Name: Vidhi Gulhane

Roll No: 15 Class: D15B

Experiment No: 03

Aim: To include icons, images, fonts in Flutter app

Theory:

Flutter allows developers to enhance their app's UI by incorporating icons, images, and custom fonts. These elements help in improving the app's aesthetics and user experience.

1. Including Icons:

Flutter provides built-in Material Icons and supports custom icon sets.

Using Material Icons:

Icon(Icons.home, size: 30, color: Colors.blue);

Using Custom Icons (from packages like FontAwesome): import 'package:font_awesome_flutter/font_awesome_flutter.dart';

lcon(FontAwesomeIcons.heart, size: 30, color: Colors.red);

2. Adding Images:

Images can be added from local assets or loaded from a network.

Adding Local Images:

Place images in the assets folder.

Define them in pubspec.yaml:

yaml

flutter:

assets:

- assets/images/logo.png

Use Image asset in the app:

Image.asset('assets/images/logo.png', width: 100, height: 100);

Using Network Images:

Image.network('https://example.com/image.png', width: 100, height: 100);

3. Adding Custom Fonts:

Flutter allows integrating custom fonts for a unique design.

Steps to add a custom font:

Define them in pubspec.yaml: yaml flutter: fonts: - family: CustomFont fonts: - asset: assets/fonts/CustomFont-Regular.ttf Use the custom font in your app: Text("Hello Flutter", style: TextStyle(fontFamily: "CustomFont", fontSize: 20),); Code: import 'package:flutter/material.dart'; import 'package:google_fonts/google_fonts.dart'; import 'recipe_screen.dart'; class HomeScreen extends StatelessWidget { final List<Map<String, dynamic>> recipes = [{ "name": "Pasta Carbonara", "details": "A delicious Italian pasta with creamy sauce.", "image": "lib/assets/recipe1.jpg", "procedure": "1. Boil pasta.\n2. Cook bacon.\n3. Mix eggs and cheese.\n4. Combine everything and serve.", }, { "name": "Spicy Tacos", "details": "Mexican-style tacos filled with spice and flavor.",

Place font files in the assets/fonts folder.

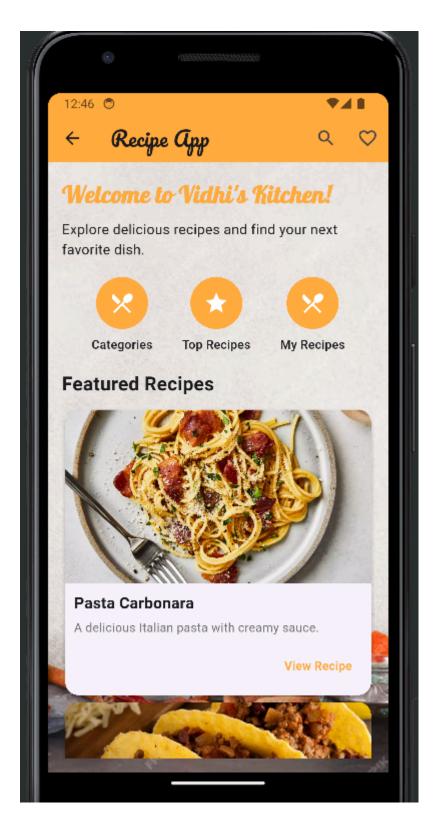
"image": "lib/assets/recipe2.jpg",

```
"procedure":
"1. Cook meat with spices.\n2. Prepare toppings.\n3. Assemble tacos.\n4. Serve and enjoy.",
},
{
"name": "Chocolate Cake",
"details": "Rich and moist chocolate cake for dessert lovers.",
"image": "lib/assets/recipe3.jpg",
"procedure":
"1. Mix dry ingredients.\n2. Add wet ingredients.\n3. Bake at 350°F for 30 minutes.\n4. Let cool and
serve.",
},
];
HomeScreen({super.key});
@override
Widget build(BuildContext context) {
return Scaffold(
appBar: AppBar(
title: Text("Recipe App", style: GoogleFonts.pacifico(fontSize: 24)),
backgroundColor: Colors.orangeAccent,
),
body: Stack(
children: [
Container(
decoration: BoxDecoration(
image: DecorationImage(
image: AssetImage('lib/assets/background1.jpg'),
fit: BoxFit.cover,
),
),
```

```
),
Padding(
padding: const EdgeInsets.all(16.0),
child: Column(
crossAxisAlignment: CrossAxisAlignment.start,
children: [
Text(
"Featured Recipes",
style: GoogleFonts.roboto(
fontSize: 22,
fontWeight: FontWeight.bold,
),
),
SizedBox(height: 10),
Expanded(
child: ListView.builder(
itemCount: recipes.length,
itemBuilder: (context, index) {
return _buildRecipeCard(context, recipes[index]);}
}
Widget _buildRecipeCard(BuildContext context, Map<String, dynamic> recipe) {
return Card(
elevation: 4,
shape: RoundedRectangleBorder(borderRadius: BorderRadius.circular(15)),
child: Column(
crossAxisAlignment: CrossAxisAlignment.start,
children: [
ClipRRect(
borderRadius: BorderRadius.vertical(top: Radius.circular(15)),
```

```
child: Image.asset(
recipe["image"],
width: double.infinity,
height: 200,
fit: BoxFit.cover,
),
),
Padding(
padding: const EdgeInsets.all(10.0),
child: Column(
crossAxisAlignment: CrossAxisAlignment.start,
children: [
Text(
recipe["name"],
style: GoogleFonts.roboto(
fontSize: 18,
fontWeight: FontWeight.bold,
),
),
SizedBox(height: 5),
Text(
recipe["details"],
style: GoogleFonts.roboto(
fontSize: 14,
color: Colors.black54,
),
),
SizedBox(height: 10),
Align(
```

```
alignment: Alignment.centerRight,
child: TextButton(
onPressed: () {
Navigator.push(
context,
MaterialPageRoute(
builder:
(context) => RecipeScreen(
recipeName: recipe["name"],
recipeDetails: recipe["details"],
procedure: recipe["procedure"],
nutritionInfo: {},
processSteps: ),),
child: Text(
"View Recipe",
style: TextStyle(
color: Colors.orangeAccent,
fontWeight: FontWeight.bold,),),},],
Output:
```



Conclusion:

By including icons, images, and fonts, we can enhance the visual appeal and usability of a Flutter app. Using built-in Material icons, external icon libraries, asset images, and custom fonts ensures a polished and professional UI. This experiment highlights the flexibility of Flutter in supporting various multimedia elements, making it a powerful tool for mobile app development.