

Mohammed Roshan Khan

Day 12 – Assignment

Mixin

In Dart, a mixin is used for reusing code and adding functionality to classes without using traditional inheritance,

Allowing a class to gain behaviors from multiple sources.

Developers can share common features across different class hierarchies, promoting code reuse and preventing the complexity of multiple inheritance

By defining a separate mixin class with methods and properties and applying it to another class using the with keyword.

Below is a simple example of mixin

Ex:-

```
mixin logger {  
  void log(String msg) {  
    print(msg);  
  }  
}  
  
class service with logger {  
  void dosomething() {  
    log("welcome");  
  }  
}  
  
void main() {  
  service obj = service();  
  obj.dosomething();  
}
```

Ex 2:-

```

mixin taxable
{
    void applyTax(double amount)
    {
        print("Tax of ${amount*0.05} is applied");
    }
}

class BankAccount {
    double balance = 1000;

    void deposit(double amount) {
        balance += amount;
        print("Deposited ${amount}, Balance: \${balance}");
    }
}

class BusinessAccount extends BankAccount with taxable {
    void makePurchase(double amount) {
        balance -= amount;
        applyTax(amount);
        print("Purchased ${amount}, Balance: ${balance}");
    }
}

void main() {
    var acc = BusinessAccount();
    acc.deposit(500);
    acc.makePurchase(200);
}

```