Command Design Pattern

This pattern decouples the classes that invoke the operation from the object that knows how to execute the operation.

Class Diagrams Our Example The pattern in Gang of Four's book Invoker Command Button Command click() execute() execute() Receiver CustomerService ConcreteCommand AddCustomer addCustomer() execute()

Explanation

We want to design a graphical user interface framework, so other developers can use our framework. Assume that there is a Button class in our framework. We don't know the usage of a button when we are designing the framework. In our example, the Button class and the Command interface belong to our framework. CustomerService and AddCustomer classes belong to the application. We want to add a customer when the button was clicked. The Button class has a click() method that calls execute() method of the command interface. AddCustomer class implements Command interface and call addCustomer() method in its execute() method. The code for adding customers is in the CustomerService class.