(top: 250, ),
width: 185, height: 55,
decoration: BoxDecoration(
boxShadow: [ BoxShadow(color: Colors.red[900], blurRadius: 8, spreadRadius: 1, offset: Offset(1,
3))],
borderRadius: BorderRadius.circular(30),
gradient: LinearGradient(colors: [Colors.red[900], Colors.red[600],Colors.red[900] ])
),

```




```
child: ElevatedButton(style: ElevatedButton.styleFrom(
  shadowColor: Colors.transparent,
  elevation: 0,
  onPrimary: Colors.white,
  primary: Colors.transparent,
  shape: RoundedRectangleBorder(
    borderRadius: BorderRadius.circular(20)
  )),
  onPressed: (){
    checkAns(false);
  }, child:
  Text("False", style: TextStyle(letterSpacing: 2 , fontWeight: FontWeight.bold))),
),
),
),

// TODO: add any widget here , testing todo comment

],
),

],
),.);
}
}
```



Quiz_brain.dart

```
import 'question.dart';

class QuizBrain {

  int _questionNo = 0;

  List<Question> _questionBank = [
    Question(qtn: 'Pakistan was founded in 1947', ans: true),
    Question(qtn: 'Flutter is maintained by Facebook', ans: false),
    Question(qtn: "Is Munzesta Solution located in Pakistan ?", ans: true),
    Question(qtn: 'Firebase is one of the backend databases for Flutter', ans: true),
    Question(qtn: 'Is E=mc^3 ?', ans: false),
    Question(qtn: "Pakistan Cricket Team has won 2 T20 Worldcups ?", ans: false),
    Question(qtn: 'More CPU cores means slower PC', ans: false),
    Question(qtn: 'Ram makes PC faster', ans: true),
    Question(qtn: 'Laptop has no heating issues', ans: false),
  ];

  void nextQuestion(){
    if(_questionNo < _questionBank.length - 1){
      _questionNo++;
    }
    print(_questionNo);
    print(_questionBank.length);
  }

  String getQuestionText(){
    return _questionBank[_questionNo].questionText;
  }
}
```



```
}
```

```
bool getCorrectAns() {  
    return _questionBank[_questionNo].questionAnswer;  
}
```

```
bool isFinished() {  
    if (_questionNo >= _questionBank.length - 1) {  
        //TODO: Step 3 Part B - Use a print statement to check that isFinished is returning true when you are indeed at  
        the end of the quiz and when a restart should happen.
```

```
        print('Now returning true');  
        return true;
```

```
    } else {  
        return false;  
    }  
}
```

```
//TODO: Step 4 part B - Create a reset() method here that sets the questionNumber back to 0.  
void reset() {  
    _questionNo = 0;  
}  
}
```



Question.dart

```
class Question {  
  String questionText='';  
  bool questionAnswer = true;  
  
  Question({String qtn='', bool ans=false}) {  
    questionText = qtn;  
    questionAnswer = ans;  
  }  
}
```



Output:





