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D15A/57

Experiment - 2

Aim: To design Flutter UI by including common widgets.
Theory:
Widgets are the central class hierarchy in the Flutter framework. A widget is an immutable description of part of a user interface. Widgets can be inflated into elements, which manage the underlying render tree.
Widgets themselves have no mutable state (all their fields must be final). If you wish to associate mutable state with a widget, consider using a StatefulWidget, which creates a State object (via StatefulWidget.createState) whenever it is inflated into an element and incorporated into the tree.
A given widget can be included in the tree zero or more times. In particular a given widget can be placed in the tree multiple times. Each time a widget is placed in the tree, it is inflated into an Element, which means a widget that is incorporated into the tree multiple times will be inflated multiple times.
The key property controls how one widget replaces another widget in the tree. If the runtimeType and key properties of the two widgets are operator ==, respectively, then the new widget replaces the old widget by updating the underlying element (i.e., by calling Element.update with the new widget). Otherwise, the old element is removed from the tree, the new widget is inflated into an element, and the new element is inserted into the tree.
See also:
- StatefulWidget and State, for widgets that can build differently several times over their lifetime.
- InheritedWidget, for widgets that introduce ambient state that can be read by descendant widgets.
- StatelessWidget, for widgets that always build the same way given a particular configuration and ambient state.

Code:
```
import 'package:flutter/material.dart';
import 'package:firebase_core/firebase_core.dart';
import 'category.dart';
import 'account_page.dart';
import 'main.dart';

class Explore extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
```

```dart
return Scaffold(
  appBar: AppBar(
    backgroundColor: Colors.white,
    elevation: 0,
    title: Row(
      children: [
        Expanded(
          child: Container(
            height: 40,
            decoration: BoxDecoration(
              color: Colors.grey[200],
              borderRadius: BorderRadius.circular(20),
            ),
            child: Row(
              children: [
                Padding(
                  padding: const EdgeInsets.all(8.0),
                  child: Image.asset(
                    'assets/ajio.png', // Replace with your image asset
                    width: 24,
                    height: 24,
                  ),
                ),
                Expanded(
                  child: TextField(
                    decoration: InputDecoration(
                      hintText: 'Search',
                      border: InputBorder.none,
                    ),
                  ),
                ),
                Padding(
                  padding: const EdgeInsets.all(8.0),
                  child: Icon(
                    Icons.camera_alt,
                    color: Colors.grey,
                  ),
                ),
              ],
            ),
```

```dart
        ),
      ),
      SizedBox(width: 16),
      Icon(
        Icons.notifications,
        color: Colors.black,
      ),
      SizedBox(width: 16),
      Icon(
        Icons.favorite_border,
        color: Colors.black,
      ),
      SizedBox(width: 16),
      Icon(
        Icons.shopping_cart,
        color: Colors.black,
      ),
    ],
  ),
),
body: Column(
  crossAxisAlignment: CrossAxisAlignment.start,
  children: [
    SizedBox(height: 8),
    SizedBox(height: 16),
    Container(
      width: double.infinity,
      padding: EdgeInsets.symmetric(horizontal: 16, vertical: 8),
      decoration: BoxDecoration(
        gradient: LinearGradient(
          begin: Alignment.topLeft,
          end: Alignment.bottomRight,
          colors: [Color(0xFFFFFCDB1), Color(0xFFE99A6B)],
        ),
        borderRadius: BorderRadius.circular(12),
      ),
      child: Text(
        'Hurry up! Sale is live!',
        style: TextStyle(
          fontSize: 24,
```

```dart
              fontWeight: FontWeight.bold,
              color: Colors.white,
            ),
          ),
        ),
        SizedBox(height: 16),
        ClipRRect(
          borderRadius: BorderRadius.circular(16),
          child: Image.asset(
            'assets/sale_image.jpg', // Replace with your sale image asset
            fit: BoxFit.cover,
            height: MediaQuery.of(context).size.height * 0.5, // Adjust the height as needed
            width: double.infinity,
          ),
        ),
      ],
    ),
  ),

  bottomNavigationBar: BottomNavigationBar(
    items: [
      BottomNavigationBarItem(
        icon: Icon(Icons.store),
        label: 'Switch Stores',
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.home),
        label: 'Explore',
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.trending_up),
        label: 'TRENDin',
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.category),
        label: 'Categories',
      ),
      BottomNavigationBarItem(
        icon: Icon(Icons.account_circle),
        label: 'Account',
      ),
```

```dart
      ],
      selectedItemColor: Colors.black,
      unselectedItemColor: Colors.black,
      showUnselectedLabels: true,
      type: BottomNavigationBarType.fixed,
      onTap: (int index) {
        // Handle bottom navigation item clicks
        switch (index) {
          case 0:
          // Handle 'Switch Stores' action
            Navigator.push(
              context,
              MaterialPageRoute(builder: (context) => MyHomePage()),
            );
            break;
          case 1:
          // Handle 'Explore' action
            break;
          case 2:
          // Handle 'TRENDin' action
            break;
          case 3:
          // Navigate to the category section page
            Navigator.push(
              context,
              MaterialPageRoute(builder: (context) => CategorySection()),
            );
            break;
          case 4:
          // Handle 'Account' action
            Navigator.push(
              context,
              MaterialPageRoute(builder: (context) => AccountPage()),
            );
            break;
          default:
        }
      },
    ),
  );
```

```
    }
  }
```

Output: