

**MPL EXP 5**

Aim: To apply navigation, routing and gestures in Flutter App

Code:

**homepage.dart**

```
import 'package:flutter/material.dart';
import 'package:google_fonts/google_fonts.dart';
import 'package:blinkit/screens/categories.dart';

void main() {
  runApp(BlinkitClone());
}

class BlinkitClone extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      debugShowCheckedModeBanner: false,
      initialRoute: '/home',
      routes: {
        '/home': (context) => HomePage(),
        '/categories': (context) => CategoriesScreen(),
      },
    );
  }
}
```

```
class HomePage extends StatefulWidget {
  @override
  _HomePageState createState() => _HomePageState();
}
```

```
class _HomePageState extends State<HomePage> {
  int _selectedIndex = 0;

  void _onItemTapped(int index) {
    if (index == 2) {
      Navigator.pushNamed(context, '/categories');
    } else {
      setState(() {
        _selectedIndex = index;
      });
    }
  }
}
```

```
}
```

```
@override
```

```
Widget build(BuildContext context) {
```

```
  return Scaffold(
```

```
    backgroundColor: Colors.white,
```

```
    bottomNavigationBar: BottomNavigationBar(
```

```
      currentIndex: _selectedIndex,
```

```
      selectedItemColor: Colors.green,
```

```
      unselectedItemColor: Colors.black,
```

```
      showUnselectedLabels: true,
```

```
      onTap: _onItemTapped,
```

```
      items: [
```

```
        BottomNavigationBarItem(icon: Icon(Icons.home), label: "Home"),
```

```
        BottomNavigationBarItem(
```

```
          icon: Icon(Icons.shopping_bag), label: "Order Again"),
```

```
        BottomNavigationBarItem(
```

```
          icon: Icon(Icons.category), label: "Categories"),
```

```
        BottomNavigationBarItem(icon: Icon(Icons.print), label: "Print"),
```

```
      ],
```

```
    ),
```

```
    body: SingleChildScrollView(
```

```
      child: Column(
```

```
        crossAxisAlignment: CrossAxisAlignment.start,
```

```
        children: [
```

```
          Container(
```

```
            color: Colors.yellow[700],
```

```
            padding: const EdgeInsets.only(
```

```
              top: 50, left: 16, right: 16, bottom: 10),
```

```
            child: Column(
```

```
              crossAxisAlignment: CrossAxisAlignment.start,
```

```
              children: [
```

```
                Row(
```

```
                  children: [
```

```
                    Icon(Icons.timer, color: Colors.black),
```

```
                    const SizedBox(width: 5),
```

```
                    Text(
```

```
                      "Blinkit in",
```

```
                      style: GoogleFonts.poppins(
```

```
                        fontSize: 14, fontWeight: FontWeight.w500),
```

```
                    ),
```

```
                    const SizedBox(width: 5),
```

```
                    Text(
```

```
                      "10 minutes",
```

```

        style: GoogleFonts.poppins(
          fontSize: 18, fontWeight: FontWeight.bold),
      ),
      Spacer(),
      Icon(Icons.shopping_cart, color: Colors.black),
      const SizedBox(width: 10),
      CircleAvatar(
        backgroundColor: Colors.white,
        child: Icon(Icons.person, color: Colors.black),
      ),
    ],
  ),
  const SizedBox(height: 5),
  Text(
    "HOME - Ria Chaudhari, 202, Coral Nirmal ▼",
    style: GoogleFonts.poppins(
      fontSize: 14, fontWeight: FontWeight.w500),
  ),
  const SizedBox(height: 10),
  Container(
    padding: EdgeInsets.symmetric(horizontal: 10),
    decoration: BoxDecoration(
      color: Colors.white,
      borderRadius: BorderRadius.circular(10),
    ),
    child: Row(
      children: [
        Icon(Icons.search, color: Colors.black54),
        Expanded(
          child: TextField(
            decoration: InputDecoration(
              hintText: "Search 'cookies'",
              border: InputBorder.none,
              contentPadding:
                EdgeInsets.symmetric(vertical: 10),
            ),
          ),
        ),
        Icon(Icons.mic, color: Colors.black54),
      ],
    ),
  ),
],
),
],
),
),

