Group 7: Pizza Ordering Application

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Overview

Starting date:

June 5, 2017

Major Developments

- We have created a program that allows the user to order a pizza using a database that stores their information
- We have also documented our progress and major developments as per our requirements listed

Overall Progress

For the most part, we have made significant progress with our project. Our application is functional, and our documentation is adequately prepared.

Development Stage - Planning the Project

Accomplishment 1

- Before starting this project, we unanimously agreed on every group member's role regarding how to proceed with the project.
- From then on, we began to work on the heart of our project.

Accomplishment 2

- During the [brief] planning phase, the documenter also created the Project Plan, one of the more significant documents that is required of this project.
- It took a week to complete.

Development Stage - Preparing the Class Objects

Accomplishment 1

- Upon beginning our project, one of our group members was assigned to work on some classes for our application.
- Within the next couple of weeks, he has managed to do so accordingly.

Accomplishment 2

- Within each class are a set of methods that each serves a significant purpose for our application. This has aided the GUI scripter immensely with his work.

Development Stage - Creating the GUI

Accomplishment 1

- Creating the GUI was a daunting task that somewhat required the utmost attention and patience.
- Although basic, the functionality of this GUI required quite a bit of problem solving.

Development Stage - Creating the Database

Accomplishment 1

- Creating the database was also a daunting task, but once completed, it allowed the user to save their credentials under our SQL database.

Accomplishment 2

- Using this newly formed database, the user can access their account and make purchases without needing to fill in their credentials every time they would like a new pizza.

