

|                                               |                                                                         |
|-----------------------------------------------|-------------------------------------------------------------------------|
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## Aim

Build a quiz app using Flutter.

## Objectives

Develop app for a general knowledge quiz.

## Theory

Flutter is an open-source UI software development kit created by Google. It is used to develop cross platform applications for Android, iOS, Linux, macOS, Windows, Google Fuchsia, and the web from a single codebase.

Flutter apps are written in the Dart language and make use of many of the language's more advanced features.

While writing and debugging an application, Flutter runs in the Dart virtual machine, which features a just-in-time execution engine. This allows for fast compilation times as well as "hot reload", with which modifications to source files can be injected into a running application. Flutter extends this further with support for stateful hot reload, where in most cases changes to source code are reflected immediately in the running app without requiring a restart or any loss of state.

For better performance, release versions of Flutter apps on all platforms use ahead-of-time (AOT) compilation.

Flutter's engine, written primarily in C++, provides low-level rendering support using Google's Skia graphics library. Additionally, it interfaces with platform-specific SDKs such as those provided by Android and iOS. The Flutter Engine is a portable runtime for hosting Flutter applications. It implements Flutter's core libraries, including animation and graphics, file and network I/O, accessibility support, plugin architecture, and a Dart runtime and compile toolchain. Most developers interact with Flutter via the Flutter Framework, which provides a reactive framework and a set of platform, layout, and foundation widgets.

## Code

*main.dart:*

```
import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedmainwidget/GeneratedMainWidget
.dart';
import
'package:flutterapp/gkquiz2app/generatedhowtoplaywidget/GeneratedHowto
PlayWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedsuccesswidget/GeneratedSuccess
Widget.dart';
import
'package:flutterapp/gkquiz2app/generatedstartwidget/GeneratedStartWidg
et.dart';
import
'package:flutterapp/gkquiz2app/generatedstartbuttonpressedwidget/Gener
atedStartButtonpressedWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedq1wronganswerwidget/GeneratedQ
1WrongAnswerWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedretrybuttonwidget2/GeneratedRe
tryButtonWidget2.dart';
import
'package:flutterapp/gkquiz2app/generatedq1widget/GeneratedQ1Widget.dar
t';
import
'package:flutterapp/gkquiz2app/generatedoptionawidget1/GeneratedOption
aWidget1.dart';
import
'package:flutterapp/gkquiz2app/generatedoptionbwidget1/GeneratedOption
bWidget1.dart';
import
'package:flutterapp/gkquiz2app/generatedoptioncwidget1/GeneratedOption
cWidget1.dart';
import
'package:flutterapp/gkquiz2app/generatedoptiondwidget1/GeneratedOption
dWidget1.dart';
import
'package:flutterapp/gkquiz2app/generatedq1rightanswerwidget/GeneratedQ
1RightAnswerWidget.dart';

void main() {
```

```

    runApp(Gkquiz2App());
}

class Gkquiz2App extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      theme: ThemeData(
        primarySwatch: Colors.blue,
      ),
      initialRoute: '/GeneratedMainWidget',
      routes: {
        '/GeneratedMainWidget': (context) => GeneratedMainWidget(),
        '/GeneratedHowtoPlayWidget': (context) =>
GeneratedHowtoPlayWidget(),
        '/GeneratedSuccessWidget': (context) =>
GeneratedSuccessWidget(),
        '/GeneratedStartWidget': (context) => GeneratedStartWidget(),
        '/GeneratedStartButtonpressedWidget': (context) =>
          GeneratedStartButtonpressedWidget(),
        '/GeneratedQ1WrongAnswerWidget': (context) =>
          GeneratedQ1WrongAnswerWidget(),
        '/GeneratedRetryButtonWidget2': (context) =>
          GeneratedRetryButtonWidget2(),
        '/GeneratedQ1Widget': (context) => GeneratedQ1Widget(),
        '/GeneratedOptionaWidget1': (context) =>
GeneratedOptionaWidget1(),
        '/GeneratedOptionbWidget1': (context) =>
GeneratedOptionbWidget1(),
        '/GeneratedOptioncWidget1': (context) =>
GeneratedOptioncWidget1(),
        '/GeneratedOptiondWidget1': (context) =>
GeneratedOptiondWidget1(),
        '/GeneratedQ1RightAnswerWidget': (context) =>
          GeneratedQ1RightAnswerWidget(),
      },
    );
  }
}