```

```

),
Container(
  padding: EdgeInsets.symmetric(vertical: 10),
  child: Row(
    mainAxisAlignment: MainAxisAlignment.spaceEvenly,
    children: [
      _CategoryItem(icon: Icons.shopping_bag, label: "All"),
      _CategoryItem(icon: Icons.favorite, label: "Weddings"),
      _CategoryItem(icon: Icons.tv, label: "Electronics"),
      _CategoryItem(icon: Icons.brush, label: "Beauty"),
      _CategoryItem(icon: Icons.child_care, label: "Kids"),
      _CategoryItem(icon: Icons.card_giftcard, label: "Gifting"),
    ],
  ),
),
Container(
  padding: EdgeInsets.all(16),
  decoration: BoxDecoration(
    color: Colors.yellow[100],
    borderRadius: BorderRadius.circular(10),
  ),
  child: Column(
    children: [
      Text("Welcome",
        style: GoogleFonts.poppins(
          fontSize: 22, fontWeight: FontWeight.bold)),
      Text("Order now to avail exciting offers!",
        style: GoogleFonts.poppins(fontSize: 14)),
      Row(
        mainAxisAlignment: MainAxisAlignment.spaceEvenly,
        children: [
          Text("Flat ₹50 OFF",
            style: GoogleFonts.poppins(
              fontSize: 16,
              fontWeight: FontWeight.bold,
              color: Colors.green)),
          Text("+", style: GoogleFonts.poppins(fontSize: 20)),
          Text("Free Delivery",
            style: GoogleFonts.poppins(
              fontSize: 16,
              fontWeight: FontWeight.bold,
              color: Colors.green)),
        ],
      ),
    ],
  ),

```

```

    ],
  ),
),
Padding(
  padding: const EdgeInsets.symmetric(horizontal: 16),
  child: Text(
    "Bestsellers",
    style: GoogleFonts.poppins(
      fontSize: 18, fontWeight: FontWeight.bold),
  ),
),
GridView.count(
  padding: const EdgeInsets.all(16),
  crossAxisCount: 3,
  shrinkWrap: true,
  physics: NeverScrollableScrollPhysics(),
  children: [
    _BestsellerItem(image: "assets/onion.jpg", count: "+135 more"),
    _BestsellerItem(
      image: "assets/oranges.jpg", count: "+320 more"),
    _BestsellerItem(image: "assets/lays.jpg", count: "+23 more"),
    _BestsellerItem(
      image: "assets/fortune.jpg", count: "+137 more"),
    _BestsellerItem(image: "assets/sprite.jpg", count: "+114 more"),
    _BestsellerItem(
      image: "assets/parle_g.jpg", count: "+135 more"),
  ],
),
],
),
);
}
}

```

```

class _CategoryItem extends StatelessWidget {
  final IconData icon;
  final String label;
  _CategoryItem({required this.icon, required this.label});

  @override
  Widget build(BuildContext context) {
    return Column(
      children: [

```

```

        Icon(icon, size: 28, color: Colors.black),
        Text(label, style: GoogleFonts.poppins(fontSize: 12)),
      ],
    );
  }
}

```

```

class _BestsellerItem extends StatelessWidget {
  final String image;
  final String count;
  _BestsellerItem({required this.image, required this.count});

```

```

  @override
  Widget build(BuildContext context) {
    return Column(
      children: [
        Image.asset(image, height: 50, fit: BoxFit.cover),
        Text(count, style: GoogleFonts.poppins(fontSize: 12)),
      ],
    );
  }
}

```

### **categories.dart**

```

import 'package:flutter/material.dart';

```

```

class CategoriesScreen extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: Colors.white,
      appBar: AppBar(
        backgroundColor: Colors.amber.shade100,
        elevation: 0,
        title: Column(
          crossAxisAlignment: CrossAxisAlignment.start,
          children: [
            Text(
              "Blinkit in",
              style: TextStyle(fontSize: 14, color: Colors.black54),
            ),
            Text(
              "11 minutes",