Development Stage - Documenting our Findings

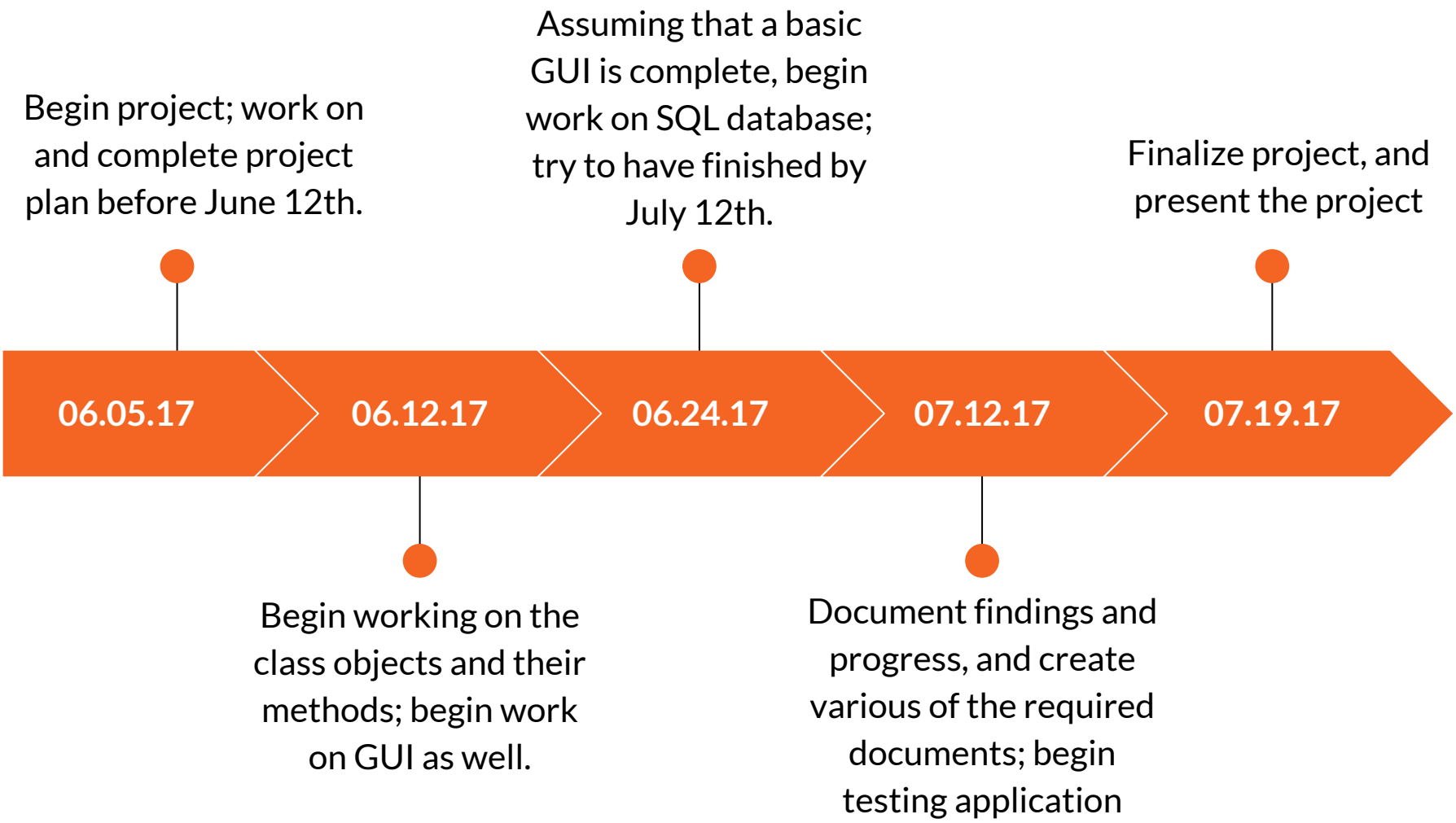
Accomplishment 1

- For our final task, we were required to document our findings and developments.
- The documentation process began once our project was nearly complete, which proved to be an error.

Accomplishment 2

- Regardless, documenting everything was somewhat of a breeze and took no more than two or three weeks of steady work to finish off.

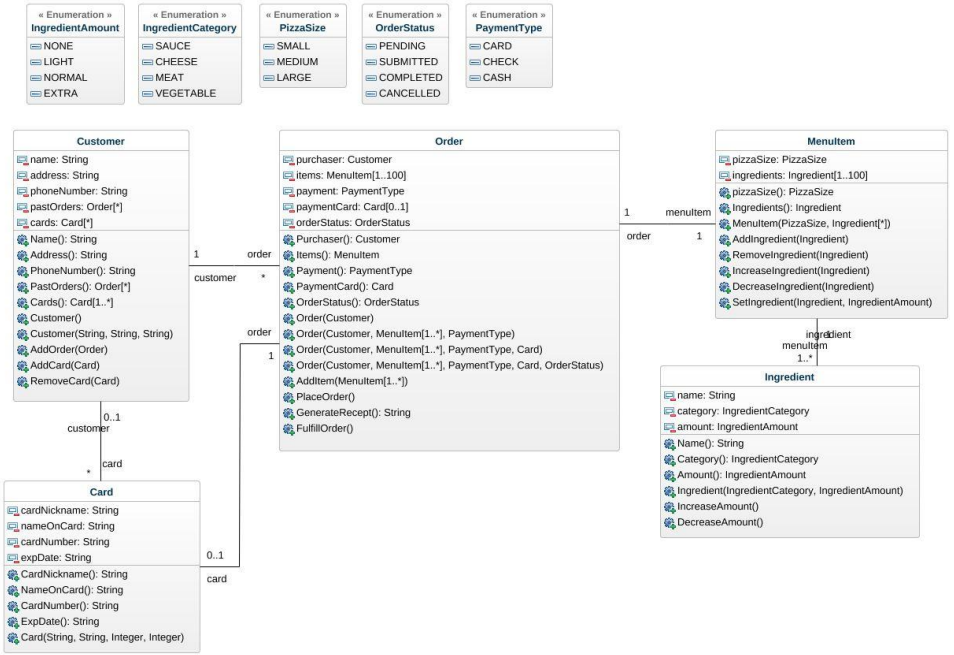
Schedule


Begin project; work on and complete project plan before June 12th.
Assuming that a basic GUI is complete, begin work on SQL database; try to have finished by July 12th.
Finalize project, and present the project
06.05.17
06.12.17
06.24.17
07.12.17
07.19.17
Begin working on the class objects and their methods; begin work on GUI as well.
Document findings and progress, and create various of the required documents; begin testing application

