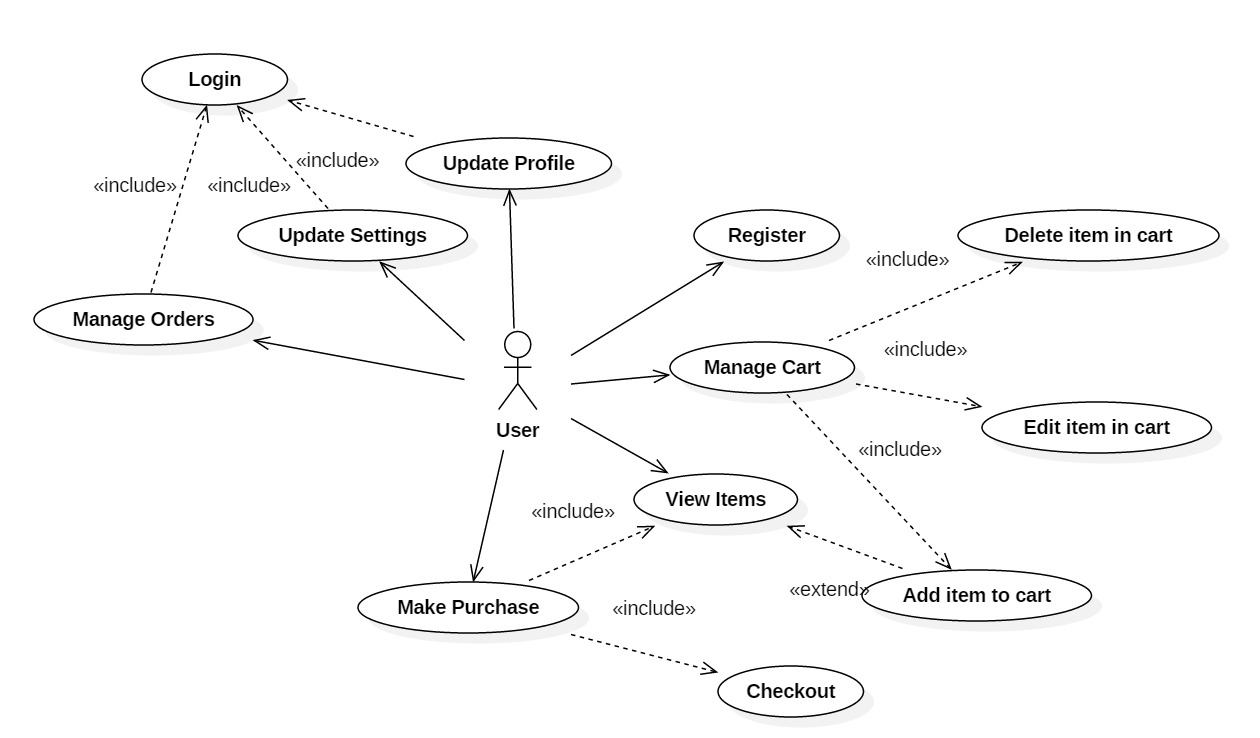
Shopping Management System

# User and Purchase Management Subsytem

## Use case diagram

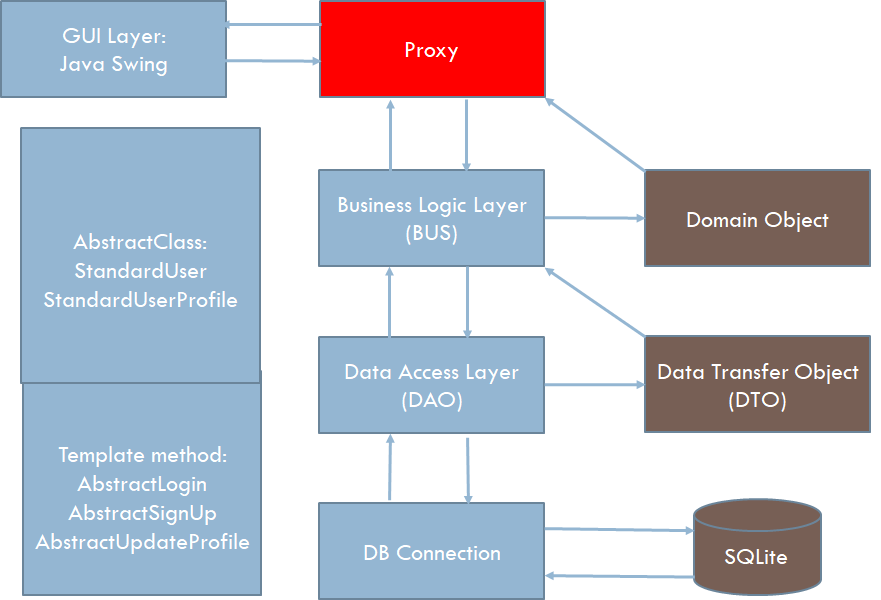


Two parts are included:

Part 1 is user management which contains register, login, update profile and update settings.

