Cairo University
Faculty of Computers and Artificial Intelligent

CS251

Software Engineering 1

Project Name: Software Design

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Boundary, control and entity

- **Boundary:** It is the border between the user and the system, which is the screen.
- **Entity:** It is represented in the data that the system needs, which are the time of entry and exit, the hourly price, the total income ... etc.
- **Control:** It is represented by functions such as park_in() , park_out() , calculatePayment()….etc

Does your class diagram respect or violate SOLID principles?

Yes, our class schema respects the principles of SOLID, and that is to use:

- **S-> Single responsibility:** it is represented in our class should have one responsibility and it should only have one reason to change.
- **O-> Open-Closed:** it is represented in our software entities should be open for extension but closed for modification.
- **L-> Liskov substitution:** We divided the large interfaces into small and specific ones. Such as class vehicle (class Car and class motorcycle), Therefore, we have converted our large classes into smaller and specific classes so that customers must know the methods that interest them only and facilitate the modification processes for each class without affecting the other.

CS251: Phase 2 – <RYM>