

Exp 2: Main.dart(flutter UI using common widget)

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

void main() => runApp(MaterialApp(
  home: CollegedCard(),
));

class CollegedCard extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.white,
      appBar: AppBar(
        title: Text('College ID Card'),
        centerTitle: true,
        backgroundColor: Colors.pink[900],
        elevation: 0.0,
      ),
      body: Padding(
        padding: const EdgeInsets.fromLTRB(30.0, 40.0, 30.0, 0),
        child: Column(
          crossAxisAlignment: CrossAxisAlignment.start,
          children: <Widget>[
            Center(
              child: CircleAvatar(
                radius: 60.0,
                backgroundImage: AssetImage('img/picc.jpeg'),
              ),
            ),
            Divider(
              color: Colors.grey[800],
              height: 60.0,
            ),
            Text(
              'STUDENT NAME',
              style: TextStyle(
                color: Colors.grey,
                letterSpacing: 2.0,
              ),
            ),
            SizedBox(height: 10.0),
            Text(
              'Rutuja Navghane',
              style: TextStyle(
                color: Colors.pink[300],
                fontWeight: FontWeight.bold,
                fontSize: 18.0,
                letterSpacing: 2.0,
              ),
            ),
            SizedBox(height: 30.0),
            Text(
```

```

'COLLEGE ADDRESS',
style: TextStyle(
  color: Colors.grey,
  letterSpacing: 2.0,
),
),
 SizedBox(height: 10.0),
Text(
  'BVCOE Kharghar, Navi Mumbai',
  style: TextStyle(
    color: Colors.pink[300],
    fontWeight: FontWeight.bold,
    fontSize: 16.0,
    letterSpacing: 2.0,
  ),
),
 SizedBox(height: 30.0),
Text(
  'CURRENT ACADEMIC YEAR',
  style: TextStyle(
    color: Colors.grey,
    letterSpacing: 2.0,
  ),
),
 SizedBox(height: 10.0),
Text(
  'TE - Information Technology',
  style: TextStyle(
    color: Colors.pink[300],
    fontWeight: FontWeight.bold,
    fontSize: 16.0,
    letterSpacing: 2.0,
  ),
),
 SizedBox(height: 30.0),
Row(
  children: <Widget>[
    Icon(
      Icons.email,
      color: Colors.grey[400],
    ),
    SizedBox(width: 10.0),
    Text(
      'navghanerutuja@gmail.com',
      style: TextStyle(
        color: Colors.grey[400],
        fontSize: 18.0,
        letterSpacing: 1.0,
      ),
    ),
  ],
),
 SizedBox(height: 30.0),
Row(

```

```

children: <Widget>[
  Icon(
    Icons.phone,
    color: Colors.grey[400],
  ),
  SizedBox(width: 10.0),
  Text(
    '8850622507',
    style: TextStyle(
      color: Colors.grey[400],
      fontSize: 18.0,
      letterSpacing: 1.0,
    ),
  ),
],
),
Divider(
  color: Colors.grey[800],
  height: 60.0,
),
Text(
  'Student Address',
  style: TextStyle(
    color: Colors.grey,
    letterSpacing: 2.0,
  ),
),
SizedBox(height: 5.0),
Text(
  'Mahavir Apt., Sector 20, airoli, Navi mumbai-400708',
  style: TextStyle(
    color: Colors.grey,
    fontWeight: FontWeight.bold,
    fontSize: 16.0,
    letterSpacing: 2.0,
  ),
),
Divider(
  color: Colors.grey[800],
  height: 60.0,
),
],
),
);
}
}

```

Exp 3: Main.dart (form)

```

import 'package:flutter/material.dart';

void main() => runApp(MyApp());

```

```

class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    final appTitle = 'Flutter Form Demo';
    return MaterialApp(
      title: appTitle,
      home: Scaffold(
        appBar: AppBar(
          title: Text(appTitle),
        ),
        body: MyCustomForm(),
      ),
    );
  }
}

// Create a Form widget.
class MyCustomForm extends StatefulWidget {
  @override
  MyCustomFormState createState() {
    return MyCustomFormState();
  }
}

// Create a corresponding State class, which holds data related to the form.
class MyCustomFormState extends State<MyCustomForm> {
  // Create a global key that uniquely identifies the Form widget
  // and allows validation of the form.
  final _formKey = GlobalKey<FormState>();