Part 2 is purchase management containing manage orders, make purchase, view items and manage cart.

## Subsystem Architecture



GUI Layer: To provide graphical user interface for system users

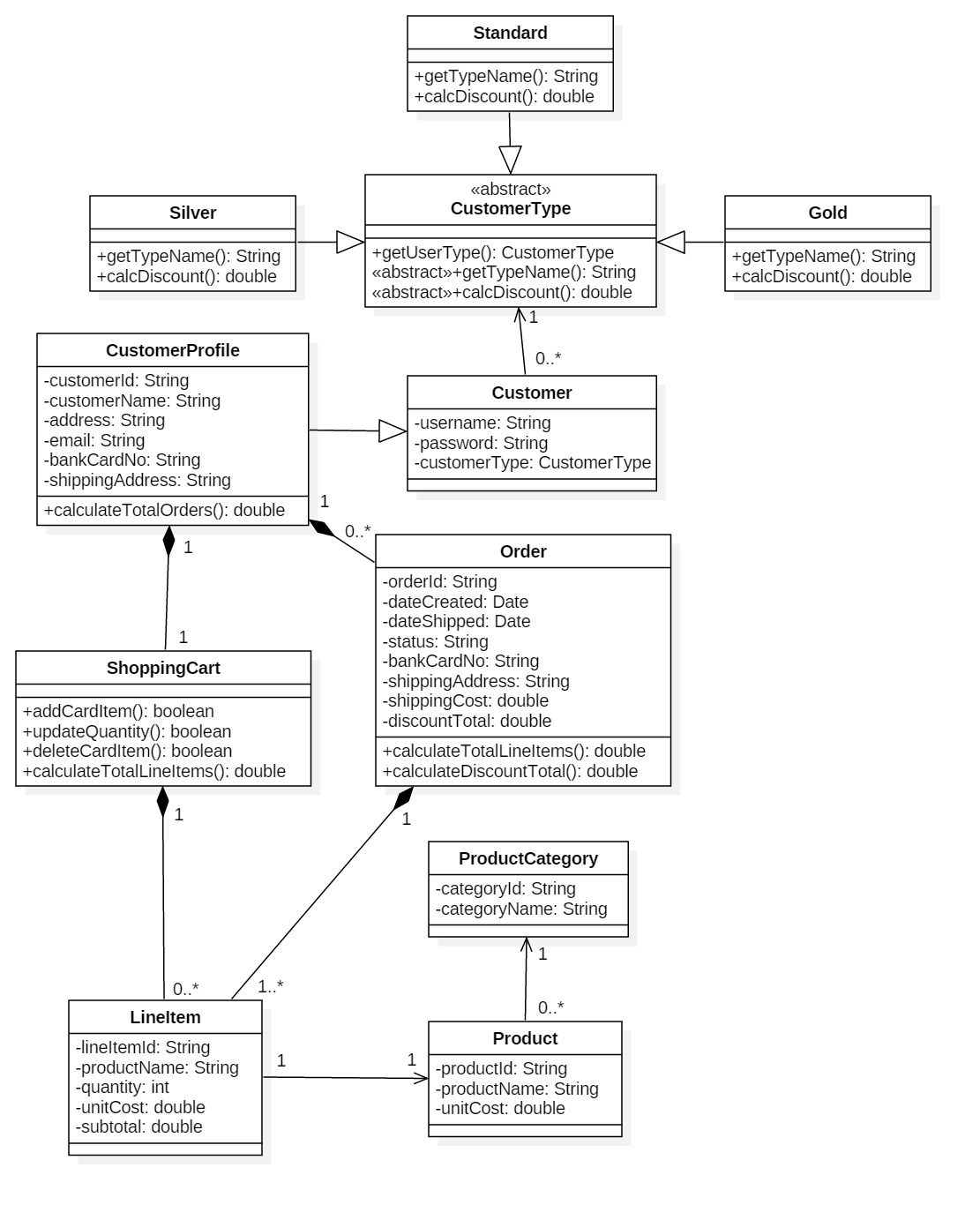
Proxy: To control access of user to system

