9. Develop Basic E-commerce UI Application.

import 'package:flutter/material.dart';

void main() {

runApp(MyShopApp());

}

class MyShopApp extends StatelessWidget {

@override

Widget build(BuildContext context) {

return MaterialApp(

debugShowCheckedModeBanner: false,

home: ProductListPage(),

);

}

}

class Product {

final String name;

final double price;

final String imageUrl;

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

}

class ProductListPage extends StatefulWidget {

@override

\_ProductListPageState createState() => \_ProductListPageState();

}

class \_ProductListPageState extends State<ProductListPage> {

final List<Product> products = [

Product(name: 'T-Shirt', price: 19.99, imageUrl: 'https://via.placeholder.com/150'),

Product(name: 'Jeans', price: 39.99, imageUrl: 'https://via.placeholder.com/150'),

Product(name: 'Sneakers', price: 59.99, imageUrl: 'https://via.placeholder.com/150'),

Product(name: 'Cap', price: 9.99, imageUrl: 'https://via.placeholder.com/150'),

];

List<Product> cart = [];

void addToCart(Product product) {

setState(() {

cart.add(product);

});

}

@override

Widget build(BuildContext context) {

return Scaffold(

appBar: AppBar(

title: Text('MyShop'),

actions: [

Padding(

padding: const EdgeInsets.all(8.0),

child: Center(child: Text('Cart: ${cart.length}')),

),

],

),

body: GridView.builder(

padding: EdgeInsets.all(10),

gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(

crossAxisCount: 2,

childAspectRatio: 3 / 4,

crossAxisSpacing: 10,

mainAxisSpacing: 10,

),

itemCount: products.length,

itemBuilder: (context, index) {

final product = products[index];

return Card(

child: Column(

crossAxisAlignment: CrossAxisAlignment.stretch,

children: [

Expanded(

child: Image.network(product.imageUrl, fit: BoxFit.cover),

),

Padding(

padding: const EdgeInsets.all(8.0),

child: Column(

crossAxisAlignment: CrossAxisAlignment.start,

children: [

Text(product.name, style: TextStyle(fontSize: 16, fontWeight: FontWeight.bold)),

Text('\$${product.price.toStringAsFixed(2)}'),

SizedBox(height: 8),

ElevatedButton(

onPressed: () => addToCart(product),

child: Text('Add to Cart'),

),

],

),

)

],

),

);

},

),

);

}

}

10. Develop an application to implement Animates Logo.

import 'package:flutter/material.dart';

void main() => runApp(MaterialApp(home: AnimatedLogoPage()));

class AnimatedLogoPage extends StatefulWidget {

@override

\_AnimatedLogoPageState createState() => \_AnimatedLogoPageState();

}

class \_AnimatedLogoPageState extends State<AnimatedLogoPage>

with SingleTickerProviderStateMixin {

late AnimationController \_controller;

late Animation<double> \_animation;

@override

void initState() {

super.initState();

\_controller = AnimationController(

duration: Duration(seconds: 2),

vsync: this,

)..repeat(reverse: true);

\_animation = Tween<double>(begin: 100, end: 200).animate(

CurvedAnimation(parent: \_controller, curve: Curves.easeInOut),

);

}

@override

void dispose() {

\_controller.dispose();

super.dispose();

}

@override

Widget build(BuildContext context) {

return Scaffold(

appBar: AppBar(title: Text('Animated Logo')),

body: Center(

child: AnimatedBuilder(

animation: \_animation,

builder: (context, child) {

return FlutterLogo(size: \_animation.value);

},

),

),

);

}

}