```

```

        style: TextStyle(fontSize: 20, fontWeight: FontWeight.bold, color:
Colors.black),
      ),
      Text(
        "HOME - Ria Chaudhari, 202, Coral Nirmal ▼",
        style: TextStyle(fontSize: 14, color: Colors.black54),
      ),
    ],
  ),
  actions: [
    IconButton(
      icon: Icon(Icons.card_giftcard, color: Colors.black),
      onPressed: () {},
    ),
    IconButton(
      icon: Icon(Icons.person, color: Colors.black),
      onPressed: () {},
    ),
  ],
),
body: Column(
  children: [
    Padding(
      padding: const EdgeInsets.all(10.0),
      child: TextField(
        decoration: InputDecoration(
          hintText: 'Search "gifts"',
          prefixIcon: Icon(Icons.search, color: Colors.black54),
          suffixIcon: Icon(Icons.mic, color: Colors.black54),
          filled: true,
          fillColor: Colors.white,
          border: OutlineInputBorder(
            borderRadius: BorderRadius.circular(10),
            borderSide: BorderSide.none,
          ),
        ),
      ),
    ),
  ],
),
Expanded(
  child: SingleChildScrollView(
    child: Padding(
      padding: const EdgeInsets.all(10.0),
      child: Column(
        crossAxisAlignment: CrossAxisAlignment.start,

```

```

        children: [
          buildCategorySection(context, "Grocery & Kitchen", [
            {"name": "Vegetables & Fruits", "image":
"assets/vegetables_fruits.png"},
            {"name": "Atta, Rice & Dal", "image": "assets/atta_rice_dal.png"},
            {"name": "Oil, Ghee & Masala", "image": 'assets/oil_ghee_masala.jpg'},
            {"name": "Dairy, Bread & Eggs", "image":
"assets/dairy_bread_eggs.png"},
            {"name": "Bakery & Biscuits", "image": "assets/bakery_biscuits.png"},
            {"name": "Dry Fruits & Cereals", "image":
"assets/dry_fruits_cereals.png"},
            {"name": "Chicken, Meat & Fish", "image":
"assets/chicken_meat_fish.png"},
            {"name": "Kitchenware & Appliances", "image":
"assets/kitchenware_appliances.png"},
          ]),
          buildCategorySection(context, "Snacks & Drinks", [
            {"name": "Chips & Namkeen", "image": "assets/chips_namkeen.png"},
            {"name": "Sweets & Chocolates", "image":
"assets/sweets_chocolates.png"},
            {"name": "Drinks & Juices", "image": "assets/drinks_juices.png"},
            {"name": "Tea, Coffee & Milk Drinks", "image":
"assets/tea_coffee_milk.png"},
            {"name": "Instant Food", "image": "assets/instant_food.png"},
            {"name": "Sauces & Spreads", "image": "assets/sauces_spreads.png"},
            {"name": "Paan Corner", "image": "assets/paan_corner.png"},
            {"name": "Ice Creams & Desserts", "image":
"assets/icrecream_desserts.png"},
          ]),
        ],
      ),
    ),
  ),
),
Container(
  padding: EdgeInsets.all(10),
  color: Colors.blue.shade100,
  child: Row(
    mainAxisAlignment: MainAxisAlignment.center,
    children: [
      Icon(Icons.delivery_dining, color: Colors.blue.shade800),
      SizedBox(width: 5),
      Text("Get FREE delivery", style: TextStyle(fontWeight: FontWeight.bold,
color: Colors.blue.shade800)),
    ],
  ),
),

```



```

        SizedBox(width: 5),
        Text("on all orders above ₹149", style: TextStyle(color: Colors.black54)),
      ],
    ),
  ),
],
),
);
}