BUS: To model business behavior interaction with domain object and data transfer object (DTO)

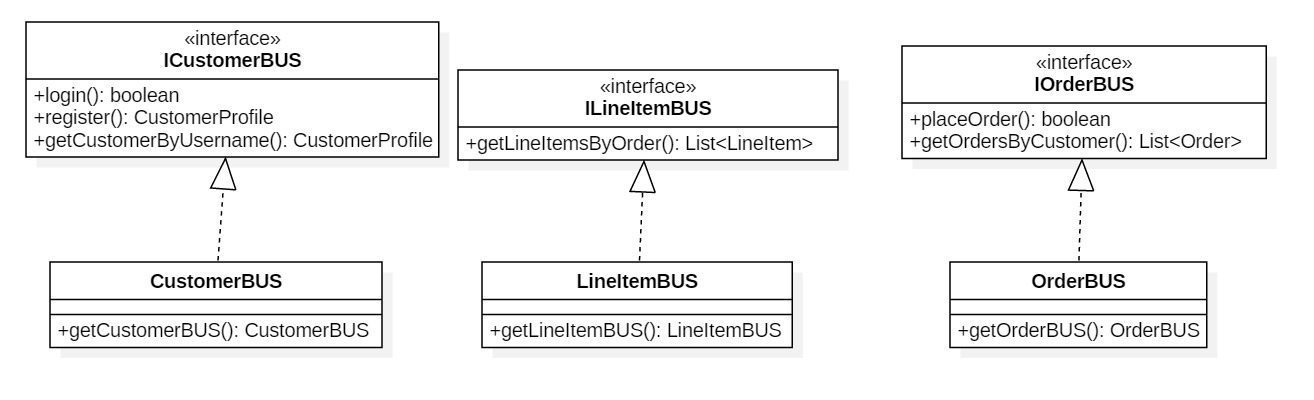
DAO: To manage data access between data transfer object (DTO) and data base