```

## Howtoplay.dart

```
import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedhowtoplaywidget/generated/GeneratedRulesareeasyYouwillbegivenaquestionAnswerrightandyouwin.dart';
import
'package:flutterapp/gkquiz2app/generatedhowtoplaywidget/generated/GeneratedBackWidget.dart';

/* Frame HowtoPlay
   Autogenerated by FlutLab FTF Generator
*/
class GeneratedHowtoPlayWidget extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: ClipRRect(
        borderRadius: BorderRadius.circular(30.0),
        child: Container(
          width: 360.0,
          height: 640.0,
          decoration: BoxDecoration(
            borderRadius: BorderRadius.circular(30.0),
          ),
          child: Stack(
            fit: StackFit.expand,
            alignment: Alignment.center,
            clipBehavior: Clip.none,
            children: [
              ClipRRect(
                borderRadius: BorderRadius.circular(30.0),
                child: Container(
                  color: Color.fromARGB(255, 240, 234, 214),
                ),
              ),
              Positioned(
                left: 41.0,
                top: 140.0,
                right: null,
                bottom: null,
                width: 281.0,
                height: 362.0,
                child:
                  GeneratedRulesareeasyYouwillbegivenaquestionAnswer
                    rightandyouwin(),
              ),
            ],
          ),
        ),
      ),
    );
  }
}
```

```

        ),
        Positioned(
          left: 56.0,
          top: 72.0,
          right: null,
          bottom: null,
          width: 30.0,
          height: 0.0,
          child: GeneratedBackWidget(),
        )
      ]),
    ),
  ));
}
}

```

### Mainpage.dart

```

import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedmainwidget/generated/Generated
WelcomeWidget.dart';

/* Frame Main
   Autogenerated by FlutLab FTF Generator
*/
class GeneratedMainWidget extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: GestureDetector(
        onTap: () => Navigator.pushNamed(context,
'/GeneratedStartWidget'),
        child: ClipRRect(
          borderRadius: BorderRadius.circular(30.0),
          child: Container(
            width: 360.0,
            height: 640.0,
            decoration: BoxDecoration(
              borderRadius: BorderRadius.circular(30.0),
            ),
            child: Stack(
              fit: StackFit.expand,
              alignment: Alignment.center,
              clipBehavior: Clip.none,

```

```

        children: [
          ClipRRect(
            borderRadius: BorderRadius.circular(30.0),
            child: Container(
              color: Color.fromARGB(255, 240, 234, 214),
            ),
          ),
          Positioned(
            left: 56.0,
            top: 270.0,
            right: null,
            bottom: null,
            width: 253.0,
            height: 105.0,
            child: GeneratedWelcomeWidget(),
          ),
        ]),
      ),
    ));
  }
}

```

### *Rightanswer.dart*

```

import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedq1rightanswerwidget/generated/
GeneratedStartButtonWidget3.dart';
import
'package:flutterapp/gkquiz2app/generatedq1rightanswerwidget/generated/
GeneratedStartButtonWidget2.dart';
import
'package:flutterapp/gkquiz2app/generatedq1rightanswerwidget/generated/
GeneratedWhichanimalisknownastheShipoftheDesertWidget1.dart';
import
'package:flutterapp/gkquiz2app/generatedq1rightanswerwidget/generated/
GeneratedStartButtonWidget1.dart';
import
'package:flutterapp/gkquiz2app/generatedq1rightanswerwidget/generated/
GeneratedStartButtonWidget4.dart';

/* Frame Q1RightAnswer
   Autogenerated by FlutLab FTF Generator
*/

