EXPERIMENT NO: 3

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CLASS: D15A ROLL NO: 45

TOPIC: BEHANCE:Behance is a platform for creative professionals to showcase

portfolios, discover inspiration, and connect with others in the industry

AIM: -To include icons, images, fonts in Flutter app

Theory:

Flutter is an open-source UI framework that allows developers to build natively compiled applications for multiple platforms—mobile, web, and desktop—using a single codebase. One of the primary advantages of Flutter is its flexibility in creating highly customizable user interfaces (UIs). This experiment focuses on the integration of essential visual elements—icons, images, and custom fonts—into a Flutter application. These visual elements not only enhance the aesthetic appeal of an app but also contribute to a more engaging and intuitive user experience.

In Flutter, an app consists of both assets (resources) and code. Assets refer to the static resources, such as images, icons, and configuration files, which are available during runtime. Flutter supports a wide variety of image formats, including JPEG, PNG, GIF, WebP, BMP, and others, enabling developers to include rich media content in their apps.

Visual elements serve a crucial role in mobile app development, offering the following benefits:

- **Improved User Experience:** Icons, images, and other visual elements make the app more visually appealing, engaging, and easy to use.
- **Quick Communication**: Visuals can convey complex information instantly. An icon can often represent a concept more effectively than text.
- **Brand Identity**: Custom visuals, such as logos and unique icon designs, contribute to reinforcing the app's branding, helping it stand out in a competitive market.

Adding Icons in Flutter

Flutter offers a range of built-in material design icons accessible through the Icons class. In addition to the default icons, developers can also add custom icons using third-party packages such as flutter_launcher_icons or font_awesome_flutter. Here is an example of adding an icon in Flutter:

```
Icon(
Icons.home,
size: 40,
);
```

Adding Images in Flutter

Flutter supports displaying images from three different sources:

- 1. Local Assets (Stored within the app project)
 - Store the image inside the assets/images/ folder of the project.
 - Declare the image path in the pubspec.yaml file.
 - Use the Image asset widget to display the image in the app.
- 2. Example:

```
flutter:

assets:
- assets/images/sample.png

Image.asset('assets/images/sample.png');
```

Network (Fetched from the internet)

• Displaying images from the internet is simple using the Image.network method. This method allows you to provide additional properties such as width, height, and fit for controlling the image's appearance.

Image.network('https://example.com/sample.jpg');

Adding Custom Fonts in Flutter

While Flutter uses the Roboto font by default, you can add custom fonts to personalize your app's typography.

- Download the font file and place it in the assets/fonts/ folder.
- Declare the custom font in the pubspec.yaml file.
- Apply the custom font to text widgets in your app using the TextStyle widget.

Example:

- 1. Place the custom font in the assets/fonts/ folder.
- 2. Declare the font in pubspec.yaml:

```
yaml

flutter:

fonts:

- family: 'CustomFont'

fonts:

- asset: assets/fonts/CustomFont-Regular.ttf

Text(

'Custom Font Example',

style: TextStyle(fontFamily: 'CustomFont'),
);
```