DB Connection: To provide connection between DAO and data base

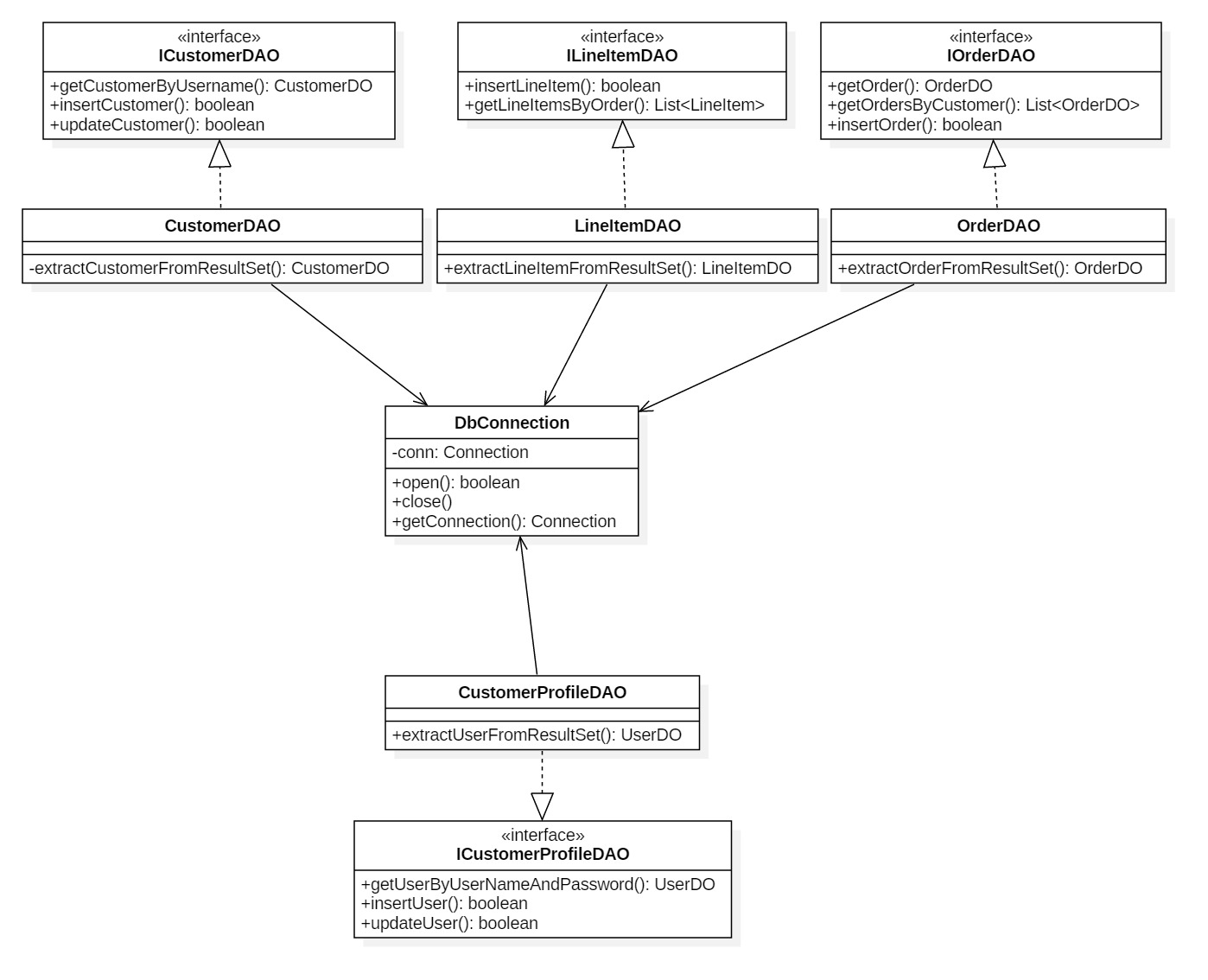
## Class diagram for Domain



## Class diagram for Business Layer

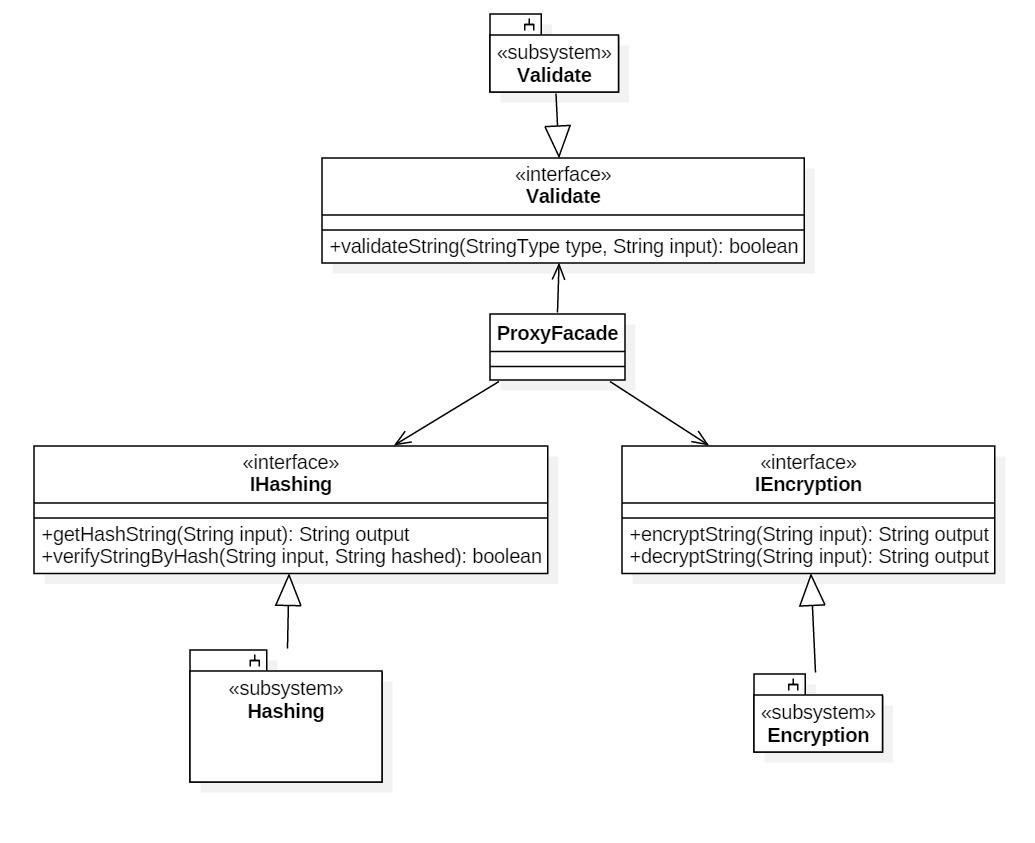


## Class diagram for DAO Layer



# Membership Framework

## Class diagram for Proxy Layer



# Product Management Subsystem

## Use case diagram

Five use cases are included:

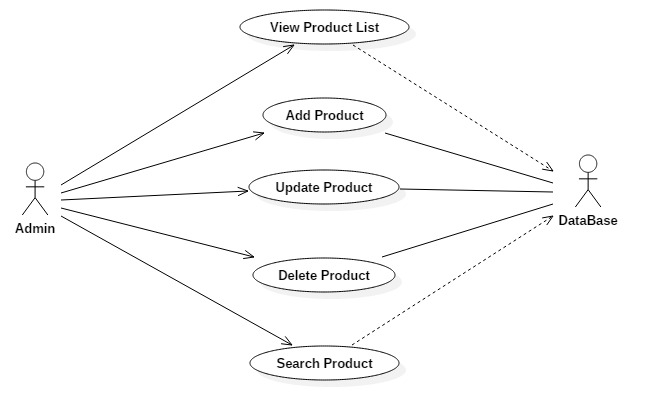
Admin user views product List

Admin user adds product

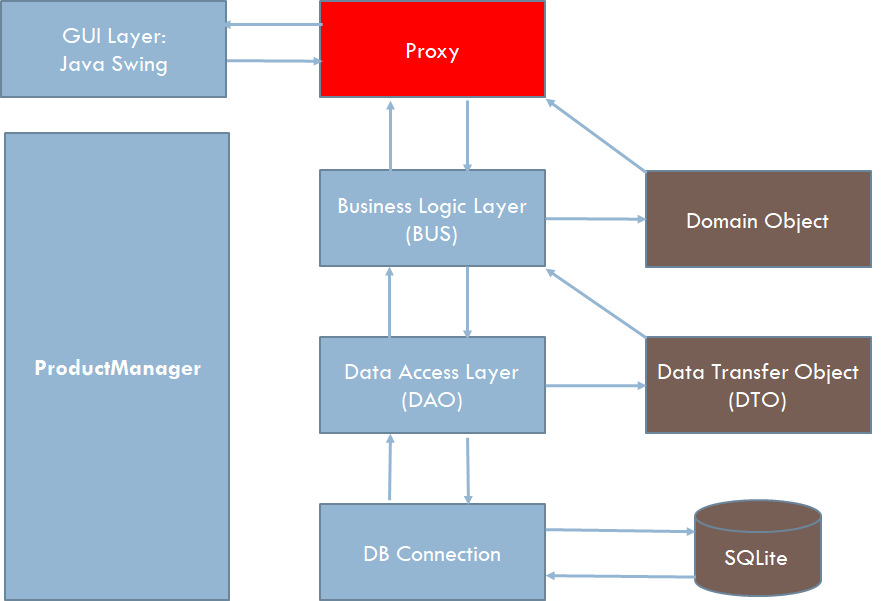
Admin user updates product

Admin user deletes product

Admin user searches product by product name or category

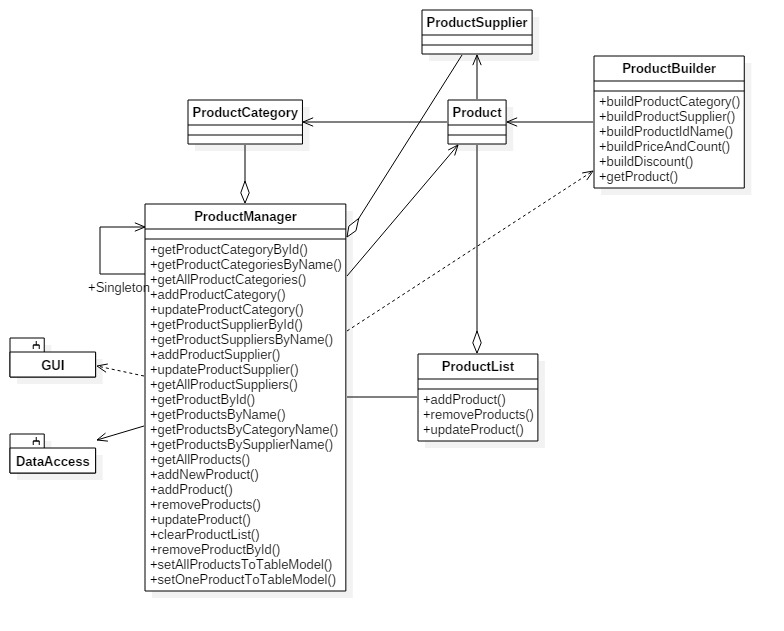


## Subsystem Architecture



Same work flow structure as user and purchase management subsystem. Whereas, using a ProductManager to manage the whole control flow.