  @override
  Widget build(BuildContext context) {
    // Build a Form widget using the _formKey created above.
    return Form(
      key: _formKey,
      child: Column(
        crossAxisAlignment: CrossAxisAlignment.start,
        children: <Widget>[
          TextFormField(
            decoration: const InputDecoration(
              icon: const Icon(Icons.person),
              hintText: 'Enter your full name',
              labelText: 'Name',
            ),
            validator: (String? value) {
              if (value!.isEmpty) {
                return 'Please enter some text';
              }
              return null;
            },
          ),
        ],
      ),
    );
  }
}

```

```

    ),
    TextFormField(
      decoration: const InputDecoration(
        icon: const Icon(Icons.phone),
        hintText: 'Enter a phone number',
        labelText: 'Phone',
      ),
      validator: (String? value) {
        if (value!.isEmpty) {
          return 'Please enter valid phone number';
        }
        return null;
      },
    ),
    TextFormField(
      decoration: const InputDecoration(
        icon: const Icon(Icons.calendar_today),
        hintText: 'Enter your date of birth',
        labelText: 'Dob',
      ),
      validator: (String? value) {
        if (value!.isEmpty) {
          return 'Please enter valid date';
        }
        return null;
      },
    ),
    new Container(
      padding: const EdgeInsets.only(left: 150.0, top: 40.0),
      child: new ElevatedButton(
        child: const Text('Submit'),
        onPressed: () {
          // It returns true if the form is valid, otherwise returns false
          if (_formKey.currentState!.validate()) {
            // If the form is valid, display a Snackbar.
            Scaffold.of(context)
              .showSnackBar(SnackBar(content: Text('Data is in processing.')));
          }
        },
      ),
    ),
  ],
),
);
}
}

```

Exp 4: Main.dart
(layout of flutter using widget)

```

import 'dart:ui';

import 'package:flutter/material.dart';

void main() => runApp(const MyApp());

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

  static const String _title = 'Flutter Tutorial';

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: _title,
      home: Scaffold(
        appBar: AppBar(title: const Text(_title)),
        body: const MyStatefulWidget(),
      ),
    );
  }
}

class MyStatefulWidget extends StatefulWidget {
  const MyStatefulWidget({Key? key}) : super(key: key);

  @override
  State<MyStatefulWidget> createState() => _MyStatefulWidgetState();
}

class _MyStatefulWidgetState extends State<MyStatefulWidget> {
  @override
  Widget build(BuildContext context) {
    return Center(
      child: GridView(
        gridDelegate: const SliverGridDelegateWithFixedCrossAxisCount(
          crossAxisCount: 3,
        ),
        primary: false,
        padding: const EdgeInsets.all(20),
        children: <Widget>[
          Container(
            padding: const EdgeInsets.all(8),
            child: const Text("Rutuja"),
            color: Colors.orange[200],
          ),
          Container(
            padding: const EdgeInsets.all(8),
            child: const Text("Navghane"),

```

```

        color: Colors.green[200],
      ),
      Container(
        padding: const EdgeInsets.all(8),
        child: const Text("Roll No 48"),
        color: Colors.red[200],
      ),
      Container(
        padding: const EdgeInsets.all(8),
        child: const Text("Bharati Vidyapeeth"),
        color: Colors.purple[200],
      ),
      Container(
        padding: const EdgeInsets.all(8),
        child: const Text("College Of Engineering"),
        color: Colors.blueGrey[200],
      ),
      Container(
        padding: const EdgeInsets.all(12),
        child: const Text("Information Technology"),
        color: Colors.yellow[200],
      ),
    ],
  ),
);
}
}

```

Exp 5: Main.dart(to include icon img chart in flutter)

```

import 'package:flutter/material.dart';

void main() => runApp(MyApp());

class MyApp extends StatelessWidget {

  // This widget is the root
  // of your application

  @override
  Widget build(BuildContext context) {

    return MaterialApp(

      home: Scaffold(
        appBar: AppBar(

```

```

        title: Text('Rutuja Navghane'),
    ),

    body: Center(
      child: Column(
        children: <Widget>[
          Image.asset('assets/images/photo.jpg'),
        ],
      ),
    ),
  );
}

```

Pubspec.yaml

```

name: exp1
description: A new Flutter project.

```

```

# The following line prevents the package from being accidentally published to
# pub.dev using `flutter pub publish`. This is preferred for private packages.
publish_to: 'none' # Remove this line if you wish to publish to pub.dev

```