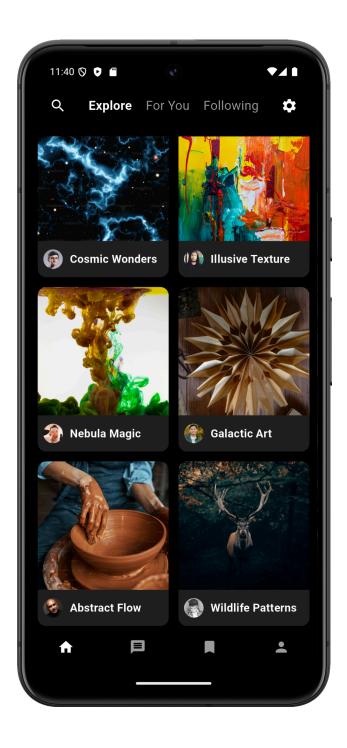
bottom_nav.dart	GestureDetector(
	onTap: () {
import 'package:flutter/material.dart';	Navigator.push(
import '/Creatives.dart'; // Ensure the	context,
correct import for CreativesPage	MaterialPageRoute(builder:
import '/AboutInfo.dart'; // Ensure this	(context) => AboutInfoPage()), // Ensure
file contains AboutInfoPage	this page exists
import '/ArtistDetails.dart';);
class TopNavBar extends StatelessWidget	},
{	child: const Text(
const TopNavBar({Key? key}):	"For You",
super(key: key);	style: TextStyle(color:
1 \ 3	Colors.grey, fontSize: 18),
@override),
Widget build(BuildContext context) {),
return Container(<i>"</i>
margin: const EdgeInsets.only(top:	// "Following" Text
30),	GestureDetector(
padding: const	onTap: () {
EdgeInsets.symmetric(horizontal: 16,	Navigator.push(
vertical: 20),	context,
color: Colors.black,	MaterialPageRoute(builder:
child: Row((context) => ArtistDetails()), // Ensure
mainAxisAlignment:	this page exists
MainAxisAlignment.spaceBetween,);
children: [},
// Search Icon	child: const Text(
IconButton("Following",
icon: const Icon(Icons.search,	style: TextStyle(color:
color: Colors.white),	Colors.grey, fontSize: 18),
onPressed: () {),
// Implement search functionality),
here	<i>"</i>
},	// Settings Icon with Navigation
),	IconButton(
,	icon: const Icon(Icons.settings,
const Text(color: Colors.white),
"Explore",	onPressed: () {
style: TextStyle(color:	Navigator.push(
Colors.white, fontSize: 18, fontWeight:	context,
FontWeight.bold),	MaterialPageRoute(builder:
),	(context) => CreativesPage()), // Ensure
•	CreativesPage exists);
// "For You" with Navigation	

Home.dart

```
import 'package:flutter/material.dart';
                                          &w=1958&auto=format&fit=crop&ixlib
                                          =rb-4.0.3&ixid=M3wxMjA3fDB8MHxw
import '../widgets/bottom nav.dart';
import '../widgets/top nav.dart';
                                          aG90by1wYWdlfHx8fGVufDB8fHx8fA
import '../widgets/custom_card.dart';
                                          %3D%3D",
                                            },
class HomePage extends
StatefulWidget {
                                              "title": "Nebula Magic",
 const HomePage({Key? key}):
                                              "imageUrl":
super(key: key);
                                          "https://images.unsplash.com/photo-1
                                          612743138072-675de14392e1?q=80
                                          &w=1972&auto=format&fit=crop&ixlib
 @override
 _HomePageState createState() =>
                                          =rb-4.0.3&ixid=M3wxMjA3fDB8MHxw
                                          aG90by1wYWdlfHx8fGVufDB8fHx8fA
_HomePageState();
                                          %3D%3D",
                                            },
class HomePageState extends
State<HomePage> {
                                              "title": "Galactic Art",
 int selectedIndex = 0;
                                              "imageUrl":
                                          "https://images.unsplash.com/photo-1
 void _onNavTapped(int index) {
                                          607349877492-8f2410658848?q=80&
  setState(() {
                                          w=1974&auto=format&fit=crop&ixlib=r
   selectedIndex = index;
                                          b-4.0.3&ixid=M3wxMjA3fDB8MHxwa
  });
                                          G90by1wYWdlfHx8fGVufDB8fHx8fA
 }
                                          %3D%3D",
                                            },
 final List<Map<String, String>> items
                                            {
= [
                                              "title": "Abstract Flow",
                                              "imageUrl":
   "title": "Cosmic Wonders",
                                          "https://plus.unsplash.com/premium_p
                                          hoto-1661683887049-69e8ae0a6c92
   "imageUrl":
"https://plus.unsplash.com/premium_p
                                          ?q=80&w=2071&auto=format&fit=cro
hoto-1667105168041-3fad1d08b58b?
                                          p&ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8
q=80&w=2127&auto=format&fit=crop
                                          MHxwaG90by1wYWdlfHx8fGVufDB8f
&ixlib=rb-4.0.3&ixid=M3wxMjA3fDB8
                                          Hx8fA%3D%3D",
MHxwaG90by1wYWdlfHx8fGVufDB8f
                                            },
Hx8fA%3D%3D",
  },
                                              "title": "Wildlife Patterns",
                                              "imageUrl":
   "title": "Illusive Texture",
                                          "https://images.unsplash.com/photo-1
   "imageUrl":
                                          543946207-39bd91e70ca7?q=80&w=
"https://images.unsplash.com/photo-1
                                          1974&auto=format&fit=crop&ixlib=rb-4
541961017774-22349e4a1262?q=80
                                          .0.3&ixid=M3wxMjA3fDB8MHxwaG90
```

```
by1wYWdlfHx8fGVufDB8fHx8fA%3D
%3D",
  },
 ];
 @override
 Widget build(BuildContext context) {
  return Scaffold(
   backgroundColor: Colors.black,
   body: Column(
     children: [
      const TopNavBar(),
      Expanded(
       child: GridView.builder(
        padding: const
EdgeInsets.all(8),
        gridDelegate: const
SliverGridDelegateWithFixedCrossAxi
sCount(
          crossAxisCount: 2,
          crossAxisSpacing: 8,
          mainAxisSpacing: 8,
          childAspectRatio: 0.8,
        itemCount: items.length,
        itemBuilder: (context, index) {
          return CustomCard(
           imageUrl:
items[index]["imageUrl"]!,
           title: items[index]["title"]!,
           avatarUrl:
"https://randomuser.me/api/portraits/m
en/${index + 1}.jpg",
          );
   bottomNavigationBar:
BottomNavBar(currentIndex:
_selectedIndex, onTap:
_onNavTapped),
  );
```

