



**Bharatiya Vidya Bhavan's**  
**SARDAR PATEL INSTITUTE OF TECHNOLOGY**  
(Autonomous Institute Affiliated to University of Mumbai)  
Munshi Nagar, Andheri (W), Mumbai – 400 058.  
Department of Computer Science and Engineering

<b>Experiment</b>	7
<b>Aim</b>	Create an app for a restaurant to deliver food at doorstep.
<b>Objective</b>	<ul style="list-style-type: none"><li>• To create app for restaurant food delivery app.</li><li>• To use either side or tabs menu</li><li>• To create your own theme for the app.</li><li>• To create Splash screen for the app.</li></ul>
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<b>Class</b>	FY MCA
<b>Batch</b>	A
<b>Date of Submission</b>	22-04-2025

<b>Technology used</b>	Framework- Flutter, Tool used - Android Studio Programming- Dart
<b>Task</b>	Create a Restaurant App for food delivery at your doorstep. Consider your own creativity and theme. Make use of multiple widgets and themes for make it look the best.
<b>Code with proper label</b>	<b>main.dart :</b> <pre>import 'package:flutter/material.dart'; import 'package:provider/provider.dart'; import 'package:google_fonts/google_fonts.dart'; import 'screens/home_screen.dart'; import 'screens/cart_screen.dart'; import 'screens/profile_screen.dart'; import 'providers/cart_provider.dart'; import 'providers/food_provider.dart'; void main() {   runApp(     MultiProvider(       providers: [         ChangeNotifierProvider(create: (context) =&gt; CartProvider()),         ChangeNotifierProvider(create: (context) =&gt; FoodProvider()),       ],       child: const MyApp(),     ),   ); }</pre>



```
class MyApp extends StatelessWidget {
  const MyApp({super.key});
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Restaurant App',
      theme: ThemeData(
        primaryColor: const Color(0xFF2D0C57),
        scaffoldBackgroundColor: Colors.white,
        textTheme: GoogleFonts.poppinsTextTheme(
          Theme.of(context).textTheme,
        ),
        colorScheme: ColorScheme.fromSeed(
          seedColor: const Color(0xFF2D0C57),
          primary: const Color(0xFF2D0C57),
          secondary: const Color(0xFFFFFD700),
        ),
        appBarTheme: AppBarTheme(
          backgroundColor: const Color.fromARGB(255, 252,
131, 1),
          elevation: 0,
          iconTheme: const IconThemeData(color:
Colors.white),
          titleTextStyle: GoogleFonts.poppins(
            color: Colors.white,
            fontSize: 20,
            fontWeight: FontWeight.bold,
          ),
        ),
        home: const MainScreen(),
        debugShowCheckedModeBanner: false,
      );
    }
}

class MainScreen extends StatefulWidget {
  const MainScreen({super.key});
  @override
  State<MainScreen> createState() => _MainScreenState();
}

class _MainScreenState extends State<MainScreen> {
  int _selectedIndex = 0;
  final List<Widget> _screens = [
```



```
const HomeScreen(),
const CartScreen(),
const ProfileScreen(),
];
void _onItemTapped(int index) {
  setState(() {
    _selectedIndex = index;
  });
}
@override
Widget build(BuildContext context) {
  return Scaffold(
    body: _screens[_selectedIndex],
    bottomNavigationBar: BottomNavigationBar(
      currentIndex: _selectedIndex,
      selectedItemColor:
Theme.of(context).primaryColor,
      unselectedItemColor: Colors.grey,
      items: const [
        BottomNavigationBarItem(
          icon: Icon(Icons.home),
          label: 'Home',
        ),
        BottomNavigationBarItem(
          icon: Icon(Icons.shopping_cart),
          label: 'Cart',
        ),
        BottomNavigationBarItem(
          icon: Icon(Icons.person),
          label: 'Profile',
        ),
      ],
      onTap: _onItemTapped,
    ),
  );
}
```

**cart\_screen.dart :**

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



```
class CartScreen extends StatelessWidget {
  const CartScreen({super.key});

  @override
  Widget build(BuildContext context) {
    return Scaffold(
      backgroundColor: const Color.fromARGB(255, 242,
240, 238),
      appBar: AppBar(
        backgroundColor: const Color.fromARGB(255, 255,
115, 1),
        elevation: 0,
        title: const Text(
          'My Cart',
          style: TextStyle(color: Color.fromARGB(255,
251, 251, 251)),
        ),
        actions: [
          Consumer<CartProvider>(
            builder: (context, cart, child) {
              return TextButton.icon(
                onPressed: cart.itemCount > 0
                  ? () {
                      cart.clear();

ScaffoldMessenger.of(context).showSnackBar(
                      const SnackBar(
                        content: Text('Cart
cleared'),
                        duration: Duration(seconds:
1),
                        backgroundColor:
Color(0xFF2D0C57),
                      ),
                    );
              }
            : null,
            icon: const Icon(Icons.delete, color:
Color.fromARGB(255, 1, 1, 1)),
            label: const Text(
              'Clear',
              style: TextStyle(color:
Color.fromARGB(255, 6, 6, 5)),
```



```
        ),  
        );  
    },  
    ),  
    ],  
    ),  
    body: Consumer<CartProvider>(  
        builder: (context, cart, child) {  
            if (cart.itemCount == 0) {  
                return Center(  
                    child: Column(  
                        mainAxisAlignment:  
MainAxisAlignment.center,  
                        children: [  
                            Icon(  
                                Icons.shopping_cart_outlined,  
                                size: 100,  
                                color: const Color.fromARGB(255, 255,  
136, 0).withOpacity(0.5),  
                            ),  
                            const SizedBox(height: 16),  
                            const Text(  
                                'Your cart is empty',  
                                style: TextStyle(  
                                    fontSize: 24,  
                                    color: Color.fromARGB(255, 9, 10,  
10),  
                                fontWeight: FontWeight.bold,  
                            ),  
                            ),  
                            const SizedBox(height: 8),  
                            const Text(  
                                'Add some delicious items to your  
cart',  
                                style: TextStyle(  
                                    fontSize: 16,  
                                    color: Color.fromARGB(179, 7, 4,  
4),  
                                ),  
                            ),  
                        ],  
                    ),  
                );  
            }  
        },  
    );
```



```
}  
    return Column(  
        children: [  
            Expanded(  
                child: ListView.builder(  
                    padding: const EdgeInsets.all(16),  
                    itemCount: cart.items.length,  
                    itemBuilder: (ctx, i) {  
                        final cartItem =  
cart.items.values.toList()[i];  
                        return Dismissible(  
                            key: ValueKey(cartItem.id),  
                            background: Container(  
                                margin: const  
EdgeInsets.symmetric(vertical: 8),  
                                color: Colors.red.shade400,  
                                alignment: Alignment.centerRight,  
                                padding: const  
EdgeInsets.only(right: 20),  
                                child: const Icon(  
                                    Icons.delete,  
                                    color: Colors.white,  
                                    size: 30,  
                                ),  
                            ),  
                            direction:  
DismissDirection.endToStart,  
                            onDismissed: (direction) {  
                                cart.removeItem(cartItem.id);  
                            },  
                            child: Card(  
                                color: const Color.fromARGB(255,  
239, 236, 218),  
                                margin: const  
EdgeInsets.symmetric(vertical: 8),  
                                shape: RoundedRectangleBorder(  
                                    borderRadius:  
BorderRadius.circular(12),  
                                ),  
                                child: ListTile(  
                                    contentPadding: const  
EdgeInsets.all(8),  
                                    leading: ClipRRect(  
                                        child: Image.asset(  
                                            'assets/images/  
cartItem.png',  
                                            width: 50,  
                                            height: 50,  
                                            fit: BoxFit.cover,  
                                        ),  
                                        clipBehavior: Clip.hardEdge,  
                                    ),  
                                    title: Text(cartItem.name),  
                                    subtitle: Text(cartItem.description),  
                                    trailing: Text(cartItem.price),  
                                ),  
                            ),  
                        ),  
                    ],  
                ),  
            ),  
        ],  
    );  
}
```