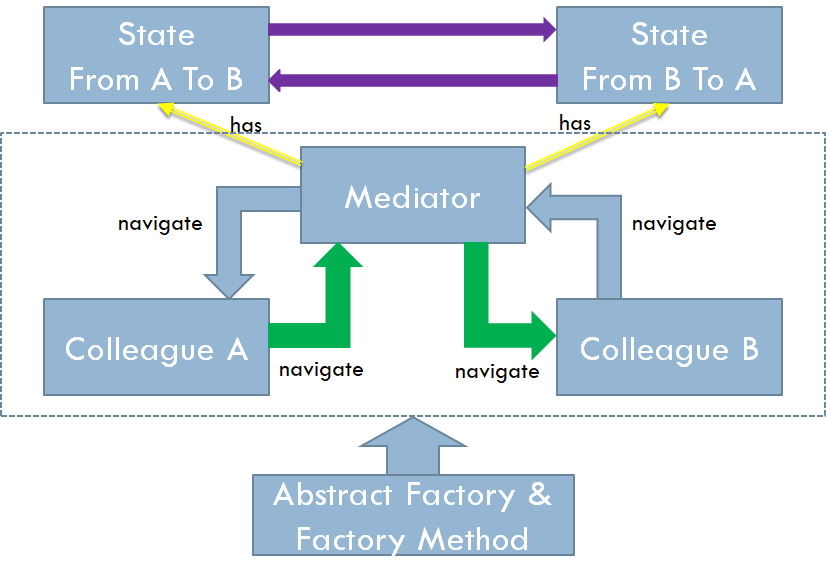
## Class diagram for ProductManager



# GUI Navigation Framework

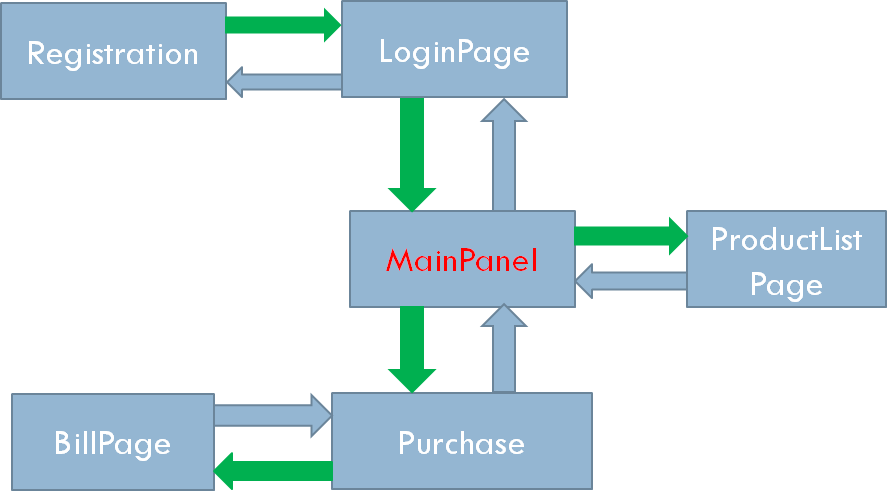
## Framework structure diagram

Abstract Factory Pattern, Factory Method Pattern, Mediator Pattern as well as State Pattern build the core skeleton of the framework.



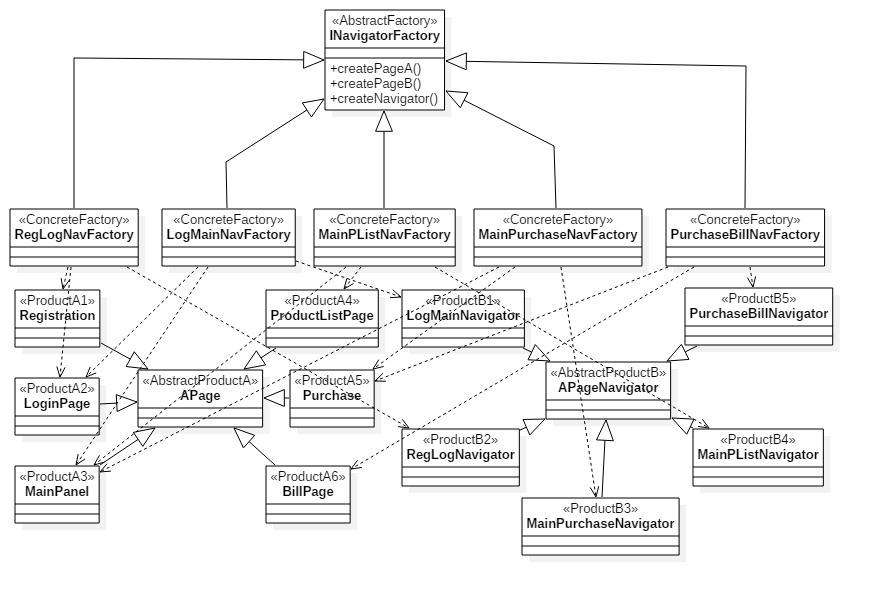
## Framework Application Shopping Management System

Six concrete colleaques are separated into five pairs of navigation which are managed by five independent concrete mediators.