Documentation

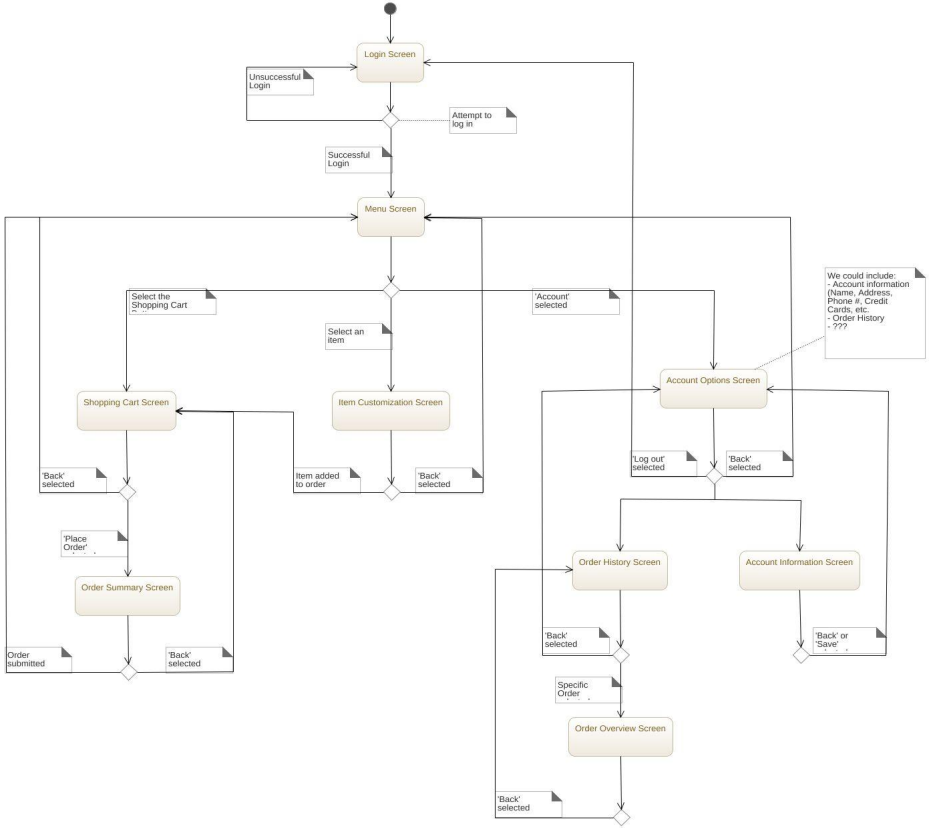
Class Diagrams

The Class Diagrams are an important foundation for our project which allowed one of our developers to create our program's class objects with ease.



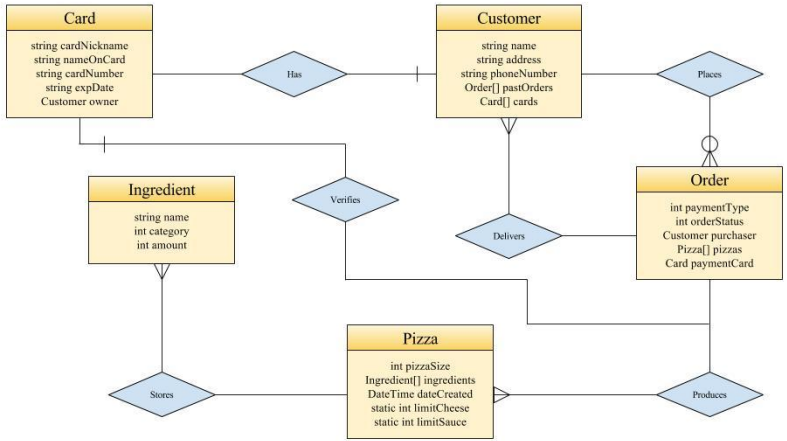
Behavior State Diagram

The Behavior State Diagram is a diagram which shows the process by which a user may navigate our application and place their order. This laid the foundation for our project.



