Project I Report

Supermarket Chain Management



# Introduction

The goal of this assignment is to know as much as possible about creating the necessary structures for a Project creation, and with those, the necessity of the subjects Databases and Software Engineering. I hope that i’m able to take what’s essential on them to apply it here, filling up gaps such as the Relationship Model, Triggers, Selects, Use Cases, Contracts, Diagrams (of Communication, of Classes, etc) and such.

# Project Description

The Project applies to supermarket chains in the real world and can be considered as one. The customer/client purchases the product through the system, but not without registering his/herself first. The Store Manager takes care of everything related with the products. He can refill the stock when the ammounts are low and can add or remove products if the need arises. The General Manager is in charge of the discounts and promotions applied to the products and will add those as he sees fit. This constitutes a supermarket chain which will make it easier for the customer to purchase the products.

# Requirements Specifications

The system must:

* Add products
* Remove products
* Add promotions
* Remove Promotions
* Add discounts
* Remove discounts
* Allow the client to register, and consequently login.
* Allow the client to purchase products through the Internet, with methods such as Paypal, Credit Card or Purchase on Arrival
* Refill the stock of products if the ammounts are low

# Actors Functions

## General Manager:

* Insert Discount
* Remove Discount
* Insert Promotion
* Remove Promotion

## Store Manager:

* Insert Product
* Remove Product
* Refill Stock

## Client:

* Do Purchase
* Register

# Use Cases

## Use Case 1: Insert Discount

## Use Case 2: Remove Discount

## Use Case 3: Insert Promotion

## Use Case 4: Remove Promotion

## Use Case 5: Insert Product

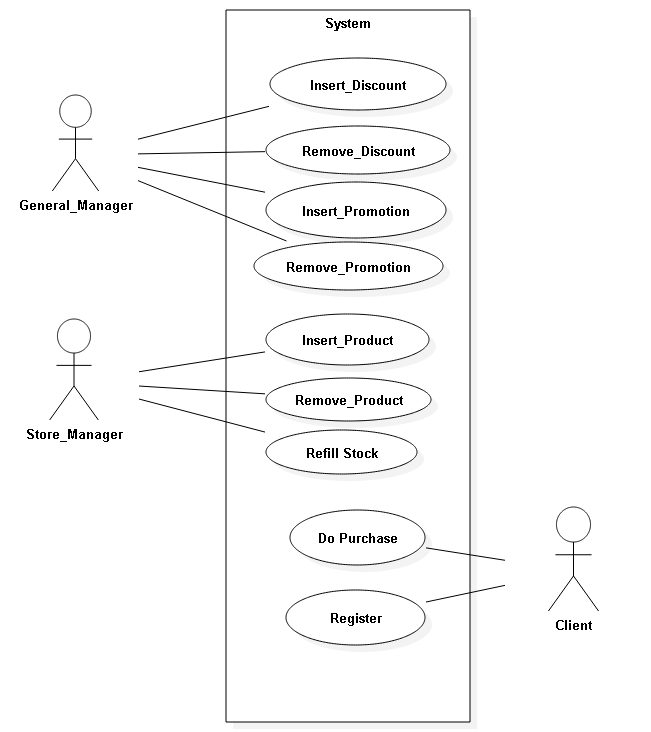
## Use Case 6: Remove Product

## Use Case 7: Refill Stock

## Use Case 8: Do Purchase

## Use Case 9: Register

# Use Case Diagram



# Contracts

## Contract 1: Insert Discount

## Contract 2: Remove Discount

## Contract 3: Insert Promotion

## Contract 4: Remove Promotion

## Contract 5: Insert Product

## Contract 6: Remove Product

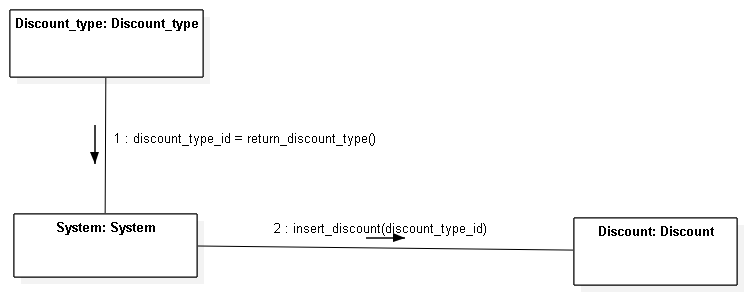
## Contract 7: Refill Stock

## Contract 8: Do Purchase

## Contract 9: Register

# Comunication Diagrams

## Diagram 1: Insert Discount



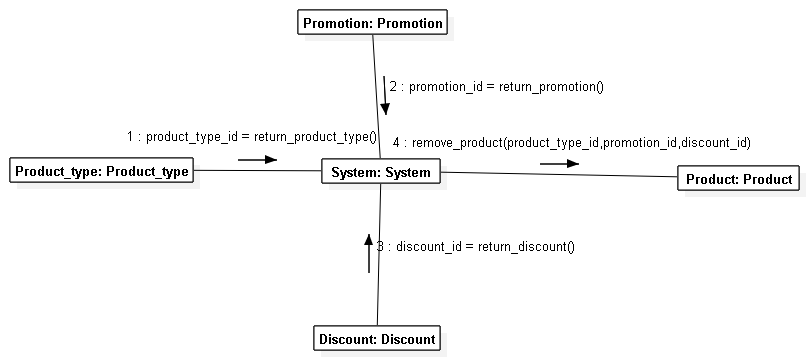
## Diagram 2: Remove Discount

## Diagram 3: Insert Promotion

## Diagram 4: Remove Promotion

## Diagram 5 : Insert Product

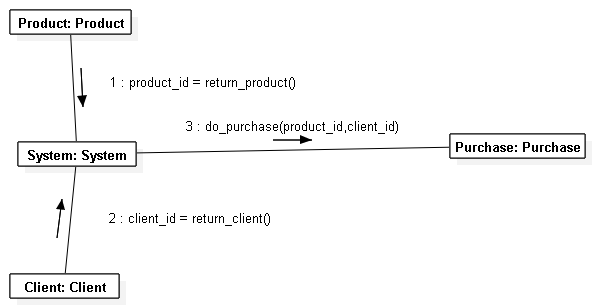
## Diagram 6: Remove Product



## Diagram 7: Refill Stock



## Diagram 8: Do Purchase



## Diagram 9: Register



# Class Diagram (No Associations)

# Class Diagram (Associations)