(Project 2 – Web Services)

Software Design Document

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COMP 433 – WebServices

09/28/2015

1. INTRODUCTION

1.1 Purpose

This software design document describes the architecture of the Project 2 implementation of the course COMP 433 – WebServices from Loyola University of Chicago.

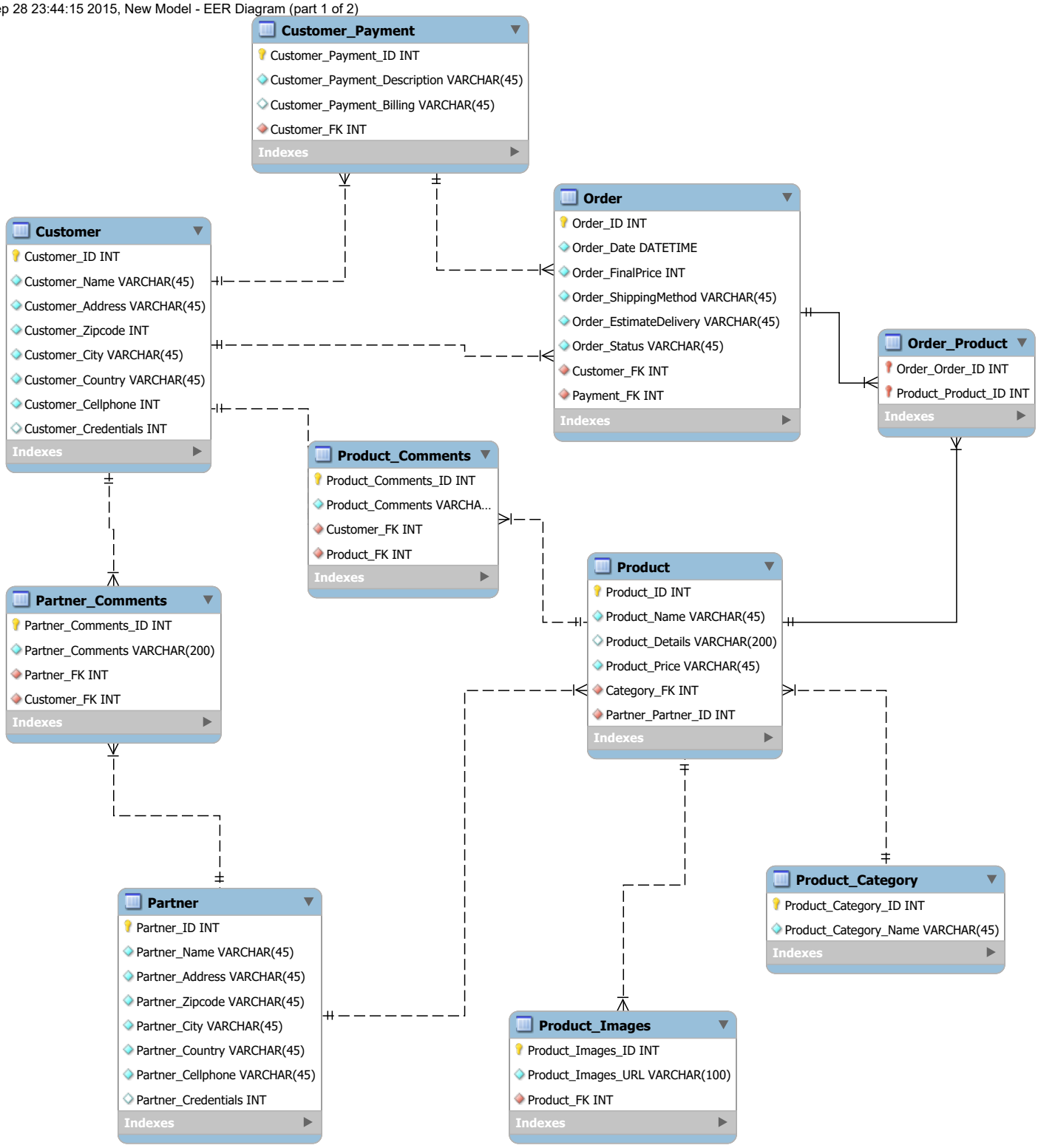
1.2 Scope

This software consists of two layers. The first layer is the database, where we use MySQL Azure for hosting. The second layer is the persistence layer, where we implemented in Java/Eclipse, using Hibernate.

