Software Requirements Specification For Tawsela (Online App Taxi Booking)

Created By
Mohammed Ahmed Abd El-Karim
Moiner Ashraf
Abanoub Ibrahim
Ahmed Tarek
Mahmoud Mustafa Abd El-Hady
Michael Shawky Ghaly

2	Р	а	g	е
---	---	---	---	---

Table of Contents

1. Introduction	3
1.1 Purpose	3
1.2 Scope	3
1.3 Definitions, acronyms, and abbreviations	4
1.4 References	4
1.5 Overview	4
2. General Description	5
2.1 Product Perspective	5
2.2 Product Functions	6
2.3 User Characteristics	8
2.4 General Constraints	8
2.5 Assumptions and Dependencies	8
3. Specific Requirements	9
3.1 External Interfaces	9
3.2 Functions	11
3.3 Logical Database Requirements	12
3.4 Object Oriented Models	13

1. Introduction

Tawsela is the online service which will automate the process of booking a taxi and will facilitate both the customers and drivers with reduced time and efforts. First the company will register the vehicles to the system. Then the customer will request for booking a vehicle on his required date and time, providing all necessary information. The fare will be calculated and customer should confirm it. Then the driver will serve the customer on the specific date and time.

1.1 Purpose

The purpose of this SRS document is to specify software requirements of the Online App Taxi Booking. It is intended to be a complete specification of what functionality the system provides. The main purpose of the system is to automate the process of booking a taxi online. Specific design and implementation details will be specified in a future document.

1.2 Scope

This project's aim is to automate the system, calculating the fare, collecting fare, collecting all necessary information of the client and then serve the customer. The data used by the system is stored in a database that will be the centre of all information held customers and employees and the base for the remainder of the process after the initial application has been made. This enables things to be simplified and considerably quickened, making the jobs of the people involved easier. It supports the current process but centralizes it and makes it possible for decisions to be made earlier and easier way. There is no feedback from the customer about the driver.

The main goal of the system is to automate the process carried out in the organization with improved performance and realize the vision of online booking. Some of the goals of the system are listed below:

- ▲ Manage large number of customers' details.
- A Manage all details of customers who registered and requested for getting the service.

- ▲ View all the details of the customers and employees.
- A Showing available vehicles to book for the customer.
- ▲ Calculating and showing the fare to the customer before booking.

1.3 Definitions, acronyms, and abbreviations

Tawsela	Online App Taxi Booking	
Order	The request of a customer to serve with a vehicle on a	
	specified date and time.	
Registration	The customers are registered to the system while request	
	a booking.	
SRS	Software Requirements Specification	
Taxi Records	The number of taxis in the system and the type of them	
Find availability	A process that take the responds of the drivers and	
	manage them to notify the availability of the driver to the	
	customer	
Send notification	The information about the taxi status that sent to the	
	customer	
ERD	Entity Relationship Diagram	
DFD	Data Flow Diagram	