```

Widget buildCategorySection(BuildContext context, String title, List<Map<String, String>> categories) {

```

  return Column(
    crossAxisAlignment: CrossAxisAlignment.start,
    children: [
      SizedBox(height: 10),
      Text(
        title,
        style: TextStyle(fontSize: 18, fontWeight: FontWeight.bold),
      ),
      GridView.builder(
        shrinkWrap: true,
        physics: NeverScrollableScrollPhysics(),
        gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(
          crossAxisCount: 4,
          crossAxisSpacing: 10,
          mainAxisSpacing: 10,
          childAspectRatio: 0.8,
        ),
        itemCount: categories.length,
        itemBuilder: (context, index) {
          return GestureDetector(
            onTap: () {
              if (categories[index]["name"] == "Bakery & Biscuits") {
                Navigator.pushNamed(context, '/bakery_biscuits');
              }
            },
            child: Column(
              children: [
                Container(
                  height: 60,
                  width: 60,
                  decoration: BoxDecoration(
                    color: Colors.grey.shade200,

```

```

        borderRadius: BorderRadius.circular(10),
        image: DecorationImage(
          image: AssetImage(categories[index]["image"]!),
          fit: BoxFit.cover,
        ),
      ),
    ),
    SizedBox(height: 5),
    Text(
      categories[index]["name"]!,
      textAlign: TextAlign.center,
      style: TextStyle(fontSize: 12),
    ),
  ],
),
);
},
),
],
);
}
}
}

```

### **bakery\_biscuits.dart**

```

import 'package:flutter/material.dart';
import 'package:provider/provider.dart';
import 'package:blinkit/providers/cart_provider.dart';

class BakeryBiscuitsPage extends StatelessWidget {
  final List<Product> products = [
    Product(name: 'Sunfeast Baked Creations Walnut & Choco Chip Cookies',
      imageUrl: 'assets/sunfeast_cookies.png', price: 134.0),
    Product(name: 'Hide & Seek Chocolate Chip Cookies (100 g)', imageUrl:
      'assets/hide_seek_100.png', price: 29.0),
    Product(name: 'Hide & Seek Chocolate Chip Cookies (200 g)', imageUrl:
      'assets/hide_seek_200.png', price: 45.0),
    Product(name: 'Britannia Good Day Cashew Biscuit', imageUrl:
      'assets/brittania_goodday.png', price: 49.0),
  ];

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(

```

```

backgroundColor: Colors.amber.shade100,
elevation: 0,
title: Text(
  "Bakery & Biscuits",
  style: TextStyle(fontSize: 20, fontWeight: FontWeight.bold, color: Colors.black),
),
leading: IconButton(
  icon: Icon(Icons.arrow_back, color: Colors.black),
  onPressed: () => Navigator.pop(context),
),
body: Row(
  children: [
    // ✅ Sidebar with categories and images
    Container(
      width: 100,
      color: Colors.white,
      child: ListView(
        children: [
          CategoryTile(label: 'Cookies', image: 'assets/cookies.png', isSelected:
true),
          CategoryTile(label: 'Cream Biscuits', image: 'assets/cream_biscuits.png'),
          CategoryTile(label: 'Healthy & Digestive', image:
'assets/healthy_digestive.png'),
          CategoryTile(label: 'Sweet & Salty', image: 'assets/sweet_salty.png'),
          CategoryTile(label: 'Glucose & Marie', image: 'assets/glucose_marie.png'),
          CategoryTile(label: 'Rusks & Wafers', image: 'assets/rusks_wafers.png'),
          CategoryTile(label: 'Cakes & Rolls', image: 'assets/cakes_rolls.png'),
          CategoryTile(label: 'Baking Ingredients', image:
'assets/baking_ingredients.png'),
        ],
      ),
    ),
    // ✅ Products grid
    Expanded(
      child: Column(
        children: [
          Expanded(
            child: GridView.builder(
              padding: EdgeInsets.all(8),
              gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(
                crossAxisCount: 2,
                crossAxisSpacing: 10,
                mainAxisSpacing: 10,

