An-Najah National University
Faculty of Information Technology
Computer Information Systems

جامعة النجاح الوطنية
كلية تكنولوجيا المعلومات
أنظمة المعلومات المحوسبة

ONETECH E-COMMERCE WEBSITE

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A project report submitted in partial fulfillment of the requirements for B.Sc. degree in Computer Information Systems.

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Acknowledgement

It has been a great opportunity to gain lots of experience in real time projects, followed by the knowledge of how to actually design and analyze real projects. For that we want to thank all the people who made it possible for students like us. Special thanks to Graduation Projects Committee for the efforts they did to provide us with all useful information and making the path clear for us to implement all the education periods in real-time project design and analysis. Furthermore, we thanks all the professors and lecturers for the interesting lectures they presented which had great benefit for all of us. We would like to express our deepest gratitude to our graduation project supervisor ***"Dr. Emmad Saadeh"*** for his patience and guidance along the semester. In addition, we it is our duty to thank and express our sincere appreciations to our families for their support and encouragement us to reach this point. Moreover, we thank all the discussion committee members for their generous discussions and encouragement.

One Tech Group
yazan Abu salhia
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Abstract

"OneTech" is a web-based system, that's designed specifically for E-commerce.
The system provides services for 3 types of actors: Admin, buyer and seller, the
system has many facility features for the three participating actors.

The system designed to help people to manage the inside process of buying and
selling the products for others in an easy way to reduce errors and consume time,
review products and deal with it online. And most importantly System take care of
making search convenient, effective and much easier.

What makes us more special than others are that we have added a helpful and
unique feature that is only available in large e-commerce website such as
The observation a product, also compare with others.
and other features like, the user get an Assurance from us about the seller, also the
block feature in our site.

Finally, the system is user friendly, helps clearly to search for products, see all
offers.

CHAPTER 1

INTRODUCTION

1.1 Introduction

"OneTech" is a web based application directed to the Palestinians clients and their customers to manage their buying and selling transaction, for the first part of "OneTech" purpose is to help the clients to automate and manage the inside process of buying and selling their products in an easy way to reduce errors and consume time and the second part of its purpose is to help the clients to find the best deals, review them and buy or sell it online.

1.2 Project Scope

"OneTech" is a computerized system that will automate the major of selling and buying operations.

The OneTech system objective is from the one side to provide a system to manage selling with ease and efficiency. The system provides effective services and advertising for products, and from the other side to provide services for buying operations to facilitate the process of finding the best options.

The system will be able to handle many services to take care of all customers in a quick manner. The system is secure, user appropriate, easy to use, helps prevention of common mistakes and has an overall high-end user satisfaction. The customers here are normal people in Palestine society.

1.3 Problem Specification

for normal people selling or buying things isn't that easy for them,
they have to go to specific places to buy their needs or to sell what they want,
also it can be so annoying dealing with the sellers and their late arrangement and
many problems can happen, such as liar dealers or fake ones that can take your
money away in second. therefor traditional ways of selling or buying is very
annoying.
so OneTech is here to solve many and many problems, to give the user
the trust and what they want in an easy and fast way.

1.4 Goals and Objectives

The OneTech system designed basically for many objectives:

1. Selling what you want easily.
2. Reduce the time, efforts and cost for clients.
3. Give the clients a wider look to everything.
4. Users can get what are looking for easily and directly.
5. Have quick access to all products.

1.5 Motivation

The lack of the management method in a lot of E-commerce case a lot of problems for people, any error in entering the data of any customer will cause loss of money and it may cause him/her pay more, having "OneTech" will add more insurance to people.

1.6 System Requirement

- PHP
- JavaScript
- Ajax
- Bootstrap
- MYSQL server
- CSS3
- Using laravel frame work

1.7 Project Plan and Schedule

This project started at the end of January-2019 and should be completed by the beginning of May-2019:

	Task	Start date	Finish date	Status
1.	Gathering information and do some research on the topic	1 oct,2019	10,oct,2019	Completed
2.	Analysis the information and researches	10 ,oct,2019	15 oct,2019	Completed
3.	Selecting the right media 3.1 determine the platform 3.2 OS environment 3.3 needed tools and programs	15 oct, 2019	20,oct,2019	Completed
4.	Writing 4.1 Documentation	20 oct,2019	3 nov,2019	Completed
5.	Implementation 5.1 building DB 5.2 constructing modules 5.3 modules integration 5.4 QA testing	5 nov,2019	30 nov,2019	Completed
6.	Distribute the final product 6.1 Feedback 6.2 Maintain	1 dec,2019	20 dec, 2019	Completed

1.8 Outline of the Project

OneTech project consists of six Chapters: Chapter One is an introduction that talks about project scope, system requirements, goals and project plan. Chapter Two discuss literature and methodology, explain a difference between current systems and proposed system, and discuss feasibility study. Chapter Three is a stage that discusses system analysis, system design and requirements such as requirement collection, requirement study and requirement structure. Chapter Four is a stage that focuses on system UML design. Chapter Five present the conclusion and future work of the system.

