

MAD & PWA Lab

Journal

Experiment No.	03
Experiment Title.	To include icons, images, fonts in Flutter app
Roll No.	38
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Class	D15A
Subject	MAD & PWA Lab
Lab Outcome	LO2: Design and Develop interactive Flutter App by using widgets, layouts, gestures and animation
Grade:	

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

Theory:

Using Icons in Flutter

Icons in Flutter can be added using the built-in Material Icons or custom icon packs.

(a) Material Icons

Flutter provides a collection of built-in Material Icons, which can be used with the Icon widget.

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

(b) Custom Icons

If you need icons that are not available in the Material Icons set, you can use external icon packs like:

- Font Awesome (font_awesome_flutter package)
- Custom SVG Icons (flutter_svg package)

Eg in pubspec.yaml file -

```
dependencies:  
  font_awesome_flutter: ^10.5.0
```

In code -

```
import 'package:font_awesome_flutter/font_awesome_flutter.dart';
```

```
IconButton(  
  icon: Falcon(FontAwesomeIcons.heart, color: Colors.red),  
  onPressed: () {},  
)
```

Adding Images in Flutter

Images can be loaded in Flutter from different sources like assets, network, or memory.

(a) Using Network Images

Network images are loaded from an online URL. Example:

Eg: `Image.network("https://example.com/sample.jpg", width: 200, height: 150)`

(b) Using Asset Images

To use images from the local project folder (assets/), follow these steps:

1. Place the image inside the assets/images/ folder.
2. Declare the image in pubspec.yaml:

```
flutter:  
  assets:  
    - assets/images/sample.png
```

In code: `Image.asset("assets/images/sample.png", width: 200, height: 150)`

Adding Custom Fonts in Flutter

Custom fonts improve the visual identity of an app. Steps to

Add a Custom Font:

1. Download the font and place it inside the assets/fonts/ folder.
2. Declare the font in pubspec.yaml:

```
flutter:  
  fonts:  
    - family: CustomFont fonts:  
      - asset: assets/fonts/CustomFont-Regular.ttf  
      - asset: assets/fonts/CustomFont-Bold.ttf weight:  
        700
```

In Code:

```
(  
  "Hello, Flutter!",  
  style: TextStyle(fontFamily: "CustomFont", fontSize: 20, fontWeight: FontWeight.bold),  
)
```

Categories Page:

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

class CategoriesPage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.white,
      appBar: AppBar(
        backgroundColor: Colors.white,
        elevation: 0,
        title: Text(
          "Categories",
          style: TextStyle(
            fontWeight: FontWeight.bold,
            color: Colors.black,
          ),
        ),
        leading: IconButton(
          icon: Icon(Icons.arrow_back, color:
Colors.black),
          onPressed: () {
            Navigator.pop(context);
          },
        ),
        body: Padding(
          padding: const EdgeInsets.all(16.0),
          child: GridView.builder(
            gridDelegate:
SliverGridDelegateWithFixedCrossAxisCount(
              crossAxisCount: 2,
              width: double.infinity,
              fit: BoxFit.cover,
              errorBuilder: (context, error, stackTrace) {
                return Container(
                  height: 120,
                  width: double.infinity,
                  color: Colors.grey[300],
                  child: Icon(Icons.image, size: 50, color: Colors.grey[600]),
                );
              },
            ),
            SizedBox(height: 8),
            Text(
              name,
              style: TextStyle(
                fontWeight: FontWeight.bold,
              ),
            ),
          ],
        ),
      );
    }
  }

  Widget _buildCategoryTile(String name, String
imagePath) {
    return GestureDetector(
      onTap: () {
        print("$name category clicked");
      },
      child: Column(
        crossAxisAlignment:
CrossAxisAlignment.center,
        children: [
          ClipRRect(
            borderRadius: BorderRadius.circular(8),
            child: Image.asset(
              imagePath,
              height: 120,
              crossAxisSpacing: 16,
              mainAxisSpacing: 16,
              childAspectRatio: 0.8,
            ),
          ),
          itemCount: categories.length,
          itemBuilder: (context, index) {
            return _buildCategoryTile(
              categories[index]['name']!,
              categories[index]['image']!,
            );
          },
        ),
      );
    }

