## UML I - interdisciplinary assignment

## Case: Big Mamma pizzaria

In the first version of the system you should focus on the part of the system that deals with the order handling of pizzas, where customers can order Pizzas.

See your teachers weekplan for hand in information.
Evaluation: Approved / not approved.
This assignment is part of a mandatory assignment. The assignment should be approved before you can attend the exam.

| 1. User Stories | Prepare a minimum of 10 simple User Stories for the Big Mamma pizzeria. <br> Put US in product backlog |
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| 2. Domain Model | Develop a domain model (containing 4-6 conceptual classes) for the Big Mamma <br> Procedure: <br> i. Find the conceptual classes <br> ii. Draw them in a UML domain model <br> iii. Add associations / aggregations / compositions / multipliers <br> iv. Add attributes |
| 3. Design Class Diagram | Prepare a Design Class Diagram (DCD) for the pizzeria based on your domain model <br> a. a. Find methods <br> b. b. Consider the direction of connection. |
| 4. Interaction diagram | Create an interaction diagram for the start method (next part.) |

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| 5. Implement Design Class | A. Create a new Console application PizzaStore <br> B. Implement all the classes from your Design Class Diagram. <br> a. Every class should have properties and a constructor <br> C. In the first version of the PizzaStore application the associations/aggregations/compositions should be implemented as $1: 1$ connections. <br> D. All the classes should implement a ToString method <br> E. Create a function, CalculateTotalPrice, that calculates the total price for the order. The function should return the total price for the order including tax and delivery costs ( 40 kr ). <br> F. To test your application you should create a class Store with a method Start. <br> a. Call the Start method from the main method in the class Program. <br> b. In the Start method you should: <br> i. Create 3 Pizza objects, 3 Customer objects and 3 Order objects each with a different pizza. <br> G. Print out order information <br> a. Using the object reference to each Order object, you should print out the pizza name, the customer name and the total price for each order. <br> b. Test the method CalculateTotalPrice |
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