```

```

class GeneratedQ1RightAnswerWidget extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: GestureDetector(
        onTap: () => Navigator.pushNamed(context,
'/GeneratedSuccessWidget'),
        child: ClipRRect(
          borderRadius: BorderRadius.circular(30.0),
          child: Container(
            width: 360.0,
            height: 640.0,
            decoration: BoxDecoration(
              borderRadius: BorderRadius.circular(30.0),
            ),
            child: Stack(
              fit: StackFit.expand,
              alignment: Alignment.center,
              clipBehavior: Clip.none,
              children: [
                ClipRRect(
                  borderRadius: BorderRadius.circular(30.0),
                  child: Container(
                    color: Color.fromARGB(255, 240, 234, 214),
                  ),
                ),
                Positioned(
                  left: 60.0,
                  top: 260.0,
                  right: null,
                  bottom: null,
                  width: 240.0,
                  height: 60.0,
                  child: GeneratedStartButtonWidget1(),
                ),
                Positioned(
                  left: 60.0,
                  top: 340.0,
                  right: null,
                  bottom: null,
                  width: 240.0,
                  height: 60.0,
                  child: GeneratedStartButtonWidget2(),
                ),
                Positioned(

```

```

        left: 60.0,
        top: 420.0,
        right: null,
        bottom: null,
        width: 240.0,
        height: 60.0,
        child: GeneratedStartButtonWidget3(),
      ),
      Positioned(
        left: 60.0,
        top: 500.0,
        right: null,
        bottom: null,
        width: 240.0,
        height: 60.0,
        child: GeneratedStartButtonWidget4(),
      ),
      Positioned(
        left: 41.0,
        top: 70.0,
        right: null,
        bottom: null,
        width: 281.0,
        height: 122.0,
        child:
          GeneratedWhichanimalisknownastheShipoftheDesertW
idget1(),
      ),
    ],
  ),
),
));
}
}

```

### Question.dart

```

import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedq1widget/generated/GeneratedOp
tionbWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedq1widget/generated/GeneratedOp
tionaWidget.dart';

```



```

import
'package:flutterapp/gkquiz2app/generatedq1widget/generated/GeneratedOptiondWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedq1widget/generated/GeneratedOptioncWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedq1widget/generated/GeneratedWhichanimalisknownastheShipoftheDesertWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedq1widget/generated/GeneratedExitButtonWidget.dart';

/* Frame Q1
   Autogenerated by FlutLab FTF Generator
  */
class GeneratedQ1Widget extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: ClipRRect(
        borderRadius: BorderRadius.circular(30.0),
        child: Container(
          width: 360.0,
          height: 640.0,
          decoration: BoxDecoration(
            borderRadius: BorderRadius.circular(30.0),
          ),
          child: Stack(
            fit: StackFit.expand,
            alignment: Alignment.center,
            clipBehavior: Clip.none,
            children: [
              ClipRRect(
                borderRadius: BorderRadius.circular(30.0),
                child: Container(
                  color: Color.fromARGB(255, 240, 234, 214),
                ),
              ),
              Positioned(
                left: 60.0,
                top: 260.0,
                right: null,
                bottom: null,
                width: 240.0,

```

```

        height: 60.0,
        child: GeneratedOptionaWidget(),
    ),
    Positioned(
      left: 61.0,
      top: 340.0,
      right: null,
      bottom: null,
      width: 240.0,
      height: 60.0,
      child: GeneratedOptionbWidget(),
    ),
    Positioned(
      left: 61.0,
      top: 420.0,
      right: null,
      bottom: null,
      width: 240.0,
      height: 60.0,
      child: GeneratedOptioncWidget(),
    ),
    Positioned(
      left: 61.0,
      top: 500.0,
      right: null,
      bottom: null,
      width: 240.0,
      height: 60.0,
      child: GeneratedOptiondWidget(),
    ),
    Positioned(
      left: 41.0,
      top: 100.0,
      right: null,
      bottom: null,
      width: 281.0,
      height: 122.0,
      child:
GeneratedWhichanimalisknownastheShipoftheDesertWidget(),
    ),
    Positioned(
      left: 298.0,
      top: 50.0,
      right: null,
      bottom: null,

```

```

        width: 22.0,
        height: 30.0,
        child: GeneratedExitButtonWidget(),
      ),
    ]),
  ),
));
}
}