Entity Relationship Diagram

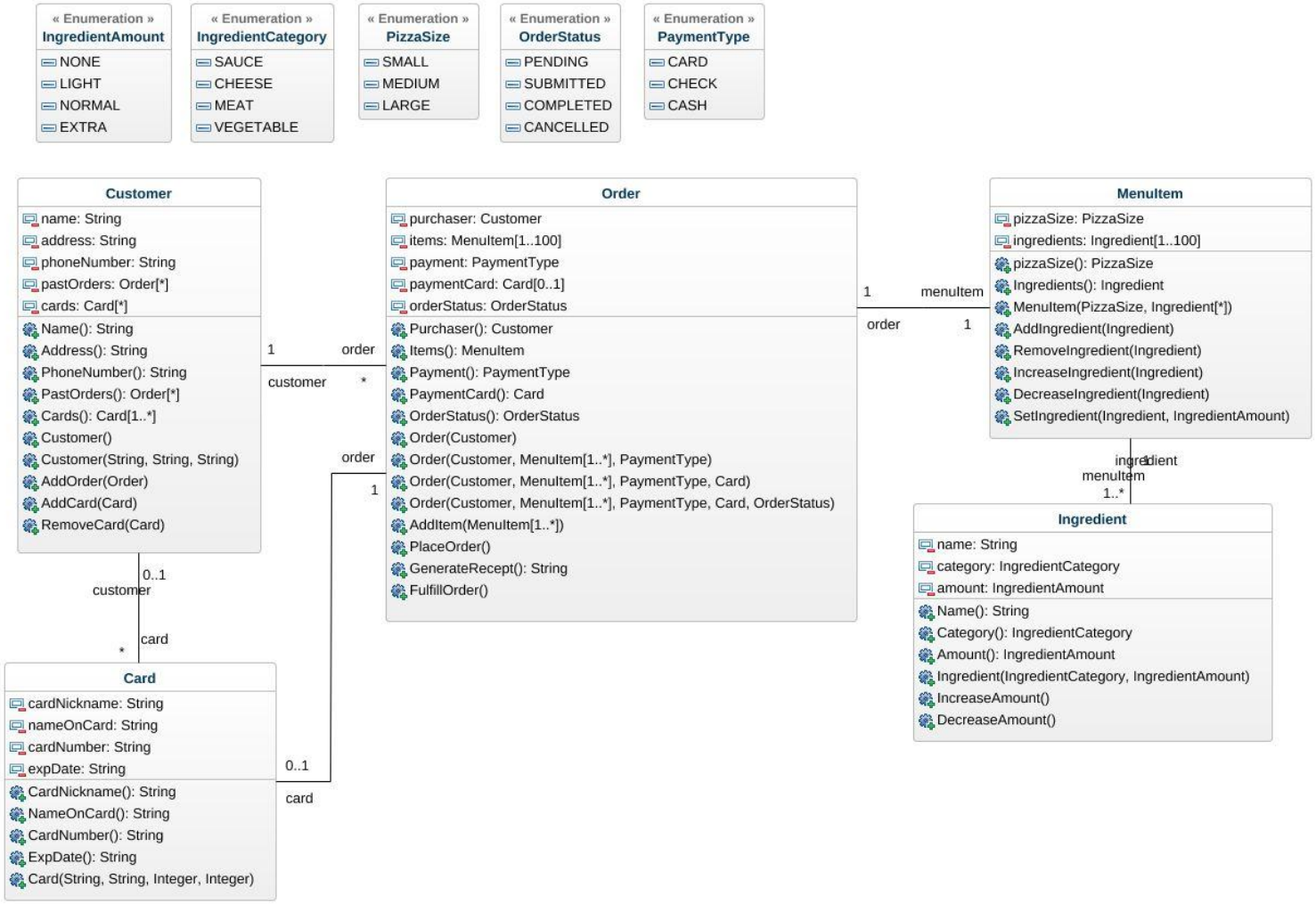
The Entity Relationship Diagram is a diagram which shows relationship within various entities of our program. Since our program is relatively small, with few entities, the diagram was thus small as well.