1.4 References

Wikipedia.org

idealassociates.weebly.com

tutorialspoint.com/uml/

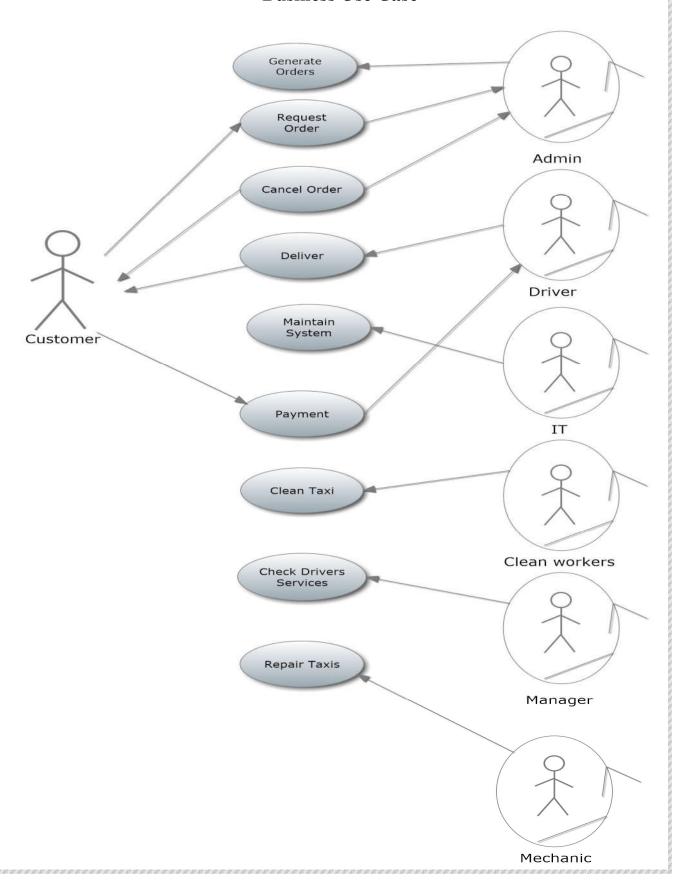
1.5 Overview

In words, we can say that, our software product will describe major components of the system, interconnection and external interfaces and requirements will describe the functions of actors, their role in the system and constraints.

2. General Description

2.1 Product Perspective

Business Use Case



Business Use Case diagram is used to represent the functionality provided by an organization as a whole

Admin:

- Manage the order information of the system
- Manage the Customer information

Driver:

The employee who will deliver the customer to the ordered place

IT:

Maintain the System and solve the technical problems in the system

Clean workers:

Employees who clean the vehicles for the customer

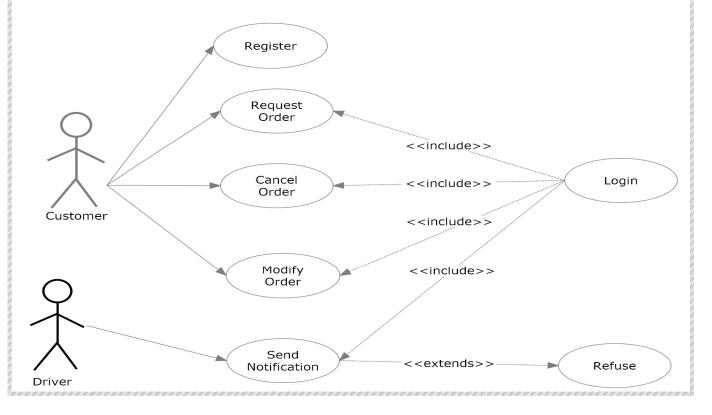
Manager:

Check drivers' services for the customers and pay for employees

Mechanic:

Repair the vehicles

2.2 Product Functions



There is many functions can the actors that interacts with this system can do. Customer:

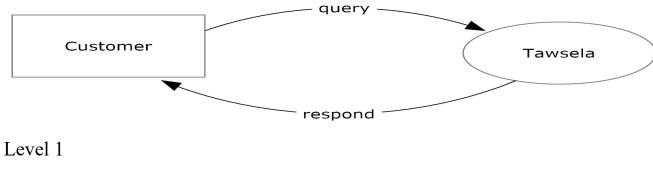
- Register
- Request Order
- Cancel Order
- Modify Order

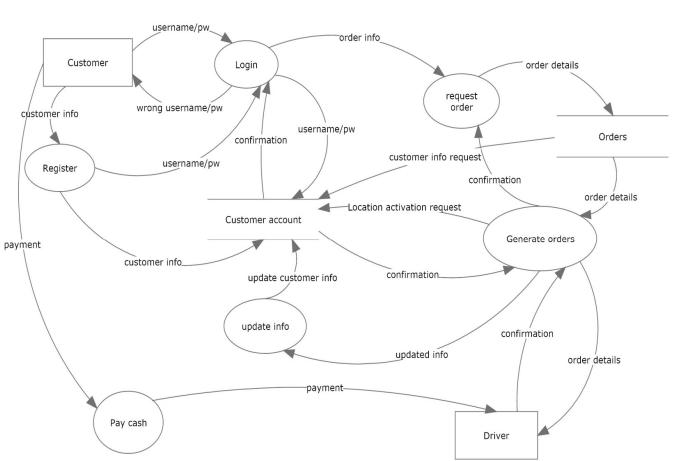
Driver

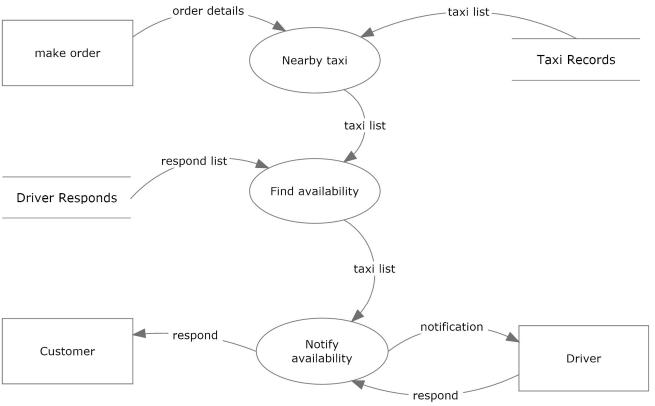
• Send acceptation notification

DFD:

Level 0







2.3 User Characteristics

The customer should have the basic idea to operate (use) the system and he already has the experience to work with android applications and should have an e-mail. Default Language is English.