```

```

        childAspectRatio: 0.7,
      ),
      itemCount: products.length,
      itemBuilder: (context, index) {
        return ProductTile(product: products[index]);
      },
    ),
  ),
  buildCartButton(context), // ✅ Floating cart button at bottom
],
),
),
],
),
);
}

```

/// ✅ Floating Cart Button

```

Widget buildCartButton(BuildContext context) {
  return Consumer<CartProvider>(
    builder: (context, cart, child) {
      return cart.cartItems.isNotEmpty
        ? Container(
            padding: EdgeInsets.all(10),
            color: Colors.green,
            width: double.infinity,
            child: Row(
              mainAxisAlignment: MainAxisAlignment.spaceBetween,
              children: [
                Text("${cart.cartItems.length} items in cart",
                  style: TextStyle(color: Colors.white, fontSize: 16)),
                ElevatedButton(
                  style: ElevatedButton.styleFrom(backgroundColor: Colors.white),
                  onPressed: () {
                    Navigator.pushNamed(context, '/checkout'); // ✅ Navigate to
Checkout Page
                  },
                  child: Text("View Cart", style: TextStyle(color: Colors.green)),
                ),
              ],
            ),
          )
        : SizedBox();
    },
  ),

```

```

    );
  }
}

```

```

class CategoryTile extends StatelessWidget {
  final String label;
  final String image;
  final bool isSelected;

```

```

  CategoryTile({required this.label, required this.image, this.isSelected = false});

```

```

  @override

```

```

  Widget build(BuildContext context) {

```

```

    return Padding(

```

```

      padding: const EdgeInsets.symmetric(vertical: 8.0),

```

```

      child: Column(

```

```

        children: [

```

```

          Container(

```

```

            height: 50,

```

```

            width: 50,

```

```

            decoration: BoxDecoration(

```

```

              borderRadius: BorderRadius.circular(10),

```

```

              image: DecorationImage(

```

```

                image: AssetImage(image),

```

```

                fit: BoxFit.cover,

```

```

            ),

```

```

          ),

```

```

        ),

```

```

        SizedBox(height: 5),

```

```

        Text(

```

```

          label,

```

```

          textAlign: TextAlign.center,

```

```

          style: TextStyle(

```

```

            color: isSelected ? Colors.green : Colors.black,

```

```

            fontWeight: isSelected ? FontWeight.bold : FontWeight.normal,

```

```

          ),

```

```

        ),

```

```

      ],

```

```

    ),

```

```

  );

```

```

}

```

```

}

```

```

class ProductTile extends StatelessWidget {

```

```
final Product product;
```

```
ProductTile({required this.product});
```

```
@override
```

```
Widget build(BuildContext context) {
```

```
  return Card(
```

```
    shape: RoundedRectangleBorder(borderRadius: BorderRadius.circular(10)),
```

```
    child: Column(
```

```
      crossAxisAlignment: CrossAxisAlignment.start,
```

```
      children: [
```

```
        Expanded(
```

```
          child: Image.asset(
```

```
            product.imageUrl,
```

```
            fit: BoxFit.cover,
```

```
            width: double.infinity,
```

```
          ),
```

```
        ),
```

```
        Padding(
```

```
          padding: const EdgeInsets.all(8.0),
```

```
          child: Text(
```

```
            product.name,
```

```
            style: TextStyle(fontWeight: FontWeight.bold),
```

```
          ),
```

```
        ),
```

```
        Padding(
```

```
          padding: const EdgeInsets.symmetric(horizontal: 8.0),
```

```
          child: Row(
```

```
            mainAxisAlignment: MainAxisAlignment.spaceBetween,
```

```
            children: [
```

```
              Text(
```

```
                '₹${product.price}',
```

```
                style: TextStyle(color: Colors.green, fontWeight: FontWeight.bold),
```

```
              ),
```

```
              ElevatedButton(
```

```
                onPressed: () {
```

```
                  Provider.of<CartProvider>(context, listen: false)
```

```
                    .addToCart(product.name, product.price);
```

```
                },
```

```
                child: Text('ADD'),
```

```
              ),
```

```
            ],
```

```
          ),
```

```
        ),
```

```

    ],
  ),
);
}
}