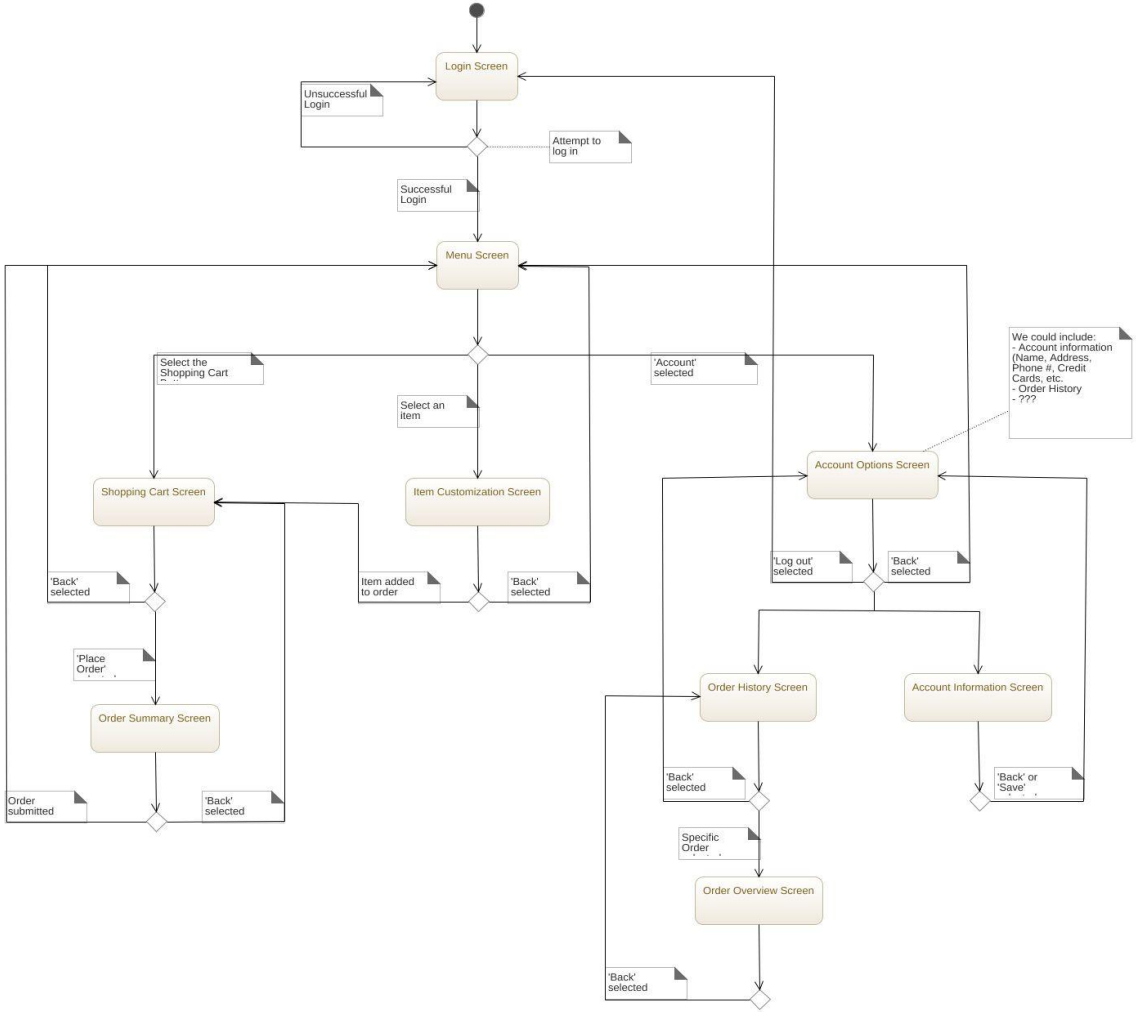