}



Custome_card.dart	child: ClipRRect(
	borderRadius: const
import 'package:flutter/material.dart';	BorderRadius.only(
	topLeft:
class CustomCard extends	Radius.circular(12),
StatelessWidget {	topRight:
final String imageUrl;	Radius.circular(12),
final String title;),
final String avatarUrl;	child: Image.network(
	imageUrl,
const CustomCard({	fit: BoxFit.cover,
Key? key,	width: double.infinity,
required this.imageUrl,),
required this.title,),
required this.avatarUrl,),
<pre>}) : super(key: key);</pre>),
	// Title & Avatar
@override	Container(
Widget build(BuildContext context) {	padding: const
return Container(EdgeInsets.symmetric(horizontal: 8.0,
margin: const	vertical: 12.0),
EdgeInsets.all(3.0),	decoration: BoxDecoration(
decoration: BoxDecoration(color: Colors.grey[900], //
borderRadius:	Background color added
BorderRadius.circular(12),	borderRadius: const
color: Colors.black,	BorderRadius.only(
),	bottomLeft:
child: Column(Radius.circular(12),
crossAxisAlignment:	bottomRight:
CrossAxisAlignment.start,	Radius.circular(12),
children: [),
// Image Section),
Expanded(child: Row(
child: Container(children: [
decoration: const	// Avatar
BoxDecoration(CircleAvatar(
borderRadius:	radius: 14,
BorderRadius.only(backgroundImage:
topLeft:	NetworkImage(avatarUrl),
Radius.circular(12),),
topRight:	const SizedBox(width: 10),
Radius.circular(12),	// Title
),	Expanded(
),	child: Text(

```
title,
style: const TextStyle(
color: Colors.white,
fontSize: 16,
fontWeight:

FontWeight.bold,
),
overflow:

TextOverflow.ellipsis,
),
),
),
],
),
),
);
}
```

Creatives.dart

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

class CreativesPage extends
StatelessWidget {
  final List<Map<String, dynamic>>
  creatives = [
      {
          "name": "Lorenzo ⊌ Bocchi",
          "location": "Australia",
          "responseTime": "Responds quickly",
          "projects": 2,
          "featured": true,
          "profilePic":
"https://via.placeholder.com/50",
          "portfolio": [
```

"https://images.unsplash.com/photo-15478 91654-e66ed7ebb968?q=80&w=2070&au o=format&fit=crop&ixlib=rb-4.0.3&ixid=M3 wxMjA3fDB8MHxwaG90by1wYWdlfHx8fG VufDB8fHx8fA%3D%3D",

"https://plus.unsplash.com/premium_photc -1673240367277-e1d394465b56?q=80&w =2069&auto=format&fit=crop&ixlib=rb-4.0. 3&ixid=M3wxMjA3fDB8MHxwaG90by1wY WdlfHx8fGVufDB8fHx8fA%3D%3D",

"https://images.unsplash.com/photo-1547{ 26039-bfc35e0f1ea8?q=80&w=1972&autc =format&fit=crop&ixlib=rb-4.0.3&ixid=M3w xMjA3fDB8MHxwaG90by1wYWdlfHx8fGV ufDB8fHx8fA%3D%3D"

```
]
},
{
"name": "Jeffrey Dirkse",
"location": "Netherlands",
"responseTime": "Responds quickly",
"projects": 1,
"featured": true,
```

```
"profilePic":
"https://via.placeholder.com/50",
"portfolio": [
```

"https://images.unsplash.com/photo-15478 91654-e66ed7ebb968?q=80&w=2070&aut o=format&fit=crop&ixlib=rb-4.0.3&ixid=M3 wxMjA3fDB8MHxwaG90by1wYWdlfHx8fG VufDB8fHx8fA%3D%3D",

"https://plus.unsplash.com/premium_photo -1673240367277-e1d394465b56?q=80&w =2069&auto=format&fit=crop&ixlib=rb-4.0. 3&ixid=M3wxMjA3fDB8MHxwaG90by1wY WdlfHx8fGVufDB8fHx8fA%3D%3D",

"https://images.unsplash.com/photo-15478 26039-bfc35e0f1ea8?q=80&w=1972&auto =format&fit=crop&ixlib=rb-4.0.3&ixid=M3w xMjA3fDB8MHxwaG90by1wYWdlfHx8fGV ufDB8fHx8fA%3D%3D"