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```
borderRadius:
BorderRadius.circular(8),

child: Image.asset(
  cartItem.imageUrl,
  width: 60,
  height: 60,
  fit: BoxFit.cover,
  errorBuilder: (context,
error, stackTrace) =>

    Container(
      width: 60,
      height: 60,
      color:
Colors.grey.shade300,

      child: const Icon(
        Icons.broken_image,
        color: Colors.grey,
      ),
    ),
  ),
),
title: Text(
  cartItem.name,
  style: const TextStyle(
    color: Color(0xFF2D0C57),
    fontWeight:
FontWeight.bold,
  ),
),
subtitle: Text(
  '₹${(cartItem.price *
cartItem.quantity).toStringAsFixed(2)}',
  style: TextStyle(
    color: const
Color(0xFF2D0C57).withOpacity(0.8),
    fontWeight:
FontWeight.w500,
  ),
),
trailing: Row(
  mainAxisAlignment:
MainAxisSize.min,

  children: [
```



```
        IconButton(  
            icon: const Icon(  
  
Icons.remove_circle_outline,  
  
            color:  
Color(0xFF2D0C57),  
  
        ),  
        onPressed: () {  
  
cart.removeSingleItem(cartItem.id);  
        },  
    ),  
    Text(  
        '${cartItem.quantity}',  
        style: const TextStyle(  
            color:  
Color(0xFF2D0C57),  
  
            fontSize: 18,  
            fontWeight:  
FontWeight.bold,  
  
        ),  
    ),  
    IconButton(  
        icon: const Icon(  
  
Icons.add_circle_outline,  
  
            color:  
Color(0xFF2D0C57),  
  
        ),  
        onPressed: () {  
  
cart.addSingleItem(cartItem.id);  
        },  
    ),  
],  
),  
),  
),  
),  
);  
},  
),  
),  
Container(  

```







```
),  
const SizedBox(height: 8),  
Row(  
  mainAxisAlignment:  
MainAxisAlignment.spaceBetween,  
  children: [  
    const Text(  
      'Delivery Fee',  
      style: TextStyle(  
        color: Color(0xFF2D0C57),  
        fontSize: 16,  
      ),  
    ),  
    Text(  
  
      '₹${cart.deliveryFee.toStringAsFixed(2)}',  
      style: const TextStyle(  
        color: Color(0xFF2D0C57),  
        fontSize: 16,  
        fontWeight:  
FontWeight.bold,  
      ),  
    ),  
  ],  
,  
const Divider(color:  
Color(0xFF2D0C57)),  
Row(  
  mainAxisAlignment:  
MainAxisAlignment.spaceBetween,  
  children: [  
    const Text(  
      'Total',  
      style: TextStyle(  
        color: Color(0xFF2D0C57),  
        fontSize: 20,  
        fontWeight:  
FontWeight.bold,  
      ),  
    ),  
    Text(  
  
      '₹${cart.total.toStringAsFixed(2)}',
```



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```
style: const TextStyle(  
    color: Color(0xFF2D0C57),  
    fontSize: 20,  
    fontWeight:  
FontWeight.bold,  
),  
),  
],  
),  
const SizedBox(height: 16),  
SizedBox(  
    width: double.infinity,  
    child: ElevatedButton(  
        style:  
ElevatedButton.styleFrom(  
            backgroundColor: const  
Color.fromARGB(255, 251, 147, 2),  
            foregroundColor:  
Colors.white,  
            padding: const  
EdgeInsets.symmetric(vertical: 16),  
            shape:  
RoundedRectangleBorder(  
                borderRadius:  
BorderRadius.circular(12),  
            ),  
        ),  
        onPressed: cart.total <= 0  
            ? null  
            : () {  
  
ScaffoldMessenger.of(context).showSnackBar(  
            const SnackBar(  
                content:  
Text('Processing your order...'),  
                backgroundColor:  
Color.fromARGB(255, 251, 130, 1),  
            ),  
        );  
    },  
    child: const Text(  
        'CHECKOUT',  
        style: TextStyle(  

```



```
fontSize: 18,  
fontWeight:  
FontWeight.bold,  
),  
),  
),  
),  
],  
),  
),  
),  
],  
);  
},  
),  
);  
}  
}
```

#### **home screen.dart :**

```
import 'package:flutter/material.dart';  
import 'package:provider/provider.dart';  
import '../providers/food_provider.dart';  
import '../providers/cart_provider.dart';  
import '../models/food_item.dart';  
  
class HomeScreen extends StatelessWidget {  
  const HomeScreen({super.key});  
  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      backgroundColor: const Color.fromARGB(255, 239,  
238, 242),  
      appBar: AppBar(  
        backgroundColor: const Color.fromARGB(255, 253,  
110, 0),  
        title: const Text('Food Point', style:  
TextStyle(color: Color.fromARGB(255, 251, 251, 251))),  
        elevation: 0,  
        actions: [  
          Row(  
            children: [  