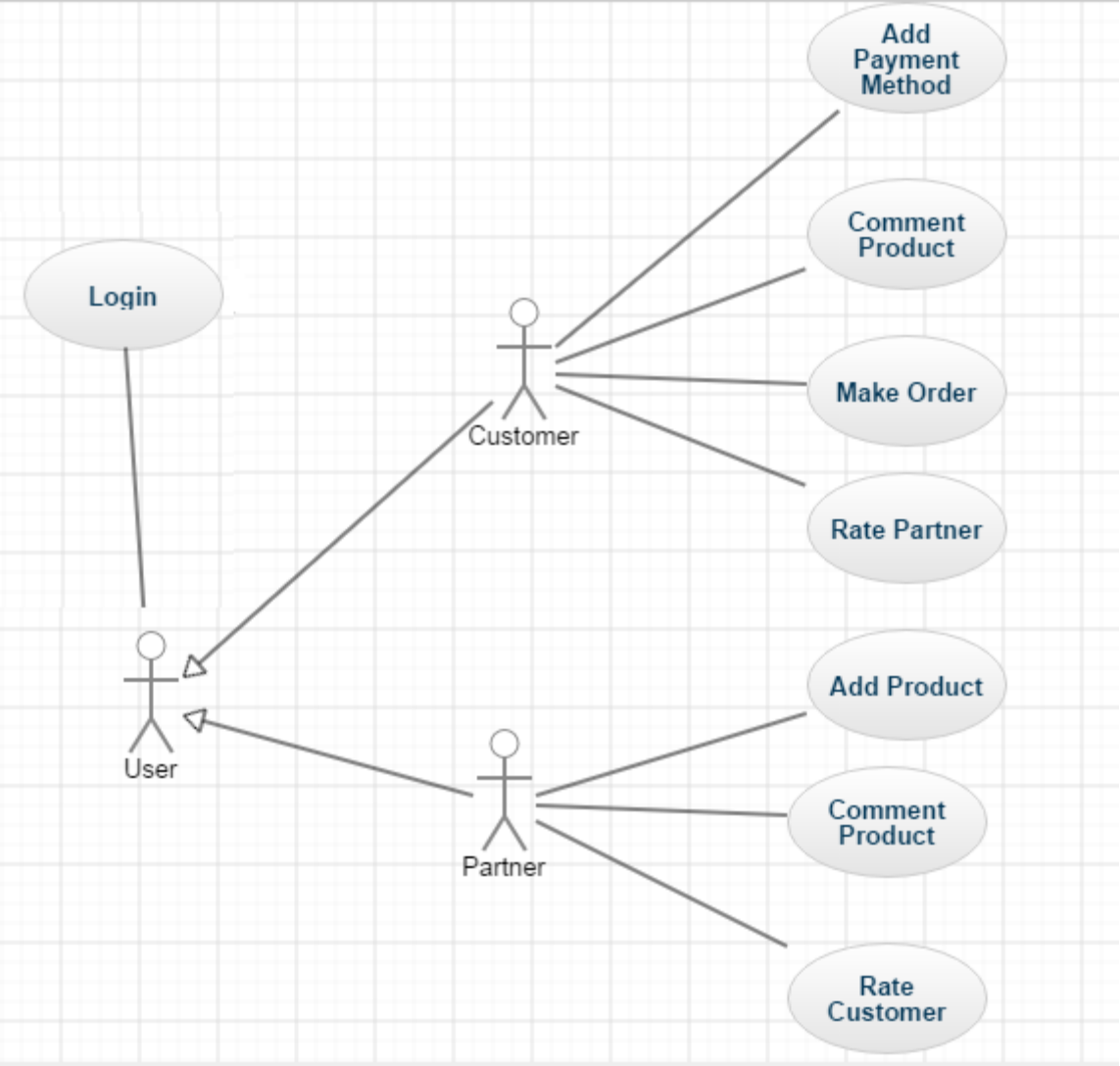
2. DIAGRAMS

2.1 ER Diagram

We created ten database tables to complete the first layer. Here is the diagram correlated:


Customer_Payment
Customer_Payment_ID INT
Customer_Payment_Description VARCHAR(45)
Customer_Payment_Billing VARCHAR(45)
Customer_FK INT
Indexes
Order
Order_ID INT
Order_Date DATETIME
Order_FinalPrice INT
Order_ShippingMethod VARCHAR(45)
Order_EstimateDelivery VARCHAR(45)
Order_Status VARCHAR(45)
Customer_FK INT
Payment_FK INT
Indexes
Customer
Customer_ID INT
Customer_Name VARCHAR(45)
Customer_Address VARCHAR(45)
Customer_Zipcode INT
Customer_City VARCHAR(45)
Customer_Country VARCHAR(45)
Customer_Cellphone INT
Customer_Credentials INT
Indexes
Order_Product
Order_Order_ID INT
Product_Product_ID INT
Indexes
Product_Comments
Product_Comments_ID INT
Product_Comments VARCHA...
Customer_FK INT
Product_FK INT
Indexes
Product
Product_ID INT
Product_Name VARCHAR(45)
Product_Details VARCHAR(200)
Product_Price VARCHAR(45)
Category_FK INT
Partner_Partner_ID INT
Indexes
Partner_Comments
Partner_Comments_ID INT
Partner_Comments VARCHAR(200)
Partner_FK INT
Customer_FK INT
Indexes
Partner
Partner_ID INT
Partner_Name VARCHAR(45)
Partner_Address VARCHAR(45)
Partner_Zipcode VARCHAR(45)
Partner_City VARCHAR(45)
Partner_Country VARCHAR(45)
Partner_Cellphone VARCHAR(45)
Partner_Credentials INT
Indexes
Product_Category
Product_Category_ID INT
Product_Category_Name VARCHAR(45)
Indexes
Product_Images
Product_Images_ID INT
Product_Images_URL VARCHAR(100)
Product_FK INT
Indexes