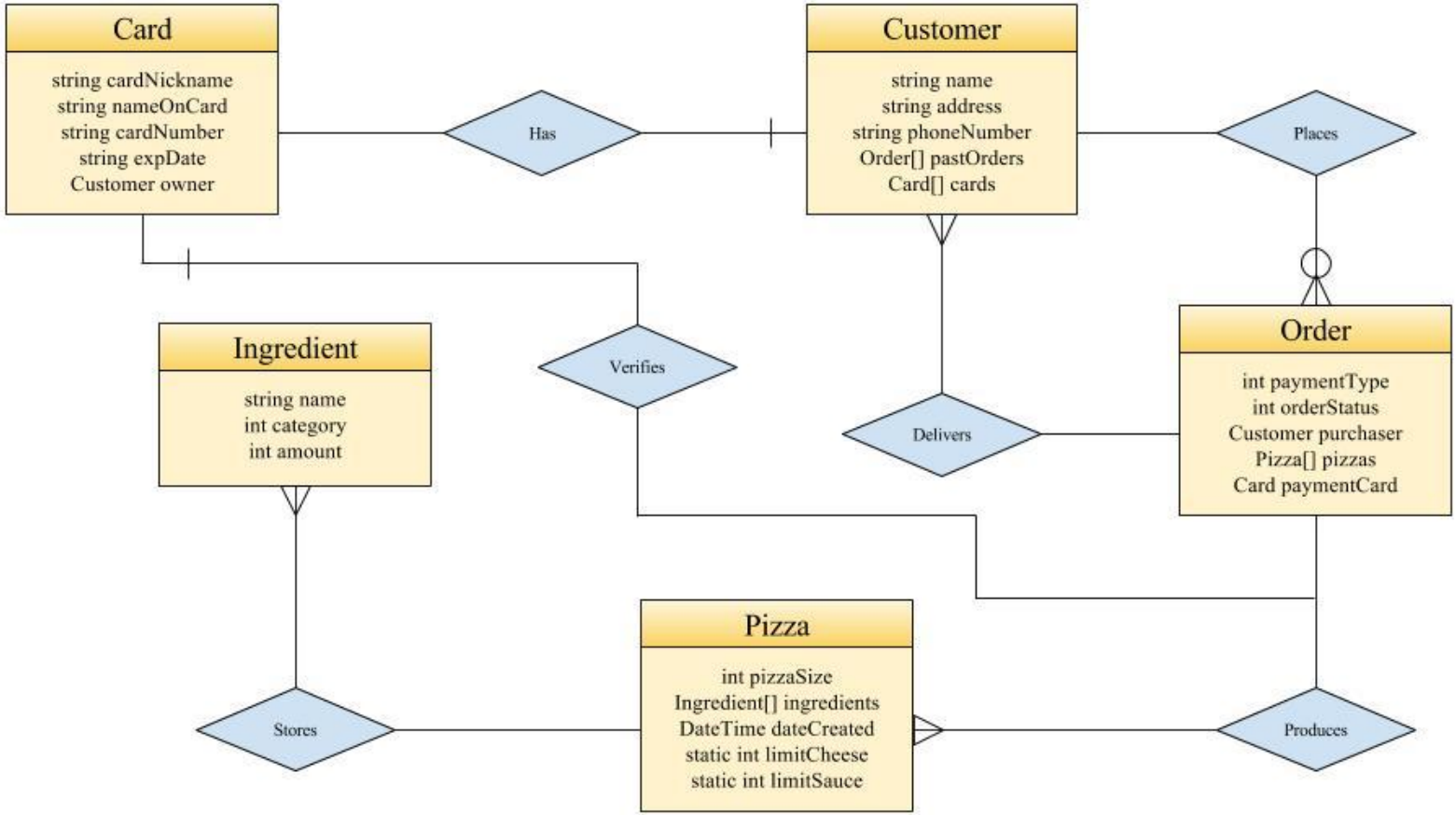
What does our project look like now?