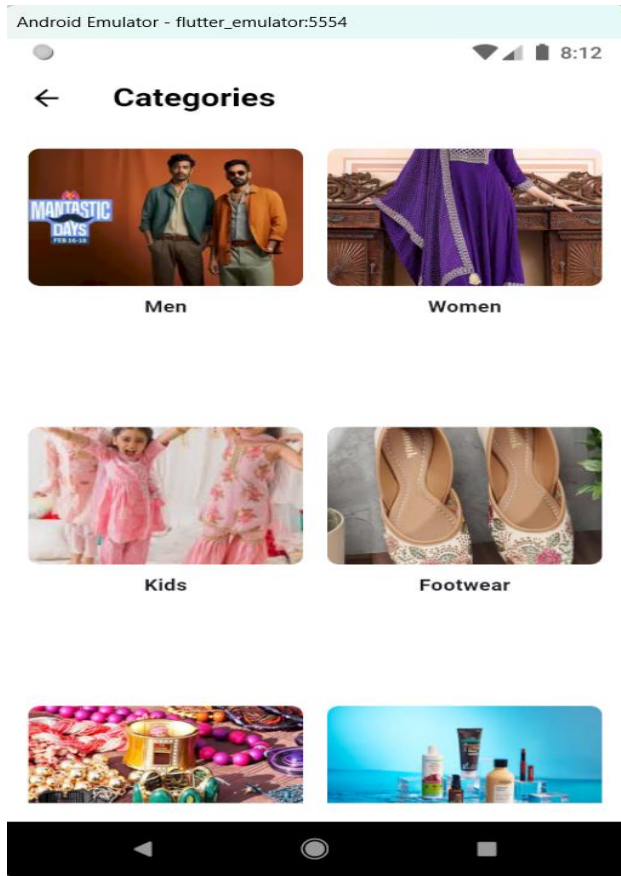
    Widget _buildCategoryTile(String name, String
imagePath) {
      return GestureDetector(
        onTap: () {
          print("$name category clicked");
        },
        child: Column(
          crossAxisAlignment:
CrossAxisAlignment.center,
          children: [
            ClipRRect(
              borderRadius: BorderRadius.circular(8),
              child: Image.asset(
                imagePath,
                height: 120,
                crossAxisSpacing: 16,
                mainAxisSpacing: 16,
                childAspectRatio: 0.8,
              ),
            ),
            itemCount: categories.length,
            itemBuilder: (context, index) {
              return _buildCategoryTile(
                categories[index]['name']!,
                categories[index]['image']!,
              );
            },
          ),
        );
      }
    }

    // Category List with Names and Image Paths
    final List<Map<String, String>> categories = [
```

```

{"name": "Men", "image": "assets/images/men.png"},
{"name": "Women", "image": "assets/images/women.png"},
{"name": "Kids", "image": "assets/images/kids.png"},
{"name": "Footwear", "image": "assets/images/footwear.png"},
{"name": "Accessories", "image": "assets/images/accessories.png"},
{"name": "Beauty", "image": "assets/images/beauty.png"},
];

```



Home Page:

```

import 'package:flutter/material.dart';

class HomePage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.white,
      appBar: AppBar(
        backgroundColor: Colors.white,
        elevation: 0,
        title: Row(
          children: [
            Text(
              "Myntra",
              style: TextStyle(
                fontWeight: FontWeight.bold,
                color: Colors.black,
              ),
            ),
            Spacer(),
            Text(
              "BECOME INSIDER >",

```

```

        style: TextStyle(
          color: Colors.orange,
          fontWeight: FontWeight.bold,
          fontSize: 12,
        ),
      ),
    ],
  ),
  actions: [
    Icon(Icons.notifications_none, color: Colors.black),
    SizedBox(width: 16),
    Icon(Icons.favorite_border, color: Colors.black),
    SizedBox(width: 16),
    Icon(Icons.account_circle, color: Colors.black),
    SizedBox(width: 16),
  ],
),
body: SingleChildScrollView(
  child: Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      // Search Bar
      Padding(
        padding: const EdgeInsets.all(16.0),
        child: TextField(
          decoration: InputDecoration(
            hintText: "Search for brands and products",
            prefixIcon: Icon(Icons.search),
            border: OutlineInputBorder(
              borderRadius: BorderRadius.circular(8),
            ),
          ),
        ),
      ),
      // HIM / HER Banner
      Padding(
        padding: const EdgeInsets.symmetric(horizontal: 16.0),
        child: ClipRRect(
          borderRadius: BorderRadius.circular(10),
          child: Image.asset(
            "assets/images/1.png",
            width: double.infinity, // Full width
            height: 200, // Fixed height
            fit: BoxFit.cover, // Ensures proper coverage
          ),
        ),
      ),
      SizedBox(height: 16),
      // Price Store Section
      _buildPriceStore(),
      // All-Time Faves Section
      Padding(
        padding: const EdgeInsets.all(16.0),
        child: Text(
          "ALL-TIME FAVES\nCurated For You",
          style: TextStyle(

```

