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 { final List 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'>), ];

final List cart = [];

void addToCart(Product product) => setState(() => cart.add(product));

@override

Widget build(BuildContext context) {

return Scaffold(

appBar: AppBar( title: Text('MyShop'),

actions: [Padding(padding: EdgeInsets.all(8),

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

body: GridView.builder( padding: EdgeInsets.all(10),

itemCount: products.length, gridDelegate: SliverGridDelegateWithFixedCrossAxisCount(

crossAxisCount: 2,

childAspectRatio: 3 / 4,

crossAxisSpacing: 10, mainAxisSpacing: 10),

itemBuilder: (\_, i) {

final p = products[i];

return Card( child: Column( crossAxisAlignment: CrossAxisAlignment.stretch, children: [

Expanded(child: Image.network(p.imageUrl, fit: BoxFit.cover)), Padding(

padding: EdgeInsets.all(8),

child: Column( crossAxisAlignment: CrossAxisAlignment.start,

children: [ Text(p.name, style: TextStyle(fontSize: 16, fontWeight: FontWeight.bold)),

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

SizedBox(height: 8),

ElevatedButton(

onPressed: () => addToCart(p),

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);

},

),

),

);

}

}