Cairo University Faculty of Computers and Artificial Intelligence



**Advanced SE**

**Software design specification document**

**2022**

**Project Team**

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| --- | --- | --- |
| **ID** | **Name** | **Email** |
| 20200234 | سميه محمد يوسف محمد | [sooma3mohammed@gmail.com](mailto:sooma3mohammed@gmail.com) |
| 20200501 | محمود عبدالراضي جادالرب | [mahmoudten55@gmail.com](mailto:mahmoudten55@gmail.com) |
| 20201038 | ايمان ابراهيم شعبان جاد | [emanelkaser@gmail.com](mailto:emanelkaser@gmail.com) |
| 20201061 | دينا احمد عبدالراضي | [da449393@gmail.com](mailto:da449393@gmail.com) |

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# Class diagram design

* **You should provide clean version for your class diagram design.**
* **Class diagram is a static diagram and should not represent any dynamic flow of events.**
* **Put Relationships between classes and the types of the relationships.**
* **Put multiplicity.**
* **Put relationship name (e.g. faculty "offer" course).**
* **Put attributes in the classes.**
* **Put functions &Put parameters.**
* **Put data types of each attributes and the parameters.**
* **Highly perfered: Each class has a corresponding interface**
  + **Let all objects parameters and returns be of interface type.**
* **See Shopping Cart Case Study**



# Class diagram Explanation

* **Explain here the design pattern(s) that you used and your justification for using them, and the participating classes for each pattern.**

# Sequence diagram design

* **List Sequence diagrams for the most important user story (according to your opinion).**
* **Make sure that each object in the sequence diagram has a corresponding class in the class description table above. If not, it will be REJECTED.**
* **Put actual function calls with proper parameters and return types corresponding to class diagrams.**
* **Following are couple of examples for small / meduim examples. We expect such diagrams, however there is a missing thing in them. Most of calls don’t have parameters. Please always specify the parameters in the call, matching the class diagram.**



# Github repository link

* **URL for your repository, should contains implemented services**,
* <https://github.com/Sooma-M/PaymentSystem>