```

### *Wronganswer.dart*

```

import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedq1wronganswerwidget/generated/
GeneratedRetryButtonWidget1.dart';
import
'package:flutterapp/gkquiz2app/generatedq1wronganswerwidget/generated/
GeneratedOopsYougotitwrongWouldyouliketotryagainWidget.dart';

/* Frame Q1WrongAnswer
   Autogenerated by FlutLab FTF Generator
*/
class GeneratedQ1WrongAnswerWidget extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: ClipRRect(
        borderRadius: BorderRadius.circular(30.0),
        child: Container(
          width: 360.0,
          height: 640.0,
          decoration: BoxDecoration(
            borderRadius: BorderRadius.circular(30.0),
          ),
          child: Stack(
            fit: StackFit.expand,
            alignment: Alignment.center,
            clipBehavior: Clip.none,
            children: [
              ClipRRect(
                borderRadius: BorderRadius.circular(30.0),
                child: Container(
                  color: Color.fromARGB(255, 240, 234, 214),
                ),
              ),
            ],
          ),
        ),
      ),
    );
  }
}

```

```

        ),
        Positioned(
          left: 40.0,
          top: 120.0,
          right: null,
          bottom: null,
          width: 281.0,
          height: 202.0,
          child:
GeneratedOopsYougotitwrongWouldyouliketotryagainWidget(),
        ),
        Positioned(
          left: 60.0,
          top: 377.0,
          right: null,
          bottom: null,
          width: 240.0,
          height: 60.0,
          child: GeneratedRetryButtonWidget1(),
        )
      ]),
    ),
  ));
}
}

```

## Firstpage.dart

```

import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedstartwidget/generated/Generate
dOrDoyouwanttoknowhowtoplayWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedstartwidget/generated/Generate
dStartButtonWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedstartwidget/generated/Generate
dGuideButtonWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedstartwidget/generated/Generate
dReadytotestyourGeneralKnowledgeWidget.dart';

/* Frame Start
   Autogenerated by FlutLab FTF Generator
  */

```

```

class GeneratedStartWidget extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: ClipRRect(
        borderRadius: BorderRadius.circular(30.0),
        child: Container(
          width: 360.0,
          height: 640.0,
          decoration: BoxDecoration(
            borderRadius: BorderRadius.circular(30.0),
          ),
          child: Stack(
            fit: StackFit.expand,
            alignment: Alignment.center,
            clipBehavior: Clip.none,
            children: [
              ClipRRect(
                borderRadius: BorderRadius.circular(30.0),
                child: Container(
                  color: Color.fromARGB(255, 240, 234, 214),
                ),
              ),
              Positioned(
                left: 60.0,
                top: 188.0,
                right: null,
                bottom: null,
                width: 240.0,
                height: 60.0,
                child: GeneratedStartButtonWidget(),
              ),
              Positioned(
                left: 60.0,
                top: 463.0,
                right: null,
                bottom: null,
                width: 240.0,
                height: 60.0,
                child: GeneratedGuideButtonWidget(),
              ),
              Positioned(
                left: 41.0,
                top: 85.0,
                right: null,

```

```

        bottom: null,
        width: 281.0,
        height: 82.0,
        child:
GeneratedReadytotestyourGeneralKnowledgeWidget(),
      ),
      Positioned(
        left: 41.0,
        top: 320.0,
        right: null,
        bottom: null,
        width: 281.0,
        height: 122.0,
        child: GeneratedOrdoyouwanttoknowhowtoplayWidget(),
      )
    ]),
  ),
));
}
}

```

## Successpage.dart

```

import 'package:flutter/material.dart';
import
'package:flutterapp/gkquiz2app/generatedsuccesswidget/generated/Genera
tedRetryButtonWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedsuccesswidget/generated/Genera
tedBravoWidget.dart';
import
'package:flutterapp/gkquiz2app/generatedsuccesswidget/generated/Genera
tedYoudidwellWouldyouliketotryagainWidget.dart';

/* Frame Success
   Autogenerated by FlutLab FTF Generator
*/
class GeneratedSuccessWidget extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Material(
      child: GestureDetector(
        onTap: () => Navigator.pushNamed(context,
'/GeneratedStartWidget'),
        child: ClipRRect(

