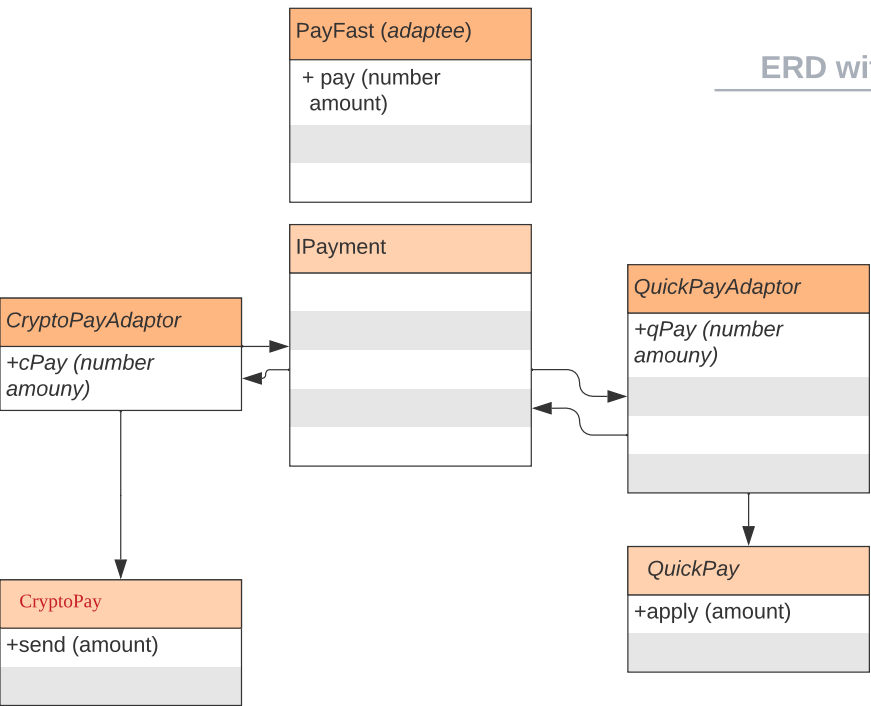


ERD with colored entities (UML notation)

Jing-Chun | September 8, 2025



```
public class QuickPayAdapter implements IPayment {
    private QuickPay quickPayApi;

    // dependency injection
    public QuickPayAdapter(QuickPay quickPayApi) {
        this.quickPayApi = quickPayApi;
    }

    @Override
    public void pay(double amount) {
        this.quickPayApi.qpay(amount);
    }
}

public class ECommercePlatform {
    private IPayment paymentGateway;

    // dependency injection
    public ECommercePlatform(IPayment paymentGateway) {
        this.paymentGateway = paymentGateway;
    }

    public void checkout(double orderTotal) {
        paymentGateway.pay(orderTotal);
    }
}
```

```
public class Main {
    public static void main(String[] args) {
        // Scenario 1: Using the existing PayFast system.
        IPayment payFastProvider = new PayFast();
        ECommercePlatform platform1 = new ECommercePlatform(payFastProvider);
        platform1.checkout(99.50);

        // Scenario 2: Using the new QuickPay system via the Adapter.
        QuickPay quickPayApi = new QuickPay();
        IPayment quickPayAdapter = new QuickPayAdapter(quickPayApi);
        ECommercePlatform platform2 = new ECommercePlatform(quickPayAdapter);
        platform2.checkout(150.00);
    }
}
```