```



```
const Text(  
  'Sort by: ',  
  style: TextStyle(color:  
Color.fromARGB(255, 8, 8, 23), fontSize: 16),  
),  
Consumer<FoodProvider>(  
  builder: (context, foodProvider, child) {  
    return TextButton.icon(  
      icon: Icon(  
  
foodProvider.isSortedByPriceAscending  
      ? Icons.arrow_upward  
      : Icons.arrow_downward,  
      color: const Color.fromARGB(255, 9,  
9, 9),  
    ),  
    label: Text(  
      'Price',  
      style: const TextStyle(  
        color: Color.fromARGB(255, 18,  
18, 18),  
        fontSize: 16,  
      ),  
    ),  
    onPressed: () =>  
foodProvider.toggleSortByPrice(),  
  );  
},  
,  
],  
,  
Stack(  
  children: [  
    IconButton(  
      icon: const Icon(Icons.shopping_cart,  
color: Color.fromARGB(255, 9, 9, 9)),  
      onPressed: () {  
  
DefaultTabController.of(context)?.animateTo(1);  
    },  
  ),  
  Positioned(  
    right: 8,
```



```
        top: 8,
        child: Consumer<CartProvider>(  
          builder: (context, cart, child) {  
            return cart.itemCount > 0  
              ? Container(  
                padding: const  
EdgeInsets.all(2),  
                decoration: BoxDecoration(  
                  color: const  
Color.fromARGB(255, 65, 16, 78),  
                  borderRadius:  
BorderRadius.circular(10),  
                ),  
                constraints: const  
BoxConstraints(  
                  minWidth: 16,  
                  minHeight: 16,  
                ),  
                child: Text(  
                  '${cart.itemCount}',  
                  style: const TextStyle(  
                    color:  
Color.fromARGB(255, 254, 254, 254),  
                    fontSize: 10,  
                    fontWeight:  
FontWeight.bold,  
                  ),  
                  textAlign:  
TextAlign.center,  
                ),  
              )  
            : Container();  
          },  
        ),  
      ],  
    ),  
  ],  
),  
body: Column(  
  children: [  
    Container(  
      color: const Color.fromARGB(255, 239, 239, 239,
```

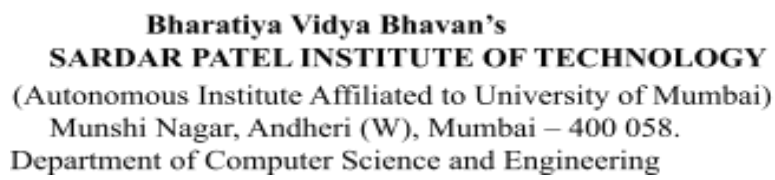


```
241),  
        padding: const EdgeInsets.all(16.0),  
        child: TextField(  
            style: const TextStyle(color:  
Color.fromARGB(255, 27, 24, 24)),  
            decoration: InputDecoration(  
                hintText: 'Search foods...',  
                hintStyle: const TextStyle(color:  
Color.fromARGB(179, 24, 24, 24)),  
                prefixIcon: const Icon(Icons.search,  
color: Color.fromARGB(179, 21, 21, 21)),  
                border: OutlineInputBorder(  
                    borderRadius:  
BorderRadius.circular(12),  
                    borderSide: const BorderSide(color:  
Color.fromARGB(255, 15, 15, 15)),  
                ),  
                enabledBorder: OutlineInputBorder(  
                    borderRadius:  
BorderRadius.circular(12),  
                    borderSide: const BorderSide(color:  
Color.fromARGB(137, 26, 26, 26)),  
                ),  
                focusedBorder: OutlineInputBorder(  
                    borderRadius:  
BorderRadius.circular(12),  
                    borderSide: const BorderSide(color:  
Color.fromARGB(255, 71, 71, 69)),  
                ),  
                filled: true,  
                fillColor: Colors.white10,  
            ),  
            onChanged: (value) {  
                Provider.of<FoodProvider>(context,  
listen: false)  
                    .searchItems(value);  
            },  
        ),  
    ),  
    Expanded(  
        child: Consumer<FoodProvider>(  
            builder: (context, foodProvider, child) {  
                final foods = foodProvider.items;
```



```
return GridView.builder(  
  padding: const EdgeInsets.all(16.0),  
  gridDelegate: const  
SliverGridDelegateWithFixedCrossAxisCount(  
    crossAxisCount: 2,  
    childAspectRatio: 0.7,  
    crossAxisSpacing: 16,  
    mainAxisSpacing: 16,  
  ),  
  itemCount: foods.length,  
  itemBuilder: (context, index) {  
    final food = foods[index];  
    return Card(  
      elevation: 4,  
      color: const Color.fromARGB(255,  
235, 235, 227),  
      shape: RoundedRectangleBorder(  
        borderRadius:  
BorderRadius.circular(12),  
      ),  
      child: Column(  
        crossAxisAlignment:  
CrossAxisAlignment.start,  
        children: [  
          ClipRRect(  
            borderRadius: const  
BorderRadius.vertical(  
              top: Radius.circular(12),  
            ),  
            child: Image.asset(  
              food.imageUrl,  
              height: 120,  
              width: double.infinity,  
              fit: BoxFit.cover,  
              errorBuilder: (context,  
error, stackTrace) =>  
                Container(  
                  height: 120,  
                  color:  
Colors.grey.shade300,  
                  child: const Icon(  
                    Icons.broken_image,  
                    color: Colors.grey,
```





```

        ),
      ),
    ),
  ),
  Expanded(
    child: Padding(
      padding: const
EdgeInsets.all(8.0),

      child: Column(
        crossAxisAlignment:
CrossAxisAlignment.start,

        mainAxisAlignment:
MainAxisAlignment.spaceBetween,

        children: [
          Column(
            crossAxisAlignment:
CrossAxisAlignment.start,

            children: [
              Text(
                food.name,
                style: const
TextStyle(
                  color:
Color(0xFF2D0C57),

                  fontWeight:
FontWeight.bold,

                  fontSize: 16,
                ),
                maxLines: 1,
                overflow:
TextOverflow.ellipsis,

              ),
            ],
          const
SizedBox(height: 4),

          Text(
            '₹${food.price.toStringAsFixed(2)}',

            style: const
TextStyle(
              color:
Color(0xFF2D0C57),

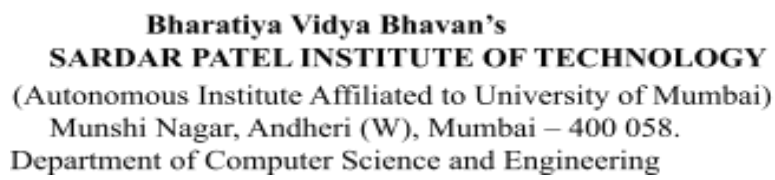
```



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```
fontWeight:
FontWeight.bold,

        fontSize: 14,
    ),
),
],
),
    SizedBox(
        width:
double.infinity,
        child:
ElevatedButton(
        style:
ElevatedButton.styleFrom(
        backgroundColor:
            const
Color.fromARGB(255, 254, 157, 2),
        foregroundColor:
Colors.white,
    ),
    onPressed: () {
Provider.of<CartProvider>(context,
        listen:
false)
        .addItem(food);
ScaffoldMessenger.of(context)
        .hideCurrentSnackBar();
ScaffoldMessenger.of(context)
        .showSnackBar(
            SnackBar(
                content:
Text(
                '${food.name} added to cart'),
                duration:
                    const
Duration(seconds: 2),
```