```

```

class Product {
  final String name;
  final String imageUrl;
  final double price;

  Product({required this.name, required this.imageUrl, required this.price});
}

```

### **checkout.dart**

```

import 'package:flutter/material.dart';
import 'package:provider/provider.dart';
import 'package:blinkit/providers/cart_provider.dart';

class CheckoutPage extends StatelessWidget {
  @override
  Widget build(BuildContext context) {
    final cart = Provider.of<CartProvider>(context);

    return Scaffold(
      appBar: AppBar(
        title: Text("Checkout"),
        backgroundColor: Colors.white,
        actions: [
          IconButton(icon: Icon(Icons.share, color: Colors.green), onPressed: () {}),
        ],
      ),
      body: Column(
        children: [
          Container(
            padding: EdgeInsets.all(10),
            child: Row(
              children: [
                Icon(Icons.timer, color: Colors.green),
                SizedBox(width: 5),
                Text("Free delivery in 10 minutes", style: TextStyle(fontWeight:
FontWeight.bold)),
              ],
            ),
          ),
        ],
      ),
    );
  }
}

```

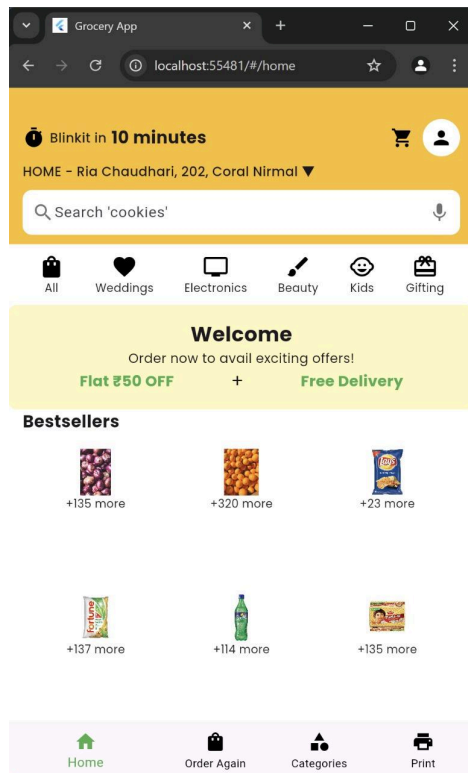
```

),
Expanded(
  child: ListView.builder(
    itemCount: cart.cartItems.length,
    itemBuilder: (context, index) {
      final item = cart.cartItems[index];
      return ListTile(
        title: Text(item["name"]),
        trailing: Text("₹${item["price"]}", style: TextStyle(color: Colors.green)),
      );
    },
  ),
),
Container(
  padding: EdgeInsets.all(10),
  color: Colors.white,
  child: Column(
    children: [
      ListTile(
        title: Text("Total Amount"),
        trailing: Text("₹${cart.totalAmount}",
          style: TextStyle(fontSize: 18, fontWeight: FontWeight.bold)),
      ),
      ElevatedButton(
        style: ElevatedButton.styleFrom(backgroundColor: Colors.green),
        onPressed: () {
          cart.clearCart(); // ✅ Clear cart after placing order
          Navigator.pop(context);
        },
        child: Padding(
          padding: const EdgeInsets.all(12.0),
          child: Text("Place Order",
            style: TextStyle(color: Colors.white, fontSize: 18)),
        ),
      ),
    ],
  ),
),
];
);
}
}

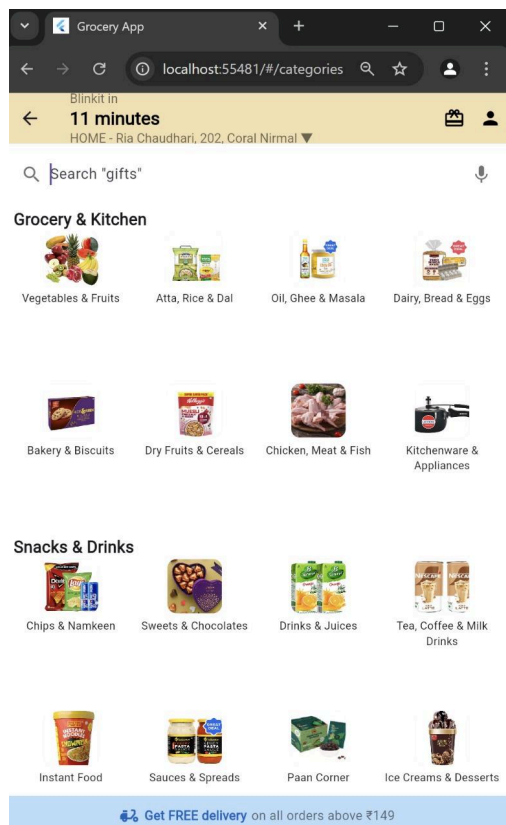
```