```

        fontWeight: FontWeight.bold,
        fontSize: 16,
      ),
    ),
  ),
  _buildFavesGrid(),
],
),
),
// Bottom Navigation Bar
bottomNavigationBar: BottomNavigationBar(
  type: BottomNavigationBarType.fixed,
  selectedItemColor: Colors.pink,
  unselectedItemColor: Colors.grey,
  items: [
    BottomNavigationBarItem(
      icon: Icon(Icons.home),
      label: "Home",
    ),
    BottomNavigationBarItem(
      icon: Icon(Icons.category),
      label: "Categories",
    ),
    BottomNavigationBarItem(
      icon: Icon(Icons.person),
      label: "Profile",
    ),
  ],
  onTap: (index) {
    String currentRoute = ModalRoute.of(context)?.settings.name ?? "";
    String newRoute = "";

    switch (index) {
      case 0:
        newRoute = '/home';
        break;
      case 1:
        newRoute = '/categories';
        break;
      case 2:
        newRoute = '/profile';
        break;
    }

    if (currentRoute != newRoute) {
      Navigator.pushNamed(context, newRoute);
    }
  },
),
);
}

Widget _buildPriceStore() {
  return Container(
    color: Colors.orange.shade100,
    child: Column(
      crossAxisAlignment: CrossAxisAlignment.center,
      children: [
        Padding(

```

```

padding: const EdgeInsets.all(16.0),
child: Text(
  "PRICE STORE",
  style: TextStyle(
    fontWeight: FontWeight.bold,
    color: Colors.orange,
    fontSize: 16,
  ),
),
),
),
Row(
  mainAxisAlignment:
MainAxisAlignment.spaceAround,
  children: [
    _buildPriceTile("Under ₹99"),
    _buildPriceTile("Under ₹199"),
    _buildPriceTile("Under ₹299"),
    _buildPriceTile("Under ₹399"),
  ],
),
],
),
);
}

```

```

Widget _buildPriceTile(String text) {
  return Container(
    height: 80,
    width: 80,
    decoration: BoxDecoration(
      border: Border.all(color: Colors.orange,
width: 2),
      borderRadius: BorderRadius.circular(8),
    ),
  ],
),
);
}

```

```

Widget _buildFavelItem(String price, String imagePath) {
  return Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      ClipRRect(
        borderRadius: BorderRadius.circular(8),
        child: Image.asset(
          imagePath,
          height: 140, // Increased height for better visibility
          width: double.infinity,
          fit: BoxFit.cover, // Ensures the image fits well
        ),
      ),
      SizedBox(height: 8),
      Text(
        price,
        style: TextStyle(
          fontWeight: FontWeight.bold,
        ),
      ),
    ],
  ),

```

```

child: Center(
  child: Text(
    text,
    textAlign: TextAlign.center,
    style: TextStyle(
      fontWeight: FontWeight.bold,
      color: Colors.orange,
    ),
  ),
),
);
}

```

```

Widget _buildFavesGrid() {
  return Padding(
    padding: const EdgeInsets.all(16.0),
    child: GridView.count(
      shrinkWrap: true,
      crossAxisCount: 2,
      crossAxisSpacing: 16,
      mainAxisSpacing: 16,
      childAspectRatio: 0.75, // Adjusted for better
image fit
      physics: NeverScrollableScrollPhysics(),
      children: [
        _buildFavelItem("Under ₹799",
"assets/images/item1.png"),
        _buildFavelItem("Under ₹699",
"assets/images/item2.png"),
        _buildFavelItem("Under ₹599",
"assets/images/item3.png"),
        _buildFavelItem("Under ₹499",
"assets/images/item4.png"),
      ],
    ),
  ),

```



