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Mata Kuliah : Pemrograman Mobile

Code program:

import 'dart:async';

enum Role { Admin, Customer }

class User {

  String name;

  int age;

  late List<Product> products;

  Role? role;

  User(this.name, this.age) {

    products = []; // initialize products

  }

}

class Product {

  String productName;

  double price;

  bool inStock;

  Product(this.productName, this.price, this.inStock);

}

class AdminUser  extends User {

  AdminUser (String name, int age) : super(name, age);

  void addProduct(Product product) {

    if (product.inStock) {

      this.products.add(product);

      print('Product ${product.productName} has been added successfully.');

    } else {

      throw Exception('Product ${product.productName} is not available in stock.');

    }

  }

  void removeProduct(String productName) {

    products.removeWhere((product) => product.productName == productName);

    print('Product $productName has been removed successfully.');

  }

}

class CustomerUser  extends User {

  CustomerUser (String name, int age) : super(name, age);

  void viewProducts() {

    if (products.isEmpty) {

      print('No products are available.');

    } else {

      print('Product list:');

      for (var product in this.products) {

        print('${product.productName} - Price: ${product.price} - In Stock: ${product.inStock}');

      }

    }

  }

}

Future<Product> fetchProductDetails(String productName) async {

  await Future.delayed(Duration(seconds: 2));

  return Product(productName, 100.0, true); // Return dummy product

}

void main() async {

  AdminUser  admin = AdminUser ('Alice', 30);

  CustomerUser  customer = CustomerUser ('Bob', 25);

  try {

    Product newProduct = await fetchProductDetails('Laptop');

    admin.addProduct(newProduct);

  } catch (e) {

    print('Error: $e');

  }

  customer.products = admin.products;

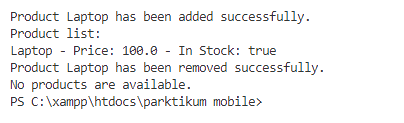
  customer.viewProducts();

  admin.removeProduct('Laptop');

  customer.viewProducts();

}

Berikut ini adalah hasil running code program diatas:



Gambar 1.1 hasil *running* program

Referensi:

1. <https://dart-tutorial.com/object-oriented-programming/oop-in-dart/>
2. <https://dart-tutorial.com/object-oriented-programming/class-in-dart/>
3. <https://dart-tutorial.com/asynchronous-programming/async-and-await-in-dart/>