Cairo University Faculty of Computers and Artificial Intelligence



**Advanced SE**

**Software design specification document**

**2022**

**Project Team**

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| --- | --- | --- |
| **ID** | **Name** | **Email** |
| 20200289 | Abdelrahman Abdelfattah Shafiq Abbas | abdofatah410@gmail.com |
| 20200041 | Ahmed Mohammed Shebl | shebblloll@gmail.com |
| 20201198 | Nouran Mostafa Abdelhamid Maamoun | nourmostafa2197@gmail.com |
| 20200633 | Yasmeen Mohammed Abdelkhalek Ali | yassmeen765@gmail.com |

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# 

# Diagram Description automatically generatedClass diagram design

# Class diagram Explanation

**we used 3 design patterns (observer, factory, Strategy pattern)**

**1-we used observer design pattern in discount and user classes to enables effective data transmission to other objects without requiring any changes to the Subject or Observer classes.**

**2- we used factory method pattern in service and admin classes to enables sub-classes to select the type of objects to create**

**3-we used strategy pattern in payment class**

# Sequence diagram design:

1. **User Sign Up**Table

   Description automatically generated with medium confidence
2. **User Login**

**A picture containing table

Description automatically generated**

1. **Add Service**

Diagram

Description automatically generated

1. **Add Discounts**

Diagram

Description automatically generated

1. **Request Refund**

Diagram

Description automatically generated

1. **Accept or Reject Refunds**

Diagram

Description automatically generated with medium confidence

1. **Search For Services**

Chart, box and whisker chart

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1. **Payment**

Diagram

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# GitHub repository link

[shebll/SoftWare-Project (github.com)](https://github.com/shebll/SoftWare-Project)