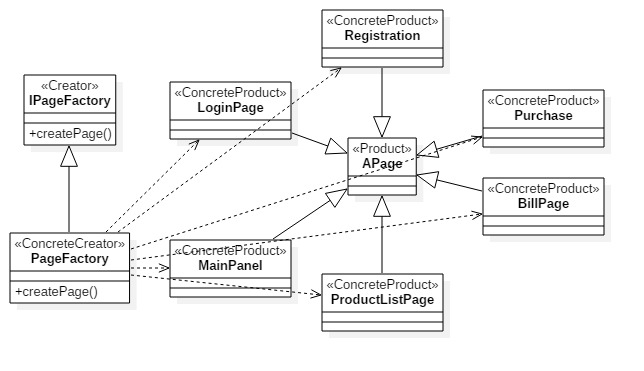


## Framework Class Diagrams in Application

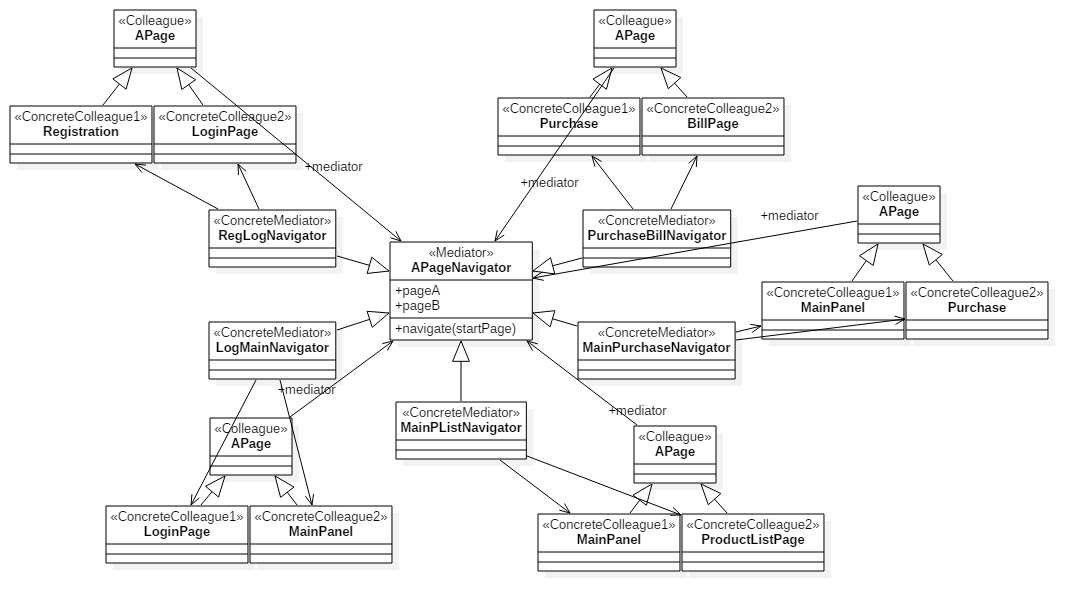
* Abstract Factory



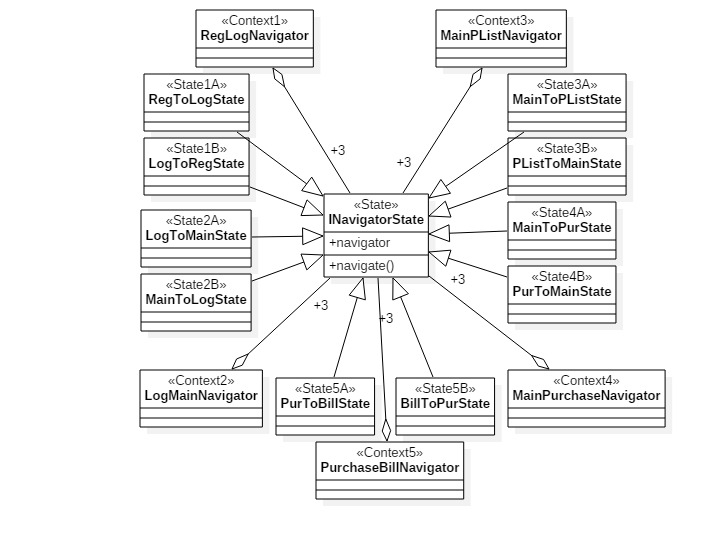
* Factory Method



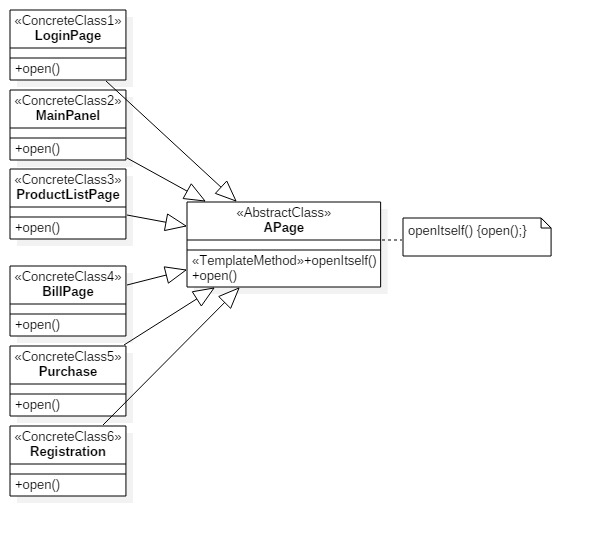
* Mediator



* State



* Template Method



* Composite

