Cairo University  
Faculty of Computers and Artificial Intelligent

**CS251**

**Software Engineering I**

Project Name

Software Design

Team Names

Month & Year

Contents

[Instructions [To be removed] 3](#_Toc101814919)

[Team 3](#_Toc101814920)

[Document Purpose and Audience 3](#_Toc101814921)

[System Models 3](#_Toc101814922)

[I. Class diagrams 3](#_Toc101814923)

[Important Algorithm 4](#_Toc101814924)

[II. Sequence diagrams 5](#_Toc101814925)

[Class - Sequence Usage Table 6](#_Toc101814926)

[Ownership Report 6](#_Toc101814927)

[Policy Regarding Plagiarism: 7](#_Toc101814928)

# Instructions[To be removed]

# Team

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Email** | **Mobile** |
| 20200654 | Youssef Sayed fawzy | 20200654@stud.fci-cu.edu.eg | 01126283082 |
| 20200177 | Rana Ahmed Mohamed | rana.elzorkani1yahoo.com@gmail.com | 01067371952 |
| 20200338 | Alyaa Mohamed saad |  | 01124047534 |
| 20200006 | Ibrahim Yasser Ibrahim | Ibrahimyasser450@gmail.com | 01124047534 |

# Document Purpose and Audience

* **This document describes the details of the software application and what the user expect it to do and how to make it better.**
* **The target audience is the developers**
* **The project members**
* **Soft ware engineer**

# System Models

## I. Class diagrams

Diagram

Description automatically generated

**List down your classes and describe them**

| **Class ID** | **Class Name** | **Description & Responsibility** |
| --- | --- | --- |
| U1 | parking | Park In, park out, calculate income, display |
| U2 | vehicle | Vehicle’s data, arrival time, departure time |
| U3 | slot | Number of slots, dimensions |

### Important Algorithm

## 

## II. Sequence diagram

1)

## Table Description automatically generated with medium confidence

2)

Diagram

Description automatically generated

3)

Diagram

Description automatically generated4)

A picture containing table

Description automatically generated

5)

A picture containing diagram

Description automatically generated

6)

A picture containing diagram

Description automatically generated

### Class - Sequence Usage Table

| **Class Name** | **Sequence Diagrams** | **Overall used methods** |
| --- | --- | --- |
| slot | 6 | Set\_slot\_length () , set\_slot\_width() , get\_slot\_length() , get\_slot\_width() , display\_available\_slot() |
| vehicle | 1 , 2 , 3 | Park\_out () , set\_leaving\_time() , get\_leaving\_time() , no\_of\_hours() ,fees() , checkout() , set\_model\_name() , set\_car\_length() , set\_id\_no() , set\_model\_year() , set\_car\_width() , enter\_slot\_id() |
| parking | 1 , 2 , 3 , 4 , 5 | Park\_out () , set\_leaving\_time() , get\_leaving\_time() , no\_of\_hours() ,fees() , checkout() , set\_model\_name() , set\_car\_length() , set\_id\_no() , set\_model\_year() , set\_car\_width() , enter\_slot\_id() ,display\_total\_income() , calculate\_total\_income() ,park\_in() , first\_come() , best\_fit() , set\_arrival\_time() , display\_available\_slot() |

# Ownership Report

|  |  |
| --- | --- |
| **Item** | **Owners** |
| Class diagram | aliaa |
| Sequence diagram | Ibrahim / aliaa |