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Description automatically generatedCairo University  
Faculty of Computers and Artificial Intelligent

**CS251 - Software Engineering I**

# Team

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| --- | --- | --- | --- |
| **ID** | **Name** | **Email** | **Mobile** |
| 20200813 | Youssef diaa el-sayed | Youssefdiaa22@icloud.com | 01022017740 |
| 20201080 | Reham hatem mohammed | rha772201@gmail.com | 01119403318 |
| 20200558 | Mennatullah sayed abo el-haggag |  | 01129058506 |
| 20200510 | Marawan tarek awad | Marwantarek035@icloud.com | 01018585984 |

**Solid Principles:**

* The Single responsibility principle:

We used the single responsibility principle (SRP)

states that each class in the program should have responsibility for just a single piece of that program functionality like (Parking\_functtion) class.

* The Open/Closed principle:

We used Open/Closed principle states by using inheritance and polymorphism with creating an Abstract class that serves as base class for all types of objects and derived classes that extends from it

Like (vehicle) as Base class and (car, motocycle) as derived classes.

**Design Patterns:**

* Adapter pattern:

We connect (exitGate) to (calculateManual) through (owner).