Now that we have talked about how we went about completing this project, we will now briefly demonstrate how our application functions.

Final Remarks and Questions


« Enumeration »
IngredientAmount
NONE
LIGHT
NORMAL
EXTRA
« Enumeration »
IngredientCategory
SAUCE
CHEESE
MEAT
VEGETABLE
« Enumeration »
PizzaSize
SMALL
MEDIUM
LARGE
« Enumeration »
OrderStatus
PENDING
SUBMITTED
COMPLETED
CANCELLED
« Enumeration »
PaymentType
CARD
CHECK
CASH
Customer
name: String
address: String
phoneNumber: String
pastOrders: Order[*]
cards: Card[*]
Name(): String
Address(): String
PhoneNumber(): String
PastOrders(): Order[*]
Cards(): Card[1..*]
Customer()
Customer(String, String, String)
AddOrder(Order)
AddCard(Card)
RemoveCard(Card)
Order
purchaser: Customer
items: MenuItem[1..100]
payment: PaymentType
paymentCard: Card[0..1]
orderStatus: OrderStatus
Purchaser(): Customer
Items(): MenuItem
Payment(): PaymentType
PaymentCard(): Card
OrderStatus(): OrderStatus
Order(Customer)
Order(Customer, MenuItem[1..*], PaymentType)
Order(Customer, MenuItem[1..*], PaymentType, Card)
Order(Customer, MenuItem[1..*], PaymentType, Card, OrderStatus)
AddItem(MenuItem[1..*])
PlaceOrder()
GenerateRecept(): String
FulfillOrder()
MenuItem
pizzaSize: PizzaSize
ingredients: Ingredient[1..100]
pizzaSize(): PizzaSize
Ingredients(): Ingredient
MenuItem(PizzaSize, Ingredient[*])
AddIngredient(Ingredient)
RemoveIngredient(Ingredient)
IncreaseIngredient(Ingredient)
DecreaseIngredient(Ingredient)
SetIngredient(Ingredient, IngredientAmount)
Ingredient
name: String
category: IngredientCategory
amount: IngredientAmount
Name(): String
Category(): IngredientCategory
Amount(): IngredientAmount
Ingredient(IngredientCategory, IngredientAmount)
IncreaseAmount()
DecreaseAmount()
Card
cardNickname: String
nameOnCard: String
cardNumber: String
expDate: String
CardNickname(): String
NameOnCard(): String
CardNumber(): String
ExpDate(): String
Card(String, String, Integer, Integer)
1
order
customer
*
1
menuItem
order
1
ingredient
menuItem
1..*
0..1
customer
*
card
order
1
0..1
card


Login Screen
Unsuccessful Login
Attempt to log in
Successful Login
Menu Screen
Select the Shopping Cart
Select an item
'Account' selected
We could include:
- Account information (Name, Address, Phone #, Credit Cards, etc.
- Order History
- ???
Shopping Cart Screen
Item Customization Screen
Account Options Screen
'Back' selected
Item added to order
'Back' selected
'Log out' selected
'Back' selected
'Place Order'
Order Summary Screen
Order History Screen
Account Information Screen
Order submitted
'Back' selected
'Back' selected
'Back' or 'Save'
Specific Order
Order Overview Screen
'Back' selected


Card
string cardNickname
string nameOnCard
string cardNumber
string expDate
Customer owner
Has
Customer
string name
string address
string phoneNumber
Order[] pastOrders
Card[] cards
Places
Ingredient
string name
int category
int amount
Verifies
Delivers
Order
int paymentType
int orderStatus
Customer purchaser
Pizza[] pizzas
Card paymentCard
Pizza
int pizzaSize
Ingredient[] ingredients
DateTime dateCreated
static int limitCheese
static int limitSauce
Stores
Produces