```
backgroundColor:                                const
Color.fromARGB(255, 254, 157, 2),
action:
SnackBarAction(
label:
'UNDO',
textColor:
const
Color.fromARGB(255, 255, 255, 255),
onPressed:
() {
Provider.of<CartProvider>(
context,
listen: false)
.removeSingleItem(food.id);
},
),
),
);
},
child: const
Text('Add to Cart'),
),
),
],
),
),
),
],
),
);
},
);
},
),
),
],
),
);
},
);
},
),
),
],
),
```



```
),  
);  
}  
}
```

#### **menu screen.dart :**

```
import 'package:flutter/material.dart';  
import '../widgets/menu_item.dart';  
import '../models/menu_item_model.dart';  
  
class MenuScreen extends StatefulWidget {  
  const MenuScreen({super.key});  
  
  @override  
  State<MenuScreen> createState() => _MenuScreenState();  
}  
  
class _MenuScreenState extends State<MenuScreen> {  
  String _searchQuery = '';  
  bool _showVegOnly = false;  
  bool _showNonVegOnly = false;  
  
  List<MenuItemModel> get filteredItems {  
    return menuItems.where((item) {  
      final matchesSearch =  
item.name.toLowerCase().contains(_searchQuery.toLowerCase  
()) ||  
  
item.description.toLowerCase().contains(_searchQuery.toLo  
werCase());  
  
      if (_showVegOnly) {  
        return matchesSearch && item.isVeg;  
      } else if (_showNonVegOnly) {  
        return matchesSearch && !item.isVeg;  
      }  
  
      return matchesSearch;  
    }).toList();  
  }  
  
  @override
```



```
Widget build(BuildContext context) {  
  return Scaffold(  
    appBar: AppBar(  
      title: const Text('Our Menu'),  
      bottom: PreferredSize(  
        preferredSize: const Size.fromHeight(120),  
        child: Column(  
          children: [  
            Padding(  
              padding: const EdgeInsets.all(8.0),  
              child: TextField(  
                onChanged: (value) {  
                  setState(() {  
                    _searchQuery = value;  
                  });  
                },  
                style: const TextStyle(color:  
Colors.white),  
                decoration: InputDecoration(  
                  hintText: 'Search menu items...',  
                  hintStyle: const TextStyle(color:  
Colors.white70),  
                  prefixIcon: const Icon(Icons.search,  
color: Colors.white70),  
                  filled: true,  
                  fillColor:  
Colors.white.withOpacity(0.1),  
                  border: OutlineInputBorder(  
                    borderRadius:  
BorderRadius.circular(12),  
                    borderSide: BorderSide.none,  
                  ),  
                ),  
              ),  
            ),  
            SingleChildScrollView(  
              scrollDirection: Axis.horizontal,  
              padding: const  
EdgeInsets.symmetric(horizontal: 8),  
              child: Row(  
                children: [  
                  FilterChip(  
                    selected: _showVegOnly,
```



```
label: Row(  
  children: [  
    Icon(  
      Icons.circle,  
      size: 12,  
      color: _showVegOnly ? const  
Color(0xFF2D0C57) : Colors.green,  
    ),  
    const SizedBox(width: 8),  
    Text(  
      'Veg Only',  
      style: TextStyle(  
        color: _showVegOnly ? const  
Color(0xFF2D0C57) : Colors.white,  
      ),  
    ),  
  ],  
)  
onSelected: (bool selected) {  
  setState(() {  
    _showVegOnly = selected;  
    if (selected) {  
      _showNonVegOnly = false;  
    }  
  });  
},  
selectedColor: const  
Color(0xFFFFD700),  
  backgroundColor:  
Colors.white.withOpacity(0.1),  
)  
const SizedBox(width: 8),  
FilterChip(  
  selected: _showNonVegOnly,  
  label: Row(  
    children: [  
      Icon(  
        Icons.circle,  
        size: 12,  
        color: _showNonVegOnly ?  
const Color(0xFF2D0C57) : Colors.red,  
      ),  
      const SizedBox(width: 8),
```



```
Text(  
    'Non-Veg Only',  
    style: TextStyle(  
        color: _showNonVegOnly ?  
const Color(0xFF2D0C57) : Colors.white,  
    ),  
),  
],  
),  
onSelected: (bool selected) {  
    setState(() {  
        _showNonVegOnly = selected;  
        if (selected) {  
            _showVegOnly = false;  
        }  
    });  
},  
selectedColor: const  
Color(0xFFFFD700),  
    backgroundColor:  
Colors.white.withOpacity(0.1),  
    ),  
],  
),  
),  
const SizedBox(height: 8),  
],  
),  
),  
),  
body: filteredItems.isEmpty  
    ? const Center(  
        child: Text(  
            'No items found',  
            style: TextStyle(color: Colors.white70),  
        ),  
    )  
: ListView.builder(  
    padding: const EdgeInsets.all(16),  
    itemCount: filteredItems.length,  
    itemBuilder: (context, index) {  
        final item = filteredItems[index];  
        return MenuItem(  

```



```
        name: item.name,  
        description: item.description,  
        price: item.price,  
        image: item.image,  
        isVeg: item.isVeg,  
      ),  
    },  
  ),  
);  
  
}
```

#### **profile\_screen.dart :**

```
import 'package:flutter/material.dart';  
  
class ProfileScreen extends StatelessWidget {  
  const ProfileScreen({super.key});  
  