2.4 General Constraints

Some of the design and implementation constraints identified are listed below:

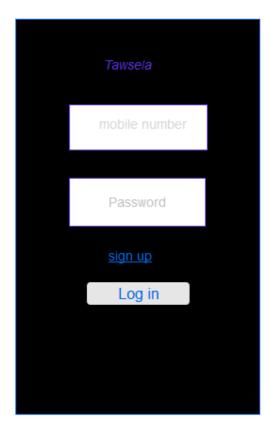
- △ Customers do not have any rights to edit any data in the system.
- ▲ Tawsela doesn't support credit card only cash money.
- ▲ There is no online payment.
- ▲ Tawsela doesn't support Arabic Language.

2.5 Assumptions and Dependencies

Development of mobile technology has created dependency on smart-phones and customer should have android kitkat software update at least.

3. Specific Requirements

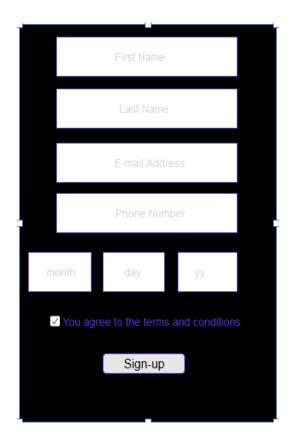
3.1 External Interfaces



Use Case: Login

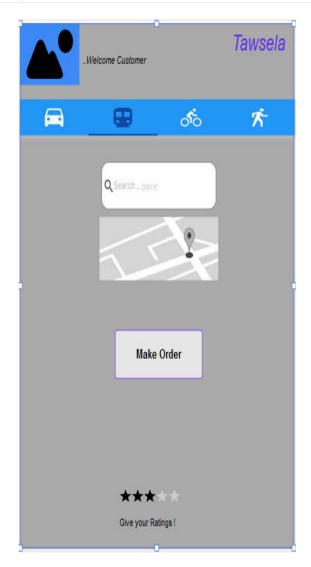
Actors: Driver, Customer

Description: Driver and customer must login to perform their functions.



Use Case: Register Actors: Customer

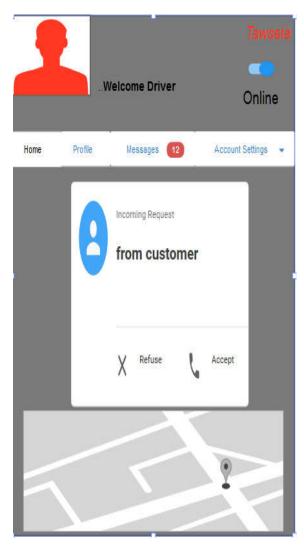
Description: if customer He does not have an account on Application.



