**1.4 Project scope**

The scope of the project:

* There is a **model** that takes a picture of the license plate and starts doing some operations on it, and in the end, the model recognizes the car.
* There is an **application** from which fees are paid, and I can also enter the car plate number to determine the violations related to the car and detect cases of theft, the person can download this application on his mobile phone, and thus the wasted time for payment has been reduced

**1.5 Output**

Creating an automation system that contains an application

* fees are paid through it.
* Detecting car violations.
* Knowing the location and time of the car that passes through the system to help in cases of theft.

**1.6 Documentation organization**

* **Chapter 1 (**Introduction**):** this chapter contains the introduction to the project (Car Palate reorganization) and discusses the problem that was wanted to solve it also talks about the objectives and scope of the project and finally talks about the output of the system and Documentation organization.
* **Chapter 2 (**Survey**):**  this chapter contains the Overview of the project, also how this technology works and the general background of the project, and how the application differs from other similar applications, add comparison tables for the technology that we relied on to determine the appropriate tools.
* **Chapter 3 (**Analyses and Design**):** this chapter contains project methodology, input, and output system, system specification also has a system framework, and System Analysis (context diagram /DFD diagram/workflow diagram /use case diagram )

Requirements

***Functional requirements:***

The functional requirement will describe a particular behavior or function of the system when certain conditions are met and developers must implement them to enable users to accomplish their tasks.

**User   
For users these functions include**

* **Login:** the system must allow the user to log in
* **Payment:** thesystem must allow the user to pay
* **View history:** system shows the history of the car
* **Contact us:** contact with the admin of the system
* **Report stolen:** add report stolen to the system

**Admin**

**For admin these functions include**

* **Control reports:** system reports must contain all reports of users and view the history of the car
* **Database:** system database must contain all related information about the user and his car (**check and approve**)
* **Sign up**: the system must allow to add a new user and sign up

***Non Functional requirements:***

A non-functional requirement (NFR) is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. Non-functional requirements are often called the "quality attributes" of a system.  
Non-Functional requirements such as:

* **Appearance &usability:** simple look and easy-to-use application
* **Availability:** the system must be available at any time
* **Response:** the system is faster in to respond of requests of the user
* **Security:** users’ information should be secure
* **Operational & environmental:** the application shall be used in variable lighting conditions
* **Reliability**: consistency of the system appears in the system being available all the time.
* **Scalability**: the ability of the system to handle the growth of data