  @override  
  Widget build(BuildContext context) {  
    return Scaffold(  
      backgroundColor: const Color.fromARGB(255,  
242, 240, 238),  
      appBar: AppBar(  
        title: const Text('Profile'),  
      ),  
      body: ListView(  
        padding: const EdgeInsets.all(16.0),  
        children: [  
          const CircleAvatar(  
            radius: 50,  
            backgroundColor: Color.fromARGB(255, 158,  
158, 158),  
            child: Icon(  
              Icons.person,  
              size: 50,  
              color: Colors.white,  
            ),  
          ),  
          const SizedBox(height: 16),  
          const Text(  
            'Abhijeet Jadhav',  
            textAlign: TextAlign.center,  
          ),  
        ],  
      ),  
    );  
  }  
}
```





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```
style: TextStyle(  
  fontSize: 24,  
  fontWeight: FontWeight.bold,  
)  
)  
const SizedBox(height: 8),  
const Text(  
  'jabhijeet9274@gmail.com',  
  textAlign: TextAlign.center,  
  style: TextStyle(  
    fontSize: 16,  
    color: Colors.grey,  
  ),  
)  
const SizedBox(height: 32),  
ListTile(  
  leading: const Icon(Icons.history),  
  title: const Text('Order History'),  
  trailing: const Icon(Icons.chevron_right),  
  onTap: () {  
    ScaffoldMessenger.of(context).showSnackBar(  
      const SnackBar(  
        content: Text('Order History coming  
soon!'),  
        duration: Duration(seconds: 1),  
      ),  
    );  
  },  
)  
ListTile(  
  leading: const Icon(Icons.location_on),  
  title: const Text('Delivery Addresses'),  
  trailing: const Icon(Icons.chevron_right),  
  onTap: () {  
    ScaffoldMessenger.of(context).showSnackBar(  
      const SnackBar(  
        content: Text('Delivery Addresses  
coming soon!'),  
        duration: Duration(seconds: 1),  
      ),  
    );  
  },  
)
```



```
ListTile(  
  leading: const Icon(Icons.payment),  
  title: const Text('Payment Methods'),  
  trailing: const Icon(Icons.chevron_right),  
  onTap: () {  
    ScaffoldMessenger.of(context).showSnackBar(  
      const SnackBar(  
        content: Text('Payment Methods coming  
soon!'),  
        duration: Duration(seconds: 1),  
      ),  
    );  
  },  
,  
ListTile(  
  leading: const Icon(Icons.settings),  
  title: const Text('Settings'),  
  trailing: const Icon(Icons.chevron_right),  
  onTap: () {  
    ScaffoldMessenger.of(context).showSnackBar(  
      const SnackBar(  
        content: Text('Settings coming soon!'),  
        duration: Duration(seconds: 1),  
      ),  
    );  
  },  
,  
ListTile(  
  leading: const Icon(Icons.help),  
  title: const Text('Help & Support'),  
  trailing: const Icon(Icons.chevron_right),  
  onTap: () {  
    ScaffoldMessenger.of(context).showSnackBar(  
      const SnackBar(  
        content: Text('Help & Support coming  
soon!'),  
        duration: Duration(seconds: 1),  
      ),  
    );  
  },  
,  
],  
)
```



```
);  
}  
}  
  
splash_screen.dart :  
import 'dart:async';  
import 'package:flutter/material.dart';  
import 'home_screen.dart';  
  
class SplashScreen extends StatefulWidget {  
  const SplashScreen({super.key});  
  
  @override  
  State<SplashScreen> createState() =>  
    _SplashScreenState();  
}  
  
class _SplashScreenState extends State<SplashScreen> with  
SingleTickerProviderStateMixin {  
  late AnimationController _controller;  
  late Animation<double> _animation;  
  
  @override  
  void initState() {  
    super.initState();  
  
    // Animation controller for scaling effect  
    _controller = AnimationController(  
      vsync: this,  
      duration: const Duration(seconds: 4),  
    );  
  
    // Zoom-out to zoom-in effect  
    _animation = Tween<double>(begin: 1.0, end:  
4.0).animate(  
      CurvedAnimation(  
        parent: _controller,  
        curve: Curves.easeInOut,  
      ),  
    );  
  
    // Start animation  
    _controller.forward();  
  }  
}
```



```
// Navigate to HomeTabs after 4 seconds
Timer(const Duration(seconds: 4), () {
  Navigator.of(context).pushReplacement(
    MaterialPageRoute(builder: (context) => const
HomeScreen()),
  );
});
}

@override
void dispose() {
  _controller.dispose(); // Dispose animation
controller
  super.dispose();
}

@override
Widget build(BuildContext context) {
  return Scaffold(
    backgroundColor: Colors.white, // New background
color
    body: Center(
      child: AnimatedBuilder(
        animation: _animation,
        builder: (context, child) {
          return Transform.scale(
            scale: _animation.value,
            child: Image.asset(
              'assets/images/splash.jpg', // New image
path
              width: 150,
              height: 150,
            ),
          );
        },
      ),
    ),
  );
}
```



**cart\_provider.dart :**

```
import 'package:flutter/foundation.dart';
import '../models/food_item.dart';

class CartProvider with ChangeNotifier {
  final Map<String, CartItem> _items = {};

  Map<String, CartItem> get items {
    return {..._items};
  }

  int get itemCount {
    return _items.values.fold(0, (sum, item) => sum +
item.quantity);
  }

  double get totalAmount {
    var total = 0.0;
    _items.forEach((key, cartItem) {
      total += cartItem.price * cartItem.quantity;
    });
    return total;
  }

  double get deliveryFee => _items.isNotEmpty ? 7.59 :
0.0;

  double get subtotal => totalAmount;

  double get total => subtotal + deliveryFee;

  void addItem(FoodItem foodItem) {
    if (_items.containsKey(foodItem.id)) {
      _items.update(
        foodItem.id,
        (existingCartItem) => CartItem(
          id: existingCartItem.id,
          name: existingCartItem.name,
          price: existingCartItem.price,
          quantity: existingCartItem.quantity + 1,
          imageUrl: existingCartItem.imageUrl,
        ),
      );
    }
  }
}
```



```
} else {
    _items.putIfAbsent(
        foodItem.id,
        () => CartItem(
            id: foodItem.id,
            name: foodItem.name,
            price: foodItem.price,
            quantity: 1,
            imageUrl: foodItem.imageUrl,
        ),
    );
}
notifyListeners();
}

void removeItem(String id) {
    _items.remove(id);
    notifyListeners();
}

void removeSingleItem(String id) {
    if (!_items.containsKey(id)) {
        return;
    }
    if (_items[id]!.quantity > 1) {
        _items.update(
            id,
            (existingCartItem) => CartItem(
                id: existingCartItem.id,
                name: existingCartItem.name,
                price: existingCartItem.price,
                quantity: existingCartItem.quantity - 1,
                imageUrl: existingCartItem.imageUrl,
            ),
        );
    } else {
        _items.remove(id);
    }
    notifyListeners();
}

void clear() {
    _items.clear();
}
```



```
notifyListeners();  
}  
  
void addSingleItem(String id) {  
  if (!_items.containsKey(id)) {  
    return;  
  }  
  _items.update(  
    id,  
    (existingCartItem) => CartItem(  
      id: existingCartItem.id,  
      name: existingCartItem.name,  
      price: existingCartItem.price,  
      quantity: existingCartItem.quantity + 1,  
      imageUrl: existingCartItem.imageUrl,  
    ),  
  );  
  notifyListeners();  
}  
}  
  
class CartItem {  
  final String id;  
  final String name;  
  final double price;  
  final int quantity;  
  final String imageUrl;  
  
  CartItem({  
    required this.id,  
    required this.name,  
    required this.price,  
    required this.quantity,  
    required this.imageUrl,  
  });  
}
```

#### **food\_provider.dart :**

```
import 'package:flutter/foundation.dart';  
import '../models/food_item.dart';  
  
class FoodProvider with ChangeNotifier {  
  final List<FoodItem> _items = [  