Use Case: make Order Actors: Customer

Description: Customer make

order and send notifications



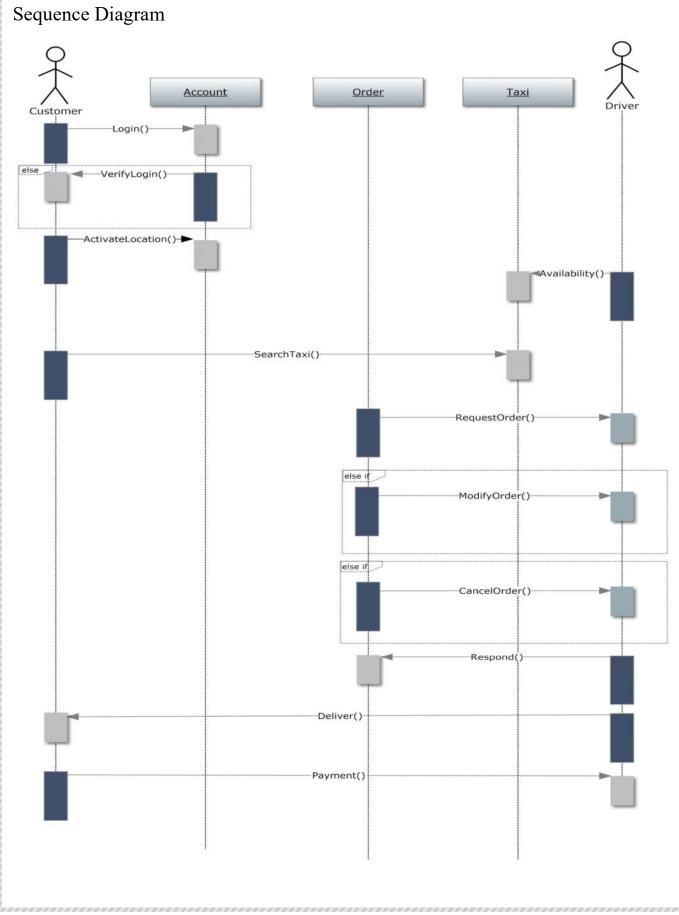
Use Case: get Notifications

Actors: Driver

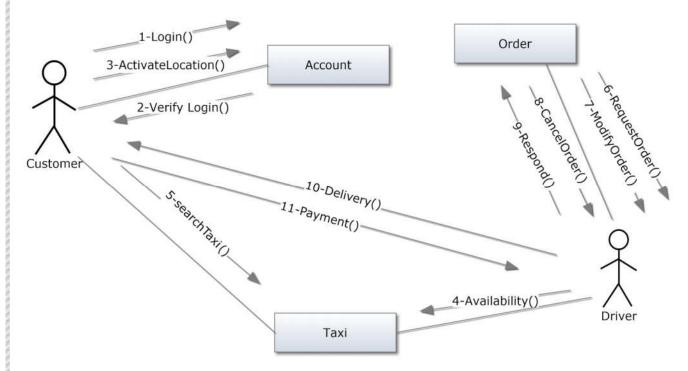
Description: Driver get

notifications from customer and make choice accept or refuse order

3.2 Functions

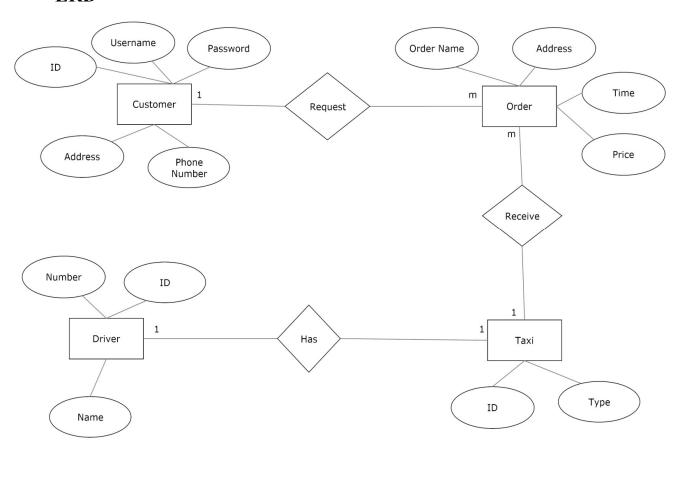


CollbortionDiagram



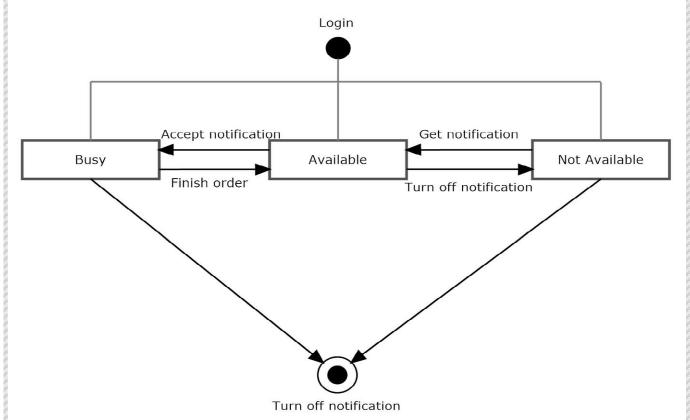
3.3 Logical Database Requirements

ERD



3.4 Object Oriented Models

State Diagram



Class Diagram