```

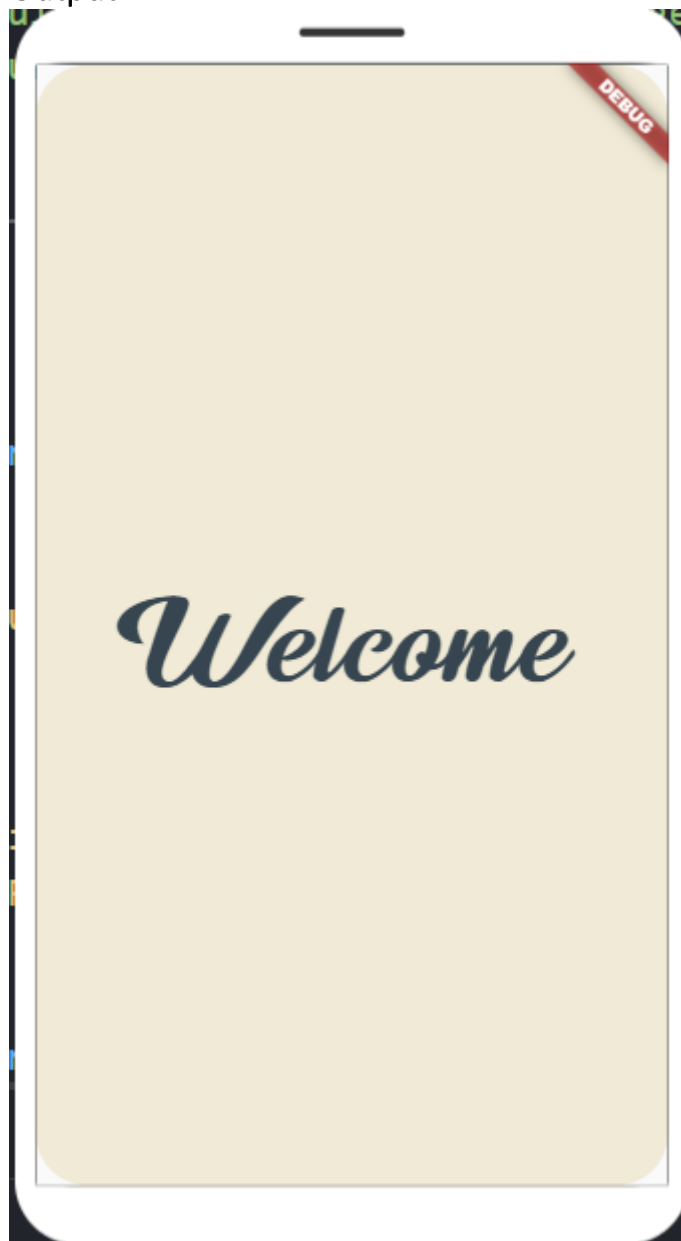
```

borderRadius: BorderRadius.circular(30.0),
child: Container(
  width: 360.0,
  height: 640.0,
  decoration: BoxDecoration(
    borderRadius: BorderRadius.circular(30.0),
  ),
  child: Stack(
    fit: StackFit.expand,
    alignment: Alignment.center,
    clipBehavior: Clip.none,
    children: [
      ClipRRect(
        borderRadius: BorderRadius.circular(30.0),
        child: Container(
          color: Color.fromARGB(255, 240, 234, 214),
        ),
      ),
      Positioned(
        left: 77.0,
        top: 67.0,
        right: null,
        bottom: null,
        width: 208.0,
        height: 82.0,
        child: GeneratedBravoWidget(),
      ),
      Positioned(
        left: 40.0,
        top: 210.0,
        right: null,
        bottom: null,
        width: 281.0,
        height: 162.0,
        child:
GeneratedYoudidwellWouldyouliketotryagainWidget(),
      ),
      Positioned(
        left: 60.0,
        top: 442.0,
        right: null,
        bottom: null,
        width: 240.0,
        height: 60.0,
        child: GeneratedRetryButtonWidget(),

```

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

Output





DEBUG

*Ready to test your  
General Knowledge*

*Start*

*Or  
Do you want to know  
how to play?*

*How to Play*

DEBUG

←

*Rules are easy.  
You will be given a  
question.*

*Answer right and you  
win.*

*On a wrong answer you  
will get to retry.*

DEBUG

7

*Which animal is known  
as the 'Ship of the  
Desert'?*

*A. Lion*

*B. Camel*

*C. Whale*

*D. Elephant*

DEBUG

*Oops*

*You got it wrong*

*Would you like to try  
again??*



DEBUG

*Which animal is known  
as the 'Ship of the  
Desert'?*

*A. Lion*

*B. Camel*

*C. Whale*

*D. Elephant*



## Conclusion

Hence, we were able to build a general knowledge quiz app in flutter.