```



```
FoodItem(  
  id: '1',  
  name: 'Butter Chicken',  
  description:  
    'Creamy, rich curry with tender chicken pieces  
in tomato-based sauce',  
  price: 499,  
  imageUrl: 'assets/images/butterchicken.jpg',  
  category: 'Indian Main Course',  
)  
FoodItem(  
  id: '2',  
  name: 'Paneer Tikka',  
  description: 'Grilled cottage cheese cubes  
marinated in spiced yogurt',  
  price: 399,  
  imageUrl: 'assets/images/paneertikka.jpg',  
  category: 'Indian Appetizer',  
)  
FoodItem(  
  id: '3',  
  name: 'Biryani',  
  description:  
    'Fragrant basmati rice cooked with aromatic  
spices and mixed vegetables',  
  price: 449,  
  imageUrl: 'assets/images/biryani.jpg',  
  category: 'Indian Main Course',  
)  
FoodItem(  
  id: '4',  
  name: 'Masala Dosa',  
  description:  
    'Crispy rice crepe filled with spiced potato  
filling, served with chutneys',  
  price: 99,  
  imageUrl: 'assets/images/dosa.jpg',  
  category: 'Indian Breakfast',  
)  
FoodItem(  
  id: '5',  
  name: 'Palak Paneer',  
  description: 'Cottage cheese cubes in creamy
```





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```
spinach gravy',
    price: 299,
    imageUrl: 'assets/images/palak-paneer.webp',
    category: 'Indian Main Course',
),
FoodItem(
    id: '6',
    name: 'Samosa',
    description: 'Crispy pastry filled with spiced
potatoes and peas',
    price: 99,
    imageUrl: 'assets/images/AlooSamosa.webp',
    category: 'Indian Snacks',
),
FoodItem(
    id: '7',
    name: 'Naan Bread',
    description: 'Soft, buttery flatbread baked in
tandoor',
    price: 9,
    imageUrl: 'assets/images/naan.jpg',
    category: 'Indian Bread',
),
FoodItem(
    id: '8',
    name: 'Gulab Jamun',
    description: 'Sweet milk dumplings soaked in sugar
syrup',
    price: 19,
    imageUrl: 'assets/images/gulabJamun.jpg',
    category: 'Indian Dessert',
),
FoodItem(
    id: '9',
    name: 'Chicken Tikka',
    description: 'Grilled chicken pieces marinated in
spiced yogurt',
    price: 499,
    imageUrl: 'assets/images/chickentikkamasala.jpeg',
    category: 'Indian Appetizer',
),
FoodItem(
    id: '10',
```



```
        name: 'Dal Makhani',
        description:
            'Creamy black lentils simmered overnight with
butter and spices',
        price: 199,
        imageUrl: 'assets/images/dal-makhani.jpg',
        category: 'Indian Main Course',
    ),
];

List<FoodItem> _filteredItems = [];
String _searchQuery = '';
bool _sortByPriceAscending = true;

List<FoodItem> get items {
    if (_searchQuery.isEmpty) {
        return [..._items];
    }
    return [..._filteredItems];
}

void searchItems(String query) {
    _searchQuery = query.toLowerCase();
    _filteredItems = _items
        .where((item) =>
item.name.toLowerCase().contains(_searchQuery) ||
item.description.toLowerCase().contains(_searchQuery))
        .toList();
    notifyListeners();
}

void toggleSortByPrice() {
    _sortByPriceAscending = !_sortByPriceAscending;
    _items.sort((a, b) => _sortByPriceAscending
        ? a.price.compareTo(b.price)
        : b.price.compareTo(a.price));
    if (_searchQuery.isNotEmpty) {
        _filteredItems.sort((a, b) => _sortByPriceAscending
            ? a.price.compareTo(b.price)
            : b.price.compareTo(a.price));
    }
}
```



```
notifyListeners();  
}  
bool get isSortedByPriceAscending =>  
_sortByPriceAscending;  
}
```

#### **menu\_items.dart :**

```
import 'package:flutter/material.dart';  
import 'package:provider/provider.dart';  
import '../providers/cart_provider.dart';  
  
class MenuItem extends StatelessWidget {  
  final String name;  
  final String description;  
  final double price;  
  final String image;  
  final bool isVeg;  
  
  const MenuItem({  
    super.key,  
    required this.name,  
    required this.description,  
    required this.price,  
    required this.image,  
    required this.isVeg,  
  });  
  
  @override  
  Widget build(BuildContext context) {  
    return Card(  
      margin: const EdgeInsets.only(bottom: 16),  
      child: Padding(  
        padding: const EdgeInsets.all(12),  
        child: Row(  
          crossAxisAlignment: CrossAxisAlignment.start,  
          children: [  
            ClipRRect(  
              borderRadius: BorderRadius.circular(12),  
              child: Image.asset(  
                image,  
                width: 100,  
                height: 100,  
                fit: BoxFit.cover,
```



```
errorBuilder: (context, error,
stackTrace) {
    return Container(
      width: 100,
      height: 100,
      color: Colors.grey[800],
      child: const Icon(Icons.restaurant,
color: Colors.white),
    );
  },
),
),
const SizedBox(width: 16),
Expanded(
  child: Column(
    crossAxisAlignment:
CrossAxisAlignment.start,
    children: [
      Row(
        children: [
          Icon(
            Icons.circle,
            size: 12,
            color: isVeg ? Colors.green :
Colors.red,
          ),
          const SizedBox(width: 8),
          Expanded(
            child: Text(
              name,
              style: const TextStyle(
                fontSize: 16,
                fontWeight: FontWeight.bold,
                color: Colors.white,
              ),
            ),
          ),
        ],
      ),
      const SizedBox(height: 4),
      Text(
        description,
        style: TextStyle(
```



```
fontSize: 14,  
color:  
Colors.white.withOpacity(0.7),  
),  
),  
const SizedBox(height: 8),  
Row(  
  mainAxisAlignment:  
MainAxisAlignment.spaceBetween,  
  children: [  
    Text(  
      '\${price.toStringAsFixed(2)}',  
      style: const TextStyle(  
        fontSize: 16,  
        fontWeight: FontWeight.bold,  
        color: Color(0xFFFFD700),  
      ),  
    ),  
    ElevatedButton(  
      onPressed: () {  
  
context.read<CartProvider>().addItem(  
      name: name,  
      image: image,  
      price: price,  
    );  
  
ScaffoldMessenger.of(context).showSnackBar(  
      SnackBar(  
        content: Text('$name added  
to cart'),  
        backgroundColor: const  
Color(0xFF2D0C57),  
        action: SnackBarAction(  
          label: 'VIEW CART',  
          textColor: const  
Color(0xFFFFD700),  
          onPressed: () {  
            // Navigate to cart  
          },  
        ),  
      ),  
    ),  
  );
```



```
        },  
        style: ElevatedButton.styleFrom(  
          padding: const  
EdgeInsets.symmetric(  
            horizontal: 16,  
            vertical: 8,  
          ),  
          backgroundColor: const  
Color(0xFFFFD700),  
          foregroundColor: const  
Color(0xFF2D0C57),  
        ),  
        child: const Text('Add to Cart'),  
      ),  
    ],  
  ),  
],  
),  
),  
],  
),  
),  
);  
}  
}
```

#### **category\_items.dart :**

