**Project description**

Each group has 4 deliverables: (**Phase2:** 50 grades)

* Total grades for the project should be **20 grades**. So, the grades will be scaled.
* The templates for your deliverables and your cover page are provided.
* Your deliverables will be submitted on **https://forms.gle/5tsks6cZURf1cwNUA**.
* This form is used to submit your different deliverables in course IS332 in the academic year (2022-2023)
* Please submit your file named T<Team number>-D<Deliverable number>.docx or .pdf. Example: T7-D2.docx
  + Do not add spaces in the filename.
  + Avoid zipping the file unless it is larger than 10 MB.
* Deliverable 2 **Firm Deadline is 26-11-2022**.

**Note that**

* Only one team member (**team leader**) can submit the project.
* Don’t submit multiple times.
* Cheating policy: Any copies will be graded zero.
* Clearly state your assumptions (only required ones).
* No handwritten reports and/or models are accepted [graded zero].
* You need to use any UML tool to depict your models and please mention the used tool(s) in your report.

[**Hint**: Review Chapters 4 - 5: domain class diagram & CRUD]

[**Tip**: Split the work among team members to help with time management]

**Project Details**

|  |  |
| --- | --- |
| Project number | *project 1* |
| Project title | *Mega store corporation* |
| Corresponding TA\LA | TA/Lamia Atef |
| Deliverable | *2* |

**Team Details**

|  |  |  |
| --- | --- | --- |
| **Student ID** | **Student name** | **Lab Group** |
| 20200366 | عمرو ابراهيم محمد ابراهيم سيد | S3/S4 |
| 20200645 | يوسف جلال الدين ناظم حيدر الطائي | S3/S4 |
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| 20201114 | عبد الرحمن سيد فؤاد سيد | S3/S4 |

# **Guidelines for Deliverable 2**

1. Apply the CRUD technique
2. Domain Class Diagram [Complete system]

* Domain Class Diagram based on the Noun technique.
* You need to follow the steps of the NOUN technique to identify the domain classes and document information using Tabular representations whenever possible. Please REFER to CHAPTER 4 in the book.
* You need to make use -as much as you can- of complex association types, i.e., generalization, aggregation, and composition.
* Your class diagram should also include multiplicities.
* Please specify the name of the associations in your model to increase readability.

1. State machine diagram (single object is enough). Please justify your selection.
2. Activity diagram(s) (at least 3 use cases)
3. System Sequence diagram(s) (for the same use cases in activity diagrams)

Please **clearly state** the name of the use case related to each model in steps 4 and 5.

**Assumptions**

1. The different types of payment methods are: Cash, Credit card, Customer points.

1. **CRUD technique:**

|  |  |  |
| --- | --- | --- |
| Domain Class | CRUD | Verified Use case |
| Customer | Create | Create account |
| Read | View profile |
| Update | Update profile details |
| Delete | Deactivate account |
| Cart | Create | Create account |
| Read | View cart |
| Update | Add product to cart |
| Delete | Deactivate account |
| Product | Create | Add product |
| Read | View profile |
| Update | View all products |
| Delete | Remove product |
| Offer | Create | Add offer |
| Read | View all offers |
| Update | Update offer details |
| Delete | Delete offer |
| Payment | Create | Checkout |
| Read | Check payment records |
| Update | None |
| Delete |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Use Case**  **VS**  **Domain Class** | **Customer** | **Cart** | **Product** | **Offer** | **Payment** | **Order** |
| **Create account** | C | C |  |  |  |  |
| **Update profile details** | U |  |  |  |  |  |
| **View profile** | R |  |  |  |  |  |
| **Deactivate account** | D |  |  |  |  |  |
| **Search products** |  |  | R |  |  |  |
| **Make purchase** |  |  |  |  |  | C |
| **Add product to cart** |  | U |  |  |  |  |
| **Browse products and offers** |  |  | R | R |  |  |
| **Request refund** |  |  | U |  |  | U |
| **Add offer** |  |  |  | C |  |  |
| **Update offer details** |  |  |  | U |  |  |
| **View all offer** |  |  |  | R |  |  |
| **Remove offer** |  |  |  | D |  |  |
| **Add product** |  |  | C |  |  |  |
| **Update product details** |  |  | U |  |  |  |
| **View all products** |  |  | R |  |  |  |
| **Remove product** |  |  | D |  |  |  |
| **Check payment records** |  |  |  |  | R |  |
| **Update customer preferences** | U | R |  |  |  | R |
| **Checkout** |  | U | U |  | C |  |
| **Package order** |  |  |  |  |  | U |
| **Package using normal bags** |  |  |  |  |  | U |
| **Package using special bags** |  |  |  |  |  | U |
| **Gain points** | U |  |  |  | R | R |

1. **Domain Class Model**

Diagram

Description automatically generated

1. **State Machine Model (Order object)**

Diagram

Description automatically generated

1. **Activity Diagrams** 
   1. Diagram

      Description automatically generated**Checkout activity diagram**
   2. **Search Product Activity Diagram**

**Diagram

Description automatically generated**

* 1. **Add to cart Activity Diagram**

**Diagram

Description automatically generated**

1. **System Sequence Diagrams**
   1. **Checkout SSD**

**Diagram

Description automatically generated**

* 1. **Search Product SSD**

**Table

Description automatically generated**

* 1. **Add to Cart SSD**

**Diagram

Description automatically generated**