```
};  
}  
}
```

Android Emulator - flutter_emulator:5554



← **Myntra** [BECOME INSIDER >](#)   

 Search for brands and products

 Search for brands and products



PRICE STORE

Under ₹99

Under ₹199

Under ₹299

Under ₹399

ALL-TIME FAVES

Curated For You



Home



Categories



Profile



Products Page:

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

void main() {
  runApp(MaterialApp(
    debugShowCheckedModeBanner: false,
    home: ProductPage(),
  ));
}

class ProductPage extends StatelessWidget {
  final List<Map<String, dynamic>> products = [
    {
      "image": "assets/images/product1.png", // Replace with actual image URL
      "brand": "HERE&NOW",
      "name": "Bandhani Yoke Design Kurta",
      "price": 626,
      "originalPrice": 1899,
      "discount": "67% OFF",
      "rating": 4.0,
      "reviews": 2500,
    },
    {
      "image": "assets/images/product2.png",
      "brand": "Anouk",
      "name": "Printed Straight Kurta",
      "price": 441,
      "originalPrice": 1299,
      "discount": "66% OFF",
      "rating": 3.9,
      "reviews": 6500,
    },
    {
      "image": "assets/images/product3.png",
      "brand": "KALINI",
      "name": "High-Slit Kurta",
      "price": 599,
      "originalPrice": 2499,
      "discount": "76% OFF",
      "rating": 4.3,
      "reviews": 5500,
    },
    {
      "image": "assets/images/product4.png",
      "brand": "Varanga",
      "name": "Women Printed Kurta",
      "price": 599,
      "originalPrice": 1499,
      "discount": "60% OFF",
      "rating": 4.1,
      "reviews": 2600,
    },
  ];

  @override
  Widget build(BuildContext context) {
    return Scaffold(
```

```

appBar: AppBar(
  title: Text("MYNTRA"),
  centerTitle: true,
  backgroundColor: Colors.white,
  elevation: 1,
  iconTheme: IconThemeData(color: Colors.black),
  actions: [
    Icon(Icons.search, color: Colors.black),
    SizedBox(width: 10),
    Icon(Icons.favorite_border, color: Colors.black),
    SizedBox(width: 10),
    Icon(Icons.shopping_bag_outlined, color: Colors.black),
    SizedBox(width: 10),
  ],
),
body: GridView.builder(
  padding: EdgeInsets.all(10),
  gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(
    crossAxisCount: 2,
    childAspectRatio: 0.6,
    crossAxisSpacing: 10,
    mainAxisSpacing: 10,
  ),
  itemCount: products.length,
  itemBuilder: (context, index) {
    final product = products[index];
    return Card(
      shape: RoundedRectangleBorder(borderRadius: BorderRadius.circular(10)),
      child: Column(
        crossAxisAlignment: CrossAxisAlignment.start,
        children: [
          ClipRRect(
            borderRadius: BorderRadius.vertical(top: Radius.circular(10)),
            child: Image.asset(
              product['image'],
              height: 150,
              width: double.infinity,
              fit: BoxFit.cover,
            ),
          ),
          Padding(
            padding: const EdgeInsets.all(8.0),
            child: Column(
              crossAxisAlignment: CrossAxisAlignment.start,
              children: [
                Text(
                  product['brand'],
                  style: TextStyle(fontWeight: FontWeight.bold),
                ),
                Text(
                  product['name'],
                  maxLines: 2,
                  overflow: TextOverflow.ellipsis,
                ),
                SizedBox(height: 5),
                Row(
                  children: [
                    Text(
                      "₹${product['price']}",
                      style: TextStyle(fontWeight: FontWeight.bold, fontSize: 16),

```

```

        ),
        SizedBox(width: 5),
        Text(
          "₹${product['originalPrice']}",
          style: TextStyle(
            decoration: TextDecoration.lineThrough,
            color: Colors.grey,
          ),
        ),
        ),
        SizedBox(width: 5),
        Text(
          product['discount'],
          style: TextStyle(color: Colors.red, fontWeight: FontWeight.bold),
        ),
      ],
    ),
    SizedBox(height: 5),
    Row(
      children: [
        Icon(Icons.star, color: Colors.amber, size: 16),
        SizedBox(width: 2),
        Text("${product['rating']} (${product['reviews']} Reviews)"),
      ],
    ),
  ],
),
],
),
),
],
),
),
);
},
),
),
bottomNavigationBar: BottomAppBar(
  child: Padding(
    padding: const EdgeInsets.all(10.0),
    child: Row(
      mainAxisAlignment: MainAxisAlignment.spaceBetween,
      children: [
        TextButton.icon(
          onPressed: () {},
          icon: Icon(Icons.category),
          label: Text("SORT"),
        ),
        TextButton.icon(
          onPressed: () {},
          icon: Icon(Icons.filter_list),
          label: Text("FILTER"),
        ),
      ],
    ),
  ),
),
),
);
}
}

```



MYNTRA



HERE&NOW

Bandhani Yoke Design
Kurta

₹626 ~~₹1899~~ **67% OFF**

★ 4.0 (2500 Reviews)



Anouk

Printed Straight Kurta

₹441 ~~₹1299~~ **66% OFF**

★ 3.9 (6500 Reviews)



KALINI



Varanga

 SORT

 FILTER