```
import 'package:flutter/material.dart';  
class CategoryItem extends StatelessWidget {  
  final IconData icon;  
  final String title;  
  final Color color;  
  const CategoryItem({  
    super.key,  
    required this.icon,  
    required this.title,  
    required this.color,  
  });  
  @override  
  Widget build(BuildContext context) {  
    return Container(  
      margin: const EdgeInsets.only(right: 16),  
      child: Column(  

```



```
children: [
  Container(
    width: 80,
    height: 80,
    decoration: BoxDecoration(
      color: color.withOpacity(0.2),
      borderRadius: BorderRadius.circular(16),
    ),
    child: Icon(
      icon,
      color: color,
      size: 40,
    ),
  ),
  const SizedBox(height: 8),
  Text(
    title,
    style: const TextStyle(
      fontSize: 14,
      fontWeight: FontWeight.w500,
    ),
  ),
],
),
);
}
```

**restaurant card.dart:**

```
import 'package:flutter/material.dart';
class RestaurantCard extends StatelessWidget {
  final String name;
  final String image;
  final double rating;
  final String deliveryTime;
  final String deliveryFee;
  const RestaurantCard({
    super.key,
    required this.name,
    required this.image,
    required this.rating,
    required this.deliveryTime,
    required this.deliveryFee,
```



```
});  
  
@override  
Widget build(BuildContext context) {  
  return Card(  
    margin: const EdgeInsets.only(bottom: 16),  
    clipBehavior: Clip.antiAlias,  
    child: InkWell(  
      onTap: () {  
        // Navigate to menu tab  
        DefaultTabController.of(context)?.animateTo(1);  
      },  
      child: Column(  
        crossAxisAlignment: CrossAxisAlignment.start,  
        children: [  
          Stack(  
            children: [  
              Image.network(  
                image,  
                height: 160,  
                width: double.infinity,  
                fit: BoxFit.cover,  
              ),  
              Positioned(  
                top: 8,  
                right: 8,  
                child: Container(  
                  padding: const EdgeInsets.symmetric(  
                    horizontal: 8,  
                    vertical: 4,  
                  ),  
                  decoration: BoxDecoration(  
                    color: Colors.white,  
                    borderRadius:  
BorderRadius.circular(12),  
                  ),  
                  child: Row(  
                    children: [  
                      const Icon(  
                        Icons.access_time,  
                        size: 16,  
                        color: Colors.grey,  
                      ),  
                    ],  
                  ),  
                ),  
            ],  
          ),  
        ],  
      ),  
    ),  
  );  
}
```





```
const SizedBox(width: 4),
Text(
  deliveryTime,
  style: const TextStyle(
    color: Colors.grey,
    fontWeight: FontWeight.bold,
  ),
),
],
),
),
],
),
Padding(
  padding: const EdgeInsets.all(12),
  child: Column(
    crossAxisAlignment:
CrossAxisAlignment.start,
    children: [
      Text(
        name,
        style: const TextStyle(
          fontSize: 18,
          fontWeight: FontWeight.bold,
        ),
      ),
      const SizedBox(height: 8),
      Row(
        children: [
          Container(
            padding: const
EdgeInsets.symmetric(
              horizontal: 8,
              vertical: 4,
            ),
            decoration: BoxDecoration(
              color: Colors.green,
              borderRadius:
BorderRadius.circular(12),
            ),
            child: Row(
              children: [
```



```
const Icon(  
  Icons.star,  
  size: 16,  
  color: Colors.white,  
) ,  
const SizedBox(width: 4),  
Text(  
  rating.toString(),  
  style: const TextStyle(  
    color: Colors.white,  
    fontWeight:  
FontWeight.bold,  
  ),  
) ,  
) ,  
1,  
) ,  
) ,  
const SizedBox(width: 8),  
Text(  
  '* $deliveryFee delivery',  
  style: const TextStyle(color:  
Colors.grey),  
) ,  
1,  
) ,  
1,  
) ,  
) ,  
1,  
) ,  
) ,  
) ;  
}  
}
```

**menu\_items\_model.dart :**

```
class MenuItemModel {  
  final String name;  
  final String description;  
  final double price;  
  final String image;  
  final bool isVeg;
```



```
final String category;

const MenuItemModel({
  required this.name,
  required this.description,
  required this.price,
  required this.image,
  required this.isVeg,
  required this.category,
});
}

final List<MenuItemModel> menuItems = [
  MenuItemModel(
    name: 'Paneer Butter Masala',
    description: 'Rich and creamy paneer curry',
    price: 14.99,
    image: 'assets/images/paneer_butter_masala.jpg',
    isVeg: true,
    category: 'Main Course',
  ),
  MenuItemModel(
    name: 'Chicken Tikka Masala',
    description: 'Grilled chicken in spicy curry sauce',
    price: 16.99,
    image: 'assets/images/chicken_tikka.jpg',
    isVeg: false,
    category: 'Main Course',
  ),
  MenuItemModel(
    name: 'Dal Makhani',
    description: 'Creamy black lentils',
    price: 12.99,
    image: 'assets/images/dal_makhani.jpg',
    isVeg: true,
    category: 'Main Course',
  ),
  MenuItemModel(
    name: 'Butter Chicken',
    description: 'Classic creamy chicken curry',
    price: 17.99,
    image: 'assets/images/butter_chicken.jpg',
    isVeg: false,
```



```
category: 'Main Course',
),
MenuItemModel(
  name: 'Veg Spring Rolls',
  description: 'Crispy rolls with vegetable filling',
  price: 8.99,
  image: 'assets/images/spring_rolls.jpg',
  isVeg: true,
  category: 'Starters',
),
MenuItemModel(
  name: 'Chicken 65',
  description: 'Spicy fried chicken',
  price: 10.99,
  image: 'assets/images/chicken_65.jpg',
  isVeg: false,
  category: 'Starters',
),
];
```

#### **restaurant\_model.dart :**

```
class RestaurantModel {
  final String name;
  final String image;
  final double rating;
  final String deliveryTime;
  final String deliveryFee;

  const RestaurantModel({
    required this.name,
    required this.image,
    required this.rating,
    required this.deliveryTime,
    required this.deliveryFee,
  });
}