```
]
},
{
  "name": "Irene Demetri",
  "location": "Greece",
  "responseTime": "Responds quickly",
  "projects": 3,
  "featured": true,
  "profilePic":
"https://via.placeholder.com/50",
  "portfolio": [
```

"https://images.unsplash.com/photo-15478 91654-e66ed7ebb968?q=80&w=2070&aut o=format&fit=crop&ixlib=rb-4.0.3&ixid=M3 wxMjA3fDB8MHxwaG90by1wYWdlfHx8fG VufDB8fHx8fA%3D%3D",

"https://plus.unsplash.com/premium_photo -1673240367277-e1d394465b56?q=80&w =2069&auto=format&fit=crop&ixlib=rb-4.0. 3&ixid=M3wxMjA3fDB8MHxwaG90by1wY WdlfHx8fGVufDB8fHx8fA%3D%3D",

	borderRadius:
"https://images.unsplash.com/photo-1547{	BorderRadius.circular(12),
26039-bfc35e0f1ea8?q=80&w=1972&autc),
=format&fit=crop&ixlib=rb-4.0.3&ixid=M3w	child: Column(
xMjA3fDB8MHxwaG90by1wYWdlfHx8fGV	children: [
ufDB8fHx8fA%3D%3D"	// Portfolio Preview
1	Stack(
}	alignment:
];	Alignment.bottomCenter,
	clipBehavior: Clip.none,
@override	children: [
Widget build(BuildContext context) {	Padding(
return Scaffold(padding: const
backgroundColor: Colors.black,	EdgeInsets.symmetric(
appBar: AppBar(horizontal: 10, vertical: 8)
backgroundColor: Colors.black,	child: Row(
title: const Text("Hire Creatives",	mainAxisAlignment:
style: TextStyle(color: Colors.white	MainAxisAlignment.spaceEvenly,
fontSize: 18,	children:
fontWeight: FontWeight.bold)),	(creative['portfolio'] as List <dynamic>)</dynamic>
actions: [.map <widget>((image)</widget>
IconButton(=>
icon: const lcon(lcons.search,	Flexible(
color: Colors.white),	child: ClipRRect(
onPressed: () {},	borderRadius:
),	BorderRadius.circular(8),
IconButton(child:
icon: const lcon(lcons.filter_list,	Image.network(image,
color: Colors.white),	width: 110, height:
onPressed: () {},	80, fit: BoxFit.cover),
),),
],))
),	.toList(),
body: ListView.builder(),
padding: const EdgeInsets.all(10),),
itemCount: creatives.length,	// Profile Picture with PRO
<pre>itemBuilder: (context, index) {</pre>	Badge
final creative = creatives[index];	Positioned(
	bottom: -25,
return Container(child: Stack(
margin: const	clipBehavior: Clip.none,
EdgeInsets.only(bottom: 12),	children: [
decoration: BoxDecoration(CircleAvatar(
color: Colors.grey[900],	radius: 30,

ba	ckgroundImage:	mainAxisAlignment:	
NetworkImage(MainAxisAlignment.center,	
	creative['profilePic']),	children: [
),		const	
	itioned(Icon(Icons.location_on, color: Colors.gr	еу,
	ttom: 0,	size: 14),	
	t: 18,	Text("	
	ild: Container(\${creative['location']}",	
padding: const		style: const TextStyle(
EdgeInsets.symmetr	=	color: Colors.grey,	
	horizontal: 6, vertical	fontSize: 12)),	
2),		const SizedBox(width:	5),
	ecoration:	Text("•	
BoxDecoration(\${creative['responseTime']}",	
	color: Colors.blue,	style: const TextStyle	
	borderRadius:	color: Colors.gree	n,
BorderRadius.circula	• •	fontSize: 12,	
),		fontWeight:	
C	hild: const Text("PRO"	FontWeight.bold)),	
	style: TextStyle(
O-1	color:),	
Colors.white, fontSiz	ze: 12)),	const SizedBox(height: 8)	,
),		Row(
), 1		mainAxisAlignment:	
],		MainAxisAlignment.center,	
),		children: [
<i>)</i> , 1		if (creative['featured']) Container(
],		padding: const	
), const Size	dBox(height: 30),	EdgeInsets.symmetric(
CONSCOIZE	abox(neight: 50),	horizontal: 8, verti	cal.
// Profile D)etails	4),	Jai.
Padding(Ctans	decoration:	
padding:	const	BoxDecoration(
EdgeInsets.all(12),	COTICE	color:	
child: Co	lumn(Colors.blueGrey[700],	
children	•	borderRadius:	
	reative['name'],	BorderRadius.circular(8),	
•	e: const TextStyle(),	
•	olor: Colors.white,	child: const Text("★	
	ontSize: 18,	Featured",	
	ontWeight:	style: TextStyle(
FontWeight.bold)),	J	color:	
Row(Colors.white, fontSize: 12)),	

```
),
                const SizedBox(width: 8),
                Container(
                  padding: const
EdgeInsets.symmetric(
                    horizontal: 8, vertical:
4),
                  decoration:
BoxDecoration(
                   color: Colors.blue,
                   borderRadius:
BorderRadius.circular(8),
                  ),
                  child: Text(
                    "${creative['projects']}
Projects Completed",
                    style: const TextStyle(
                       color: Colors.white,
fontSize: 12)),
               ],
    },
   // Bottom Navigation Bar
   bottomNavigationBar:
BottomNavBar(currentIndex: 0, onTap:
(index) {}),
  );
}
```

