# ISY211 – Assignment #1 (OOAD Assignment)

# Weighting: 10%

## Objectives:

The assignment is based on a case study for which you are required to come up with Use case and UML diagrams for the purpose of Object Oriented Analysis and Design.

## Due Date:

Sunday 3rd September, 2017 by 11:55PM

## Specification:

You are contacted by a small Pizzeria owner who wants you to help with making a website of the shop from where the customers can order pizza online for pickup/Delivery.

**The main objectives of this ordering system are:**

**Build your own pizza** – This system will help customers in ordering custom pizzas. So the customer will pick exactly the things which he/she wants in their pizza. This will surely enhance the image of the pizzeria and customer satisfaction will be more.

**Online Payment**- This system will give option to the customer for online payment. This will make pizza buying experience cash free.

**Better Knowledge**- This system will provide customer all the details of his order before making order. This confirmation will help customers to check the items ordered with their prices.

**Know Delivery Time**- This system will show the time by which the order will be delivered to the customer. For pick-ups customers can fix the time by which they will pick their order.

**Reduce Paper Work**- As most of the things will be performed online, it will reduce the usage of paper for the pizzeria.

**Improves Efficiency**- This system will make things easier for staff as whole ordering process is done by                                                    customer                                                    only. These were the objectives of the online pizza ordering System. Let us now get into the details of the working of this ordering system.

Whenever a customer visits the webpage of the pizzeria, he/she will have to select his location if the customer is interested in delivery. There is a menu that will help the customer with the pizzas and other non-pizza products on offer. All the ingredients will be shown with their prices.

The customer can customize his pizza and make changes in the ingredients if he wishes for and select the quantity for it. Customers are required to provide his/her details like name, phone number, address (for delivery) and email id. They are also asked for payment option and they can choose to pay online using various online payment methods or cash on delivery option.

The system should notify the customer about the time by which the pizza will be ready/delivered to them.

## Requirements:

1. Create a use case for a customer who would want to order pizza(s) via this online pizza ordering system.
2. Create the Domain Model for the online pizza ordering system.
3. Create a System Sequence Diagram for pizza ordering system.
4. Create a class diagram for pizza ordering system.

## Submission:

1. You are required to submit a report on this case study that highlights what the case study is about and any two assumptions you have made for this system. (Please note: Any assumption you make for this system should be in line with the case study given and should not contradict the problem definition itself).
2. The report should have all the artefacts mentioned in the Requirements section.
3. The report must conclude with a small reflection section that reflects on what you learnt via this assignment and any challenges you had to work on this case study.

## Marking Criteria:

| Criteria | Marks | Marks Received |
|---|---|---|
| 1. Use Case<br>    a. Actors, preconditions<br>    b. Main flow<br>    c. At least 2 Alternative flows/Exceptions<br>    d. post conditions | 0.25<br>1.0<br>1.0<br><br>0.25 | |
| 2. Domain Model<br>    a. Domain classes Identified<br>    b. Domain classes connected | 0.5<br><br>0.5 | |
| 3. System Sequence Diagram<br>    a. Actor and various objects in the system<br>    b. Lifelines and messages passed between various objects and Actors | 1.0<br><br>1.5 | |
| 4. Class Diagram<br>    a. Main classes identified<br>    b. Relationship between main classes identified | 1.0<br><br>1.0 | |
| 5. General<br>    a. Assignment cover page, title, table of contents, page numbers and overall format<br>    b. Reflection<br>    c. References | 0.5<br><br><br><br>1.0<br>0.5 | |