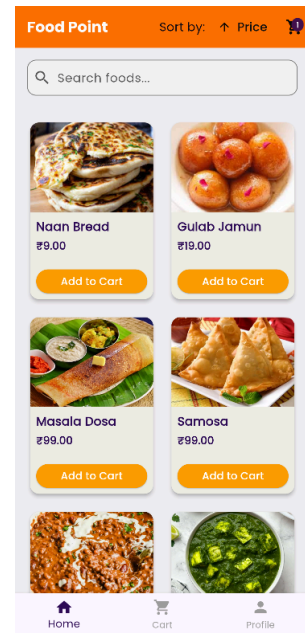
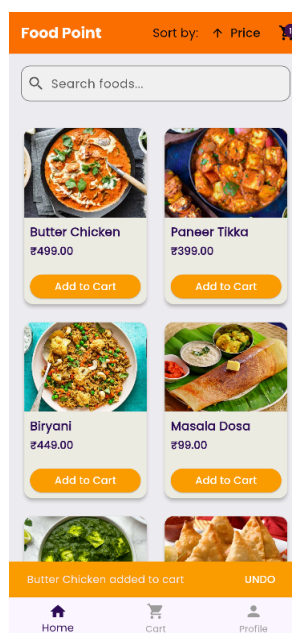
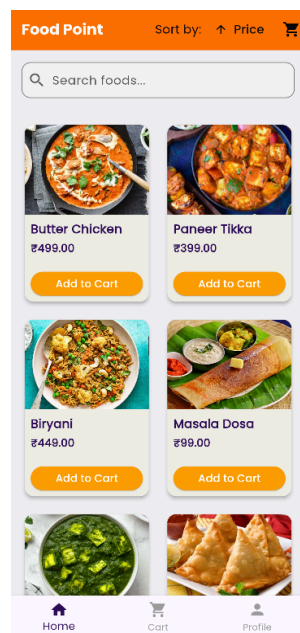
final List<RestaurantModel> popularRestaurants = [
  RestaurantModel(
    name: 'Pizza Palace',
    image:
'https://images.unsplash.com/photo-1513104890138-7c749659a591',
```



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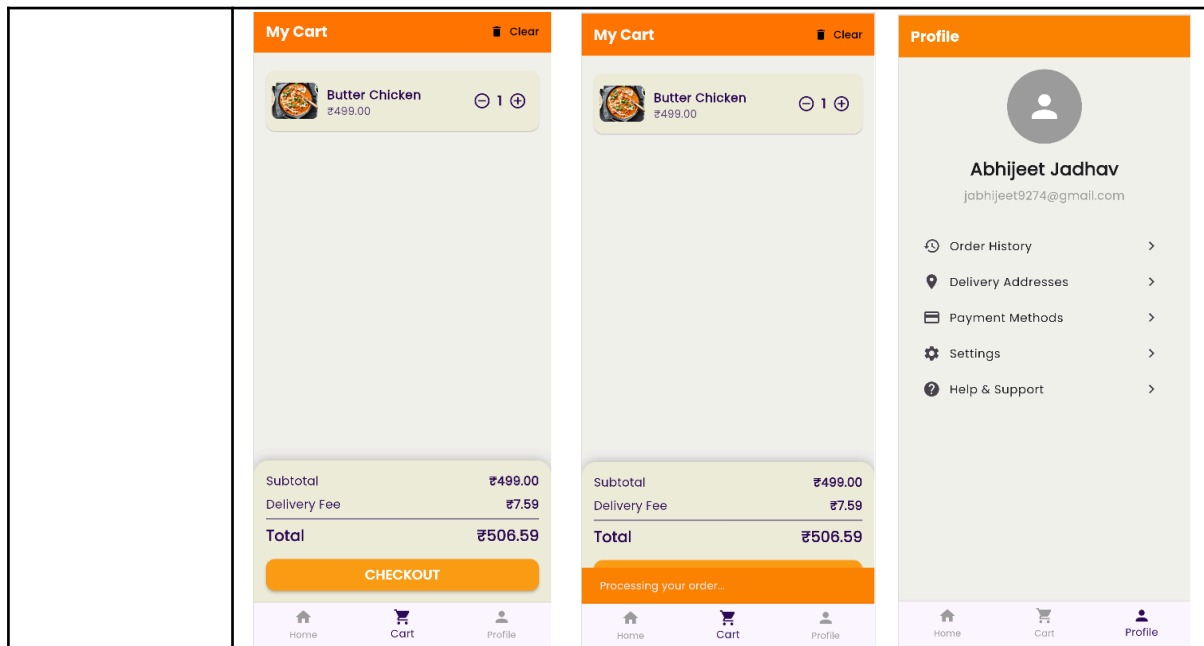
```
rating: 4.5,  
deliveryTime: '25-35 min',  
deliveryFee: '\$2.99',  
,  
RestaurantModel(  
  name: 'Burger Hub',  
  image:  
'https://images.unsplash.com/photo-1568901346375-23c9450c58cd',  
  rating: 4.3,  
  deliveryTime: '20-30 min',  
  deliveryFee: '\$1.99',  
,  
  RestaurantModel(  
    name: 'Sushi Master',  
    image:  
'https://images.unsplash.com/photo-1579871494447-9811cf80d66c',  
    rating: 4.7,  
    deliveryTime: '30-40 min',  
    deliveryFee: '\$3.99',  
  ),  
,  
];
```

### Screenshots





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**Question and  
Answers**

Answer the following Questions:

1. How did you use 60-30-10 rule in your application?

**Ans :** The 60-30-10 rule is a design principle used for creating visually balanced color schemes in UI:

60% – Primary color: Used as the dominant color in the app, often as the background or major surfaces.

30% – Secondary color: Complements the primary color and is applied to UI elements like cards, buttons, or app bars.

10% – Accent color: Adds a pop and draws attention to important features like floating action buttons, icons, or CTA buttons.

2. Which new elements did you use for creating UI components?

**Ans :** Some new UI elements or widgets I might have used include:

ClipRRect – For rounded corners.

CustomPaint – For drawing custom shapes and graphics.

Stack – To overlay widgets on top of each other.

AnimatedContainer – For smooth transitions and animations.

SliverAppBar – For creating flexible app bars with scroll effects.

ListView.builder or GridView.count – For dynamic list/grid layouts.

Hero – For shared element transitions between screens.

BottomNavigationBar or NavigationRail – For navigation.

3. In pubspec.yaml file, what dependencies need to be there?

**Ans :** dependencies:

flutter:

  sdk: flutter

  cupertino\_icons: ^1.0.6

  provider: ^6.0.5       # For state management

  http: ^0.14.0       # For API calls

  shared\_preferences: ^2.2.1 # For local storage

  flutter\_svg: ^2.0.7   # For SVG asset support

  google\_fonts: ^6.1.0   # For custom fonts



	<p>animations: ^2.0.7    # For prebuilt animation widgets</p> <p>4. What is the use of Splash Screen?</p> <p><b>Ans :</b> A Splash Screen serves several purposes:</p> <p>Branding – Shows logo and name of the app/company.</p> <p>User Experience – Provides a smooth transition while the app is loading.</p> <p>Initialization – Useful for performing tasks like loading resources, checking login status, or preparing data in the background.</p> <p>In Flutter, you can define it in AndroidManifest.xml and customize it using packages like flutter_native_splash.</p>
<b>Conclusion</b>	<p>This exercise taught the importance of state management using Provider, responsive design principles, and proper navigation flow. Ensuring type safety in models (like CartItem) prevents runtime errors. The 60-30-10 rule helped maintain visual consistency, while the splash screen enhanced user experience during loading..</p>