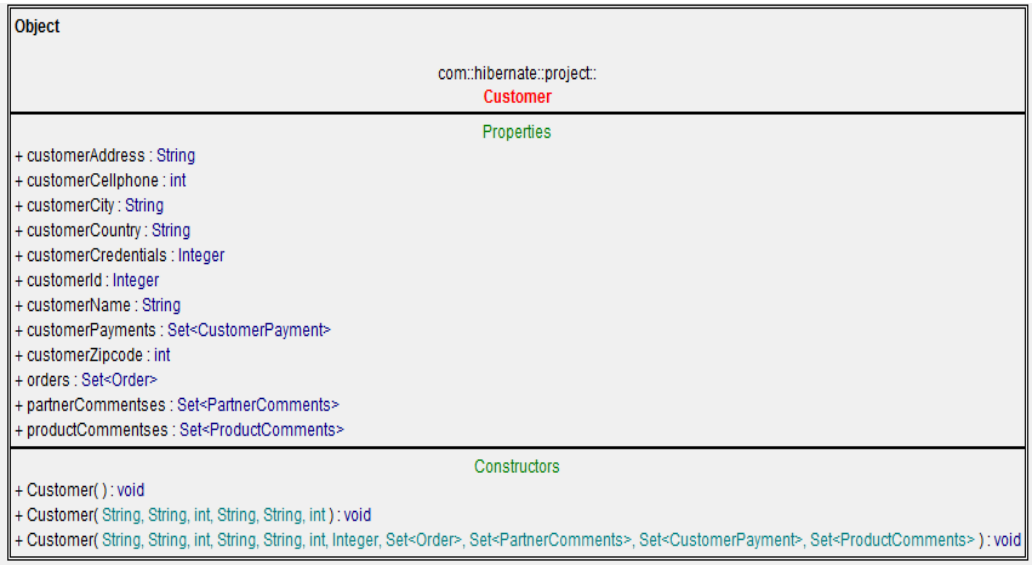
2.2 Use Case Diagram



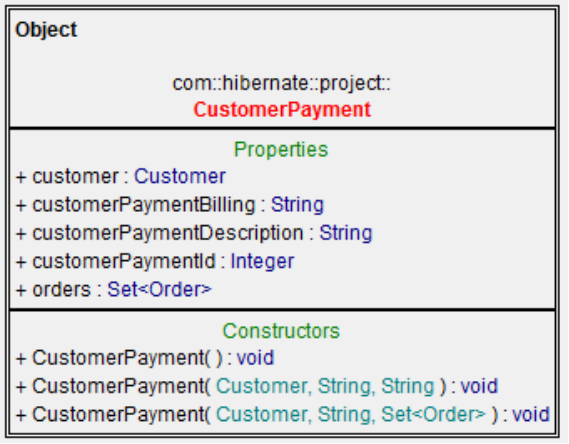
2.3 Classes

Below is a list of all classes of our project and the respective attributes and methods.