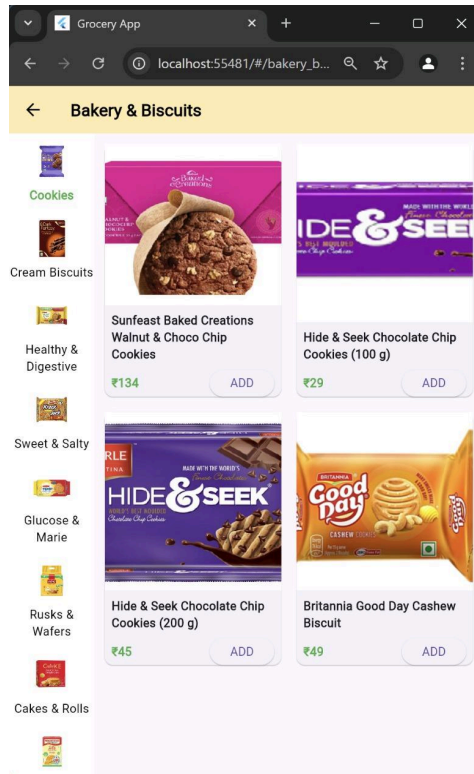
Output:  
This is the homepage.



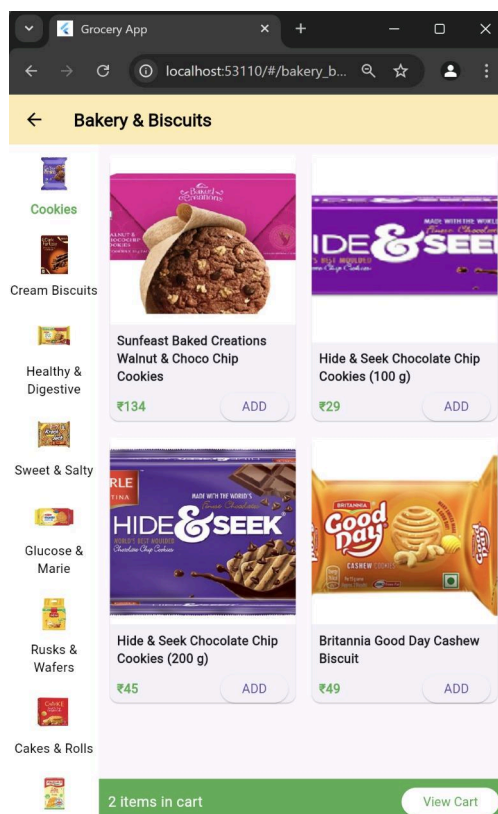
When the user clicks on categories icon at the bottom of the screen it will navigate the user to the categories page.



When the user clicks on Bakery and Biscuits under Grocery and Kitchen section it will navigate the user to bakery and biscuits section.



When the user clicks on 'Add' button on an item it will show a floating cart at the bottom of the screen.



When the user clicks on View Cart at the bottom of the screen it will show the user all the products the user has added into the cart along with the total amount the user has to pay and thus navigate to the checkout page.

