**Billing System**

The project is based on billing system. The purpose of the project was to implement four different design patterns. The four design patterns selected for the billing system project are: command, factory, singleton, and state. All these patterns have different classes that support each design pattern.

**Difficulties and lessons**

Billing system is a large system, that has different operations. Choosing the right types of design patterns was not an easy task for the project. I was not sure whether I am choosing the right patterns for the project or not. Unit testing was another difficult task, as I had never done this thing earlier. I called the classes from each pattern from their given packages in the final class. The Unit tests are run specifically on two design patterns: Factory pattern and State Pattern. However, these difficulties were resolved by studying the examples covered in the book. The project has helped me to clear my thoughts on the usage of the classes and object-oriented things. This will be helpful for my career also.