2.3.1 Customer Class

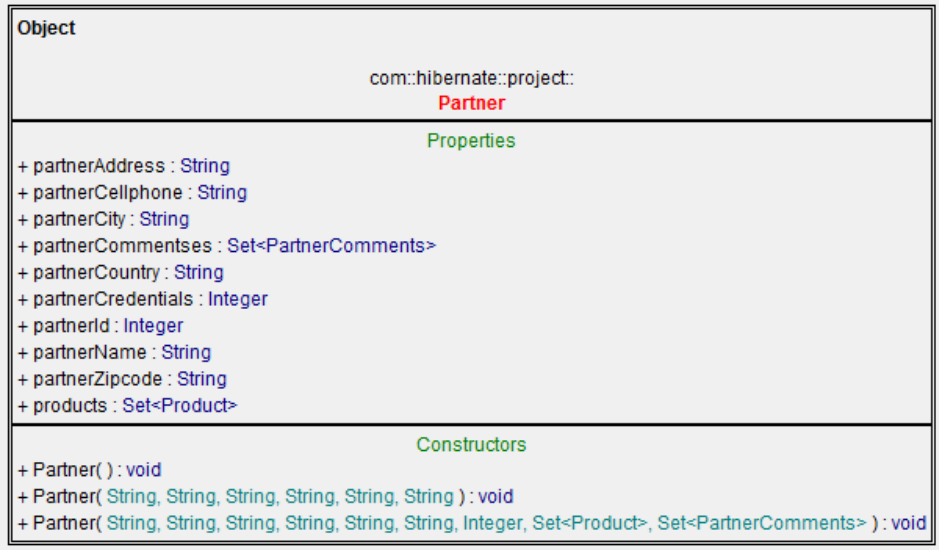


2.3.2 CustomerPayment Class

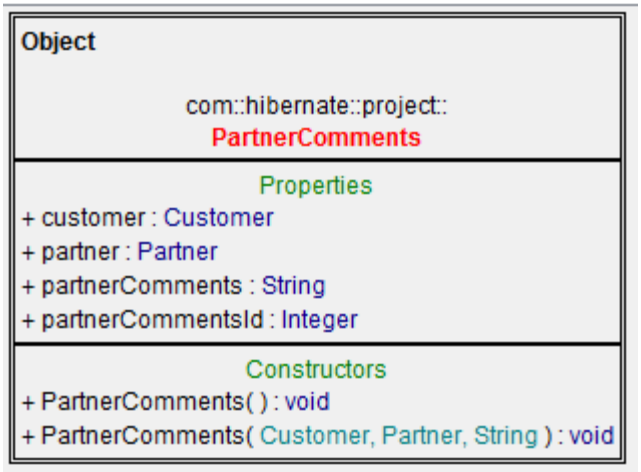


2.3.3 Order Class

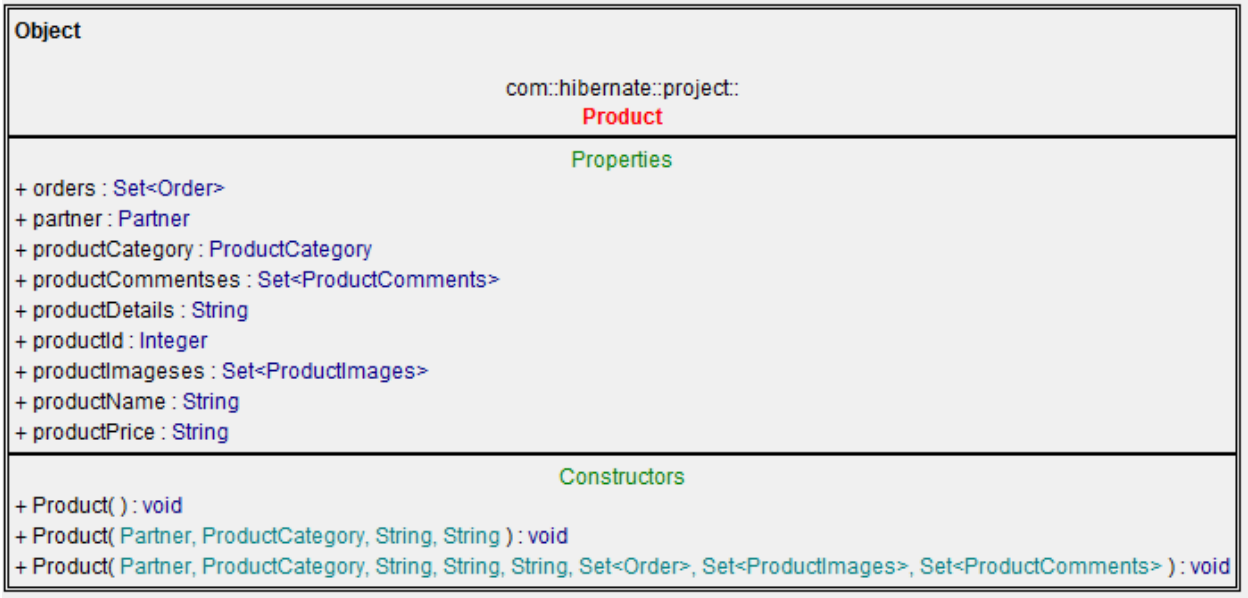
2.3.4 Partner Class



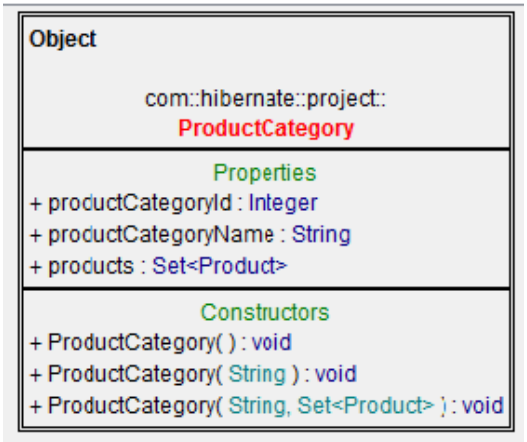
2.3.5 PartnerComments Class



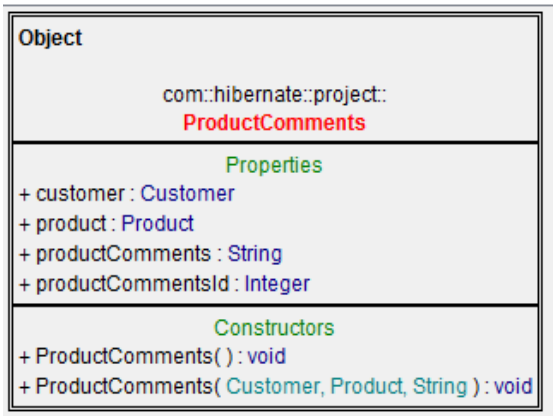
2.3.6 Product Class



2.3.7 ProductCategory Class



2.3.8 ProductComments Class



2.3.9 ProductImages Class