MPL Experiment 3

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

Theory:

Including icons, images, and custom fonts in a Flutter app enhances visual appeal and user experience. Icons can be added using the Icon widget with built-in Icons class or custom icons via the flutter_launcher_icons package.
Images can be loaded from assets using the Image.asset() method or from the internet using Image.network().
To use local images, they must be placed in the assets folder and declared in pubspec.yaml.
Custom fonts improve typography and branding; they can be added by placing font files in the assets/fonts directory and specifying them in pubspec.yaml under the flutter section.
Using TextStyle with the fontFamily property applies the custom font to text.

Code:

```dart
import 'package:flutter/material.dart';
import '../screens/sign_in_page.dart';
import '../screens/cart_page.dart';
import '../widgets/category_list.dart';
import '../widgets/product_grid.dart';

void main() {
  runApp(const MyApp());
}

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

  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      home: const HomeScreen(),
    );
  }
}

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

```dart
  @override
  _HomeScreenState createState() => _HomeScreenState();
}

class _HomeScreenState extends State<HomeScreen> {
  int _currentIndex = 0;
  final List<Widget> _pages = [
    HomeContent(),
    CategoryList(),
    ProductGrid(),
    SignInPage(),
  ];

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        backgroundColor: Colors.blueAccent,
        title: Row(
          children: [
            Expanded(
              child: TextField(
                decoration: InputDecoration(
                  hintText: 'Search',
                  border: InputBorder.none,
                  prefixIcon: Icon(Icons.search, color: Colors.white),
                ),
              ),
            ),

          ],
        ),
        actions: [
          IconButton(
            icon: Icon(Icons.shopping_cart, color: Colors.white),
            onPressed: () {
              Navigator.push(
                  context, MaterialPageRoute(builder: (context) => CartPage()));
            },
          ),
        ],
      ),
      body: _pages[_currentIndex],
```

```dart
      bottomNavigationBar: BottomNavigationBar(
        currentIndex: _currentIndex,
        type: BottomNavigationBarType.fixed,
        selectedItemColor: Colors.blueAccent,
        unselectedItemColor: Colors.grey,
        onTap: (index) {
          setState(() {
            _currentIndex = index;
          });
        },
        items: [
          BottomNavigationBarItem(icon: Icon(Icons.home), label: 'Home'),
          BottomNavigationBarItem(icon: Icon(Icons.category), label: 'Categories'),
          BottomNavigationBarItem(icon: Icon(Icons.shopping_bag), label: 'Orders'),
          BottomNavigationBarItem(icon: Icon(Icons.person), label: 'Profile'),
        ],
      ),
    );
  }
}

class HomeContent extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return SingleChildScrollView(
      child: Column(
        crossAxisAlignment: CrossAxisAlignment.start,
        children: [
          Padding(
            padding: const EdgeInsets.all(8.0),
            child: Row(
              children: [
                Icon(Icons.location_on, color: Colors.black54),
                SizedBox(width: 5),
                Text("Mumbai 400020", style: TextStyle(fontSize: 16)),
                Spacer(),
                Icon(Icons.arrow_drop_down, color: Colors.black54),
              ],
            ),
          ),
          SizedBox(height: 10),
          Container(
            height: 150,
            margin: EdgeInsets.symmetric(horizontal: 10),
```

```dart
    decoration: BoxDecoration(
      borderRadius: BorderRadius.circular(10),
      image: DecorationImage(
        image: AssetImage('assets/banner.jpg'),
        fit: BoxFit.cover,
      ),
    ),
  ),

  SizedBox(height: 10),
  Padding(
    padding: const EdgeInsets.symmetric(horizontal: 10.0),
    child: Text(
      "BEST DEALS",
      style: TextStyle(fontSize: 18, fontWeight: FontWeight.bold),
    ),
  ),
  SizedBox(height: 20),
  Wrap(
    spacing: 16,
    runSpacing: 16,
    alignment: WrapAlignment.center,
    children: [
      _dealCard(context, 'Up to 50% Off', 'Biscuits,Drinks', 'assets/biscuit.png'),
      _dealCard(context, 'Up to 30% Off', 'Dairy Items', 'assets/dairy.png'),
      _dealCard(context, 'Up to 25% Off', 'Fruit & Vegetable', 'assets/fruits.png'),
      _dealCard(context, 'Up to 25% Off', 'Personal Care', 'assets/personal care.png'),
      _dealCard(context, 'Up to 20% Off', 'Beauty Products', 'assets/beauty.png'),
      _dealCard(context, 'Up to 20% Off', 'Home Care', 'assets/home care.png'),
    ],
  ),
  SizedBox(height: 10),
  Container(
    height: 150,
    margin: EdgeInsets.symmetric(horizontal: 10),
    decoration: BoxDecoration(
      borderRadius: BorderRadius.circular(10),
      image: DecorationImage(
        image: AssetImage('assets/banner2.png'),
        fit: BoxFit.cover,
      ),
    ),
  ),
  SizedBox(height: 20),
```

```dart
        ],
      ),
    );
  }

  Widget _dealCard(BuildContext context, String discount, String title, String asset) {
    return GestureDetector(
      onTap: () {
        Navigator.push(
            context, MaterialPageRoute(builder: (context) => ProductGrid()));
      },
      child: Column(
        children: [
          Container(
            height: 80,
            width: 80,
            decoration: BoxDecoration(
              image: DecorationImage(image: AssetImage(asset), fit: BoxFit.cover),
            ),
          ),
          SizedBox(height: 5),
          Text(discount, style: TextStyle(color: Colors.green, fontSize: 12)),
          Text(title, style: TextStyle(fontSize: 14, fontWeight: FontWeight.bold)),
        ],
      ),
    );
  }
}

class CartPage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(title: Text("My Cart")),
      body: Center(child: Text("Your cart is empty")),
    );
  }
}
```

Output:

Q Search   🛒

LOWEST PRICES ON GROCERY
10-30 MINUTE DELIVERY
Download the App Now
JioMart

BEST DEALS

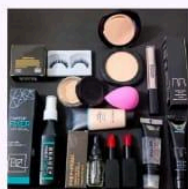Up to 50% Off
Biscuits,Drinks

Up to 30% Off
Dairy Items

Up to 25% Off
Fruit & Vegetable

Up to 25% Off
Personal Care

Up to 20% Off
Beauty Products

Up to 20% Off
Home Care

Get Grocery at Incredibly LOW PRICES.
FREE HOME DELIVERY   NO MINIMUM ORDER
UP TO 50% OFF

🏠 Home   ◢ Categories   🛍 Orders   👤 Profile

Try something new

| oil | sugar | biscuits | ghee |

| atta | surf excel powder | mustard oil |

| maggi | rice | soap |

Most trending categories

TOM OVERFLOWED BBOTTOM OVERFLOWED BBOTTOM OVERFLOWED BBOTTOM OVERFLOWED BY 18 PIX

Groceries   Electronic   Fashion   Jewellery
s

TOM OVERFLOWED BBOTTOM OVERFLOWED BBOTTOM OVERFLOWED BBOTTOM OVERFLOWED BY 18 PIX

Toys   Furniture   Books   Beauty