```

# The following defines the version and build number for your application.
# A version number is three numbers separated by dots, like 1.2.43
# followed by an optional build number separated by a +.
# Both the version and the builder number may be overridden in flutter
# build by specifying --build-name and --build-number, respectively.
# In Android, build-name is used as versionName while build-number used as versionCode.
# Read more about Android versioning at https://developer.android.com/studio/publish/versioning
# In iOS, build-name is used as CFBundleShortVersionString while build-number used as CFBundleVersion.
# Read more about iOS versioning at
#
https://developer.apple.com/library/archive/documentation/General/Reference/InfoPlistKeyReference/Articles/CoreFoundationKeys.html
version: 1.0.0+1

```

```

environment:
  sdk: ">=2.16.2 <3.0.0"

```

```

# Dependencies specify other packages that your package needs in order to work.
# To automatically upgrade your package dependencies to the latest versions
# consider running `flutter pub upgrade --major-versions`. Alternatively,
# dependencies can be manually updated by changing the version numbers below to
# the latest version available on pub.dev. To see which dependencies have newer
# versions available, run `flutter pub outdated`.
dependencies:

```



```
flutter:  
  sdk: flutter
```

```
# The following adds the Cupertino Icons font to your application.  
# Use with the CupertinoIcons class for iOS style icons.  
cupertino_icons: ^1.0.2
```

```
dev_dependencies:  
  flutter_test:  
    sdk: flutter
```

```
# The "flutter_lints" package below contains a set of recommended lints to  
# encourage good coding practices. The lint set provided by the package is  
# activated in the `analysis_options.yaml` file located at the root of your  
# package. See that file for information about deactivating specific lint  
# rules and activating additional ones.  
flutter_lints: ^1.0.0
```

```
# For information on the generic Dart part of this file, see the  
# following page: https://dart.dev/tools/pub/pubspec
```

```
# The following section is specific to Flutter.  
flutter:  
  assets:  
    - assets/images/photo.jpg
```

```
# The following line ensures that the Material Icons font is  
# included with your application, so that you can use the icons in  
# the material Icons class.  
uses-material-design: true
```

```
# To add assets to your application, add an assets section, like this:  
# assets:  
# - images/a_dot_burr.jpeg  
# - images/a_dot_ham.jpeg
```

```
# An image asset can refer to one or more resolution-specific "variants", see  
# https://flutter.dev/assets-and-images/#resolution-aware.
```

```
# For details regarding adding assets from package dependencies, see  
# https://flutter.dev/assets-and-images/#from-packages
```

```
# To add custom fonts to your application, add a fonts section here,  
# in this "flutter" section. Each entry in this list should have a  
# "family" key with the font family name, and a "fonts" key with a  
# list giving the asset and other descriptors for the font. For  
# example:
```

```

# fonts:
# - family: Schyler
#   fonts:
#     - asset: fonts/Schyler-Regular.ttf
#     - asset: fonts/Schyler-Italic.ttf
#       style: italic
# - family: Trajan Pro
#   fonts:
#     - asset: fonts/TrajanPro.ttf
#     - asset: fonts/TrajanPro_Bold.ttf
#       weight: 700
#
# For details regarding fonts from package dependencies,
# see https://flutter.dev/custom-fonts/#from-packages

```

Exp 6: Main.dart (to apply navigation routing and gesture)

```

import 'package:flutter/material.dart';
void main() => runApp(MyApp());
class MyApp extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Demo',
      home: MyHomePage(),
    );
  }
}
class MyHomePage extends StatefulWidget {
  @override
  _MyHomePageState createState() => _MyHomePageState();
}
class MySecondPage extends StatefulWidget {
  @override
  _MySecondPageState createState() => _MySecondPageState();
}
class _MyHomePageState extends State<MyHomePage> {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('Hello,My name is Rutuja... This is home-page'),
      ),
      body: Center(
        child: RaisedButton(
          child: Text('Go to Second Screen'),

```

```
onPressed: () {
Navigator.push(
context,
MaterialPageRoute(builder: (context) => MySecondPage()),
);
},
),
);
}
}
class _MySecondPageState extends State<MySecondPage> {
@override
Widget build(BuildContext context) {
return Scaffold(
appBar: AppBar(
title: Text('This is Second Screen after navigation...'),
),
body: Center(
child: RaisedButton(
child: Text('Go back to Home Screen !!'),
onPressed: () {
Navigator.pop(context);
},
),
),
);
}
}
```