CHAPTER TWO

LITERATURE AND METHODOLOGY

2.1 Introduction

Every system has its own functionalities; OneTech Management System was found to give new functionalities over Traditional buying and selling management methods. After reading this section the customer will be able to distinguish the differences between the old system and the proposed system in many aspects, he will also know the properties and the advantages of the proposed system; hence customer can easily define the best system with full understanding.

2.2 Current System

Most of people are using the traditional way (manual) to control their buying or selling operations. Manual system may have some advantage, but disadvantages are much more.

Disadvantages of traditional system:

1. It's difficult to find good things within a specific budget.
2. It's not an easy thing to compare between products, according to qualifications that are not well known.
3. It's difficult to find good things within a specific time.
4. People can't see all the offers of a specific products.

2.3 Proposed System

The main purpose of OneTech is to replace the old and aging process with a new and a modern process, make the people more comfortable in finding products.

These are services that OneTech system will provide:

- **For Seller:**
    - ❖ The ability of sell their products.
    - ❖ See his product and edit it or delete it.
    - ❖ View a list of all of his sold products.
    - ❖ The ability of buying other products.
    - ❖ Add new categories if needed.
    - ❖ Contact customers by their phone or address.

    - ❖ Can contact with admins.

    - ❖ Edit his/her profile.

    - ❖ See his/her old orders.

- **For buyer:**
    - ❖ The ability of buying other products.
    - ❖ The ability to search for products.
    - ❖ The ability to monitor a product.
    - ❖ Can contact with admins.
    - ❖ See his/her old order
    - ❖ Edit his/her profile

- **For Admins:**
  - ❖ View the list all products.
  - ❖ View the list of all orders in the website.
  - ❖ Add users.
  - ❖ Add new admins.
  - ❖ Add products.
  - ❖ Update (delete, modify) products.
  - ❖ Add categories(delete).
  - ❖ See users' operations in the site.
  - ❖ Block users and delete them.
  - ❖ See messages from users.

2.4 Feasibility Study

- **preliminary feasibility study (Operational)**

OneTech system is a web service system doing a lot of services that facilitate and speed up the process of managing, for the market type it is a competitive market where many competitors, in general, for the company the possibility of producing such a project is not as difficult because of the availability of cofactors fully, providing time effort on administration and has many other benefits.

In addition, customers are going to make everything on the equipment and technology of modern, so the production process of the system will be feasible and great benefit and the good demand from customers and the market.

- **Market feasibility study**

 With the increasing demand for software products and their use in many areas of life, OneTech system will be a successful project, there is many systems in markets provide online management system for buying and selling so the development of OneTech system will attract people's attention and achieve their acceptance and also make a great profit and benefits.

- **Technical study of the project**

OneTech system needs in order to produce many of the supplies, which consists of programmers, software engineer and project manager, analysts and Hardware and the level of excellent knowledge of programming language that will be worked on and is available in the company's additional equipment is required in order to accomplish this software plus the time it would take for the project.

2.5 Methodology (SDLC)

After studying this system deeply, agile methodology is chosen to be used. That refers to many reasons , First of all the user wants this system in short time period and the agile achieves that since each evolution is only on a small part of the whole project , Secondly Agile methodology deals with the unstable and changing environment (changing in requirements, needs , priorities, technology, ..etc) by keeping the development team in contact with the user , Finally Agile methodology builds a collaborative team environment since they work together to find better ways of solutions.

Now, to do that each iteration has to be done in a short period of time, all team members will work on that iteration (planning, designing, coding and testing), after each iteration is completed, the iterations will be integrated and then contact the customer to confirm its functionality.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.1 Requirements discovery

In this chapter, the system is described by explaining the actors, modules and the requirement which divided to functional and nonfunctional. Also the collection and the analyze of system-related information.

3.1.1 Requirement Collection

The requirements were collected by means of an in-depth and multiple examination with several companies specialized in E-commerce. The laws and regulations pertaining to this area were reviewed. A survey was made to collect the opinions of people about the system properties to solve problems maybe faced by future users.

3.1.1.2 Prototype

That comes by building a small scale, representative mock-up implementation of the user's main requirements which helps us to clarify, complete the requirements, find new functionalities, discuss usability and establish the priorities.

3.1.1.3 Brainstorming

We arrange multiple sessions where we sat down and gathered thoughts and suggestions on the main actors and listed each role and their reflections on the system requirements.

3.1.2 Actors

The following are the system main actors

- **buyer:** They are the common people who is interested of buying their needs.
- **seller:** They're the common people who's interested of selling their products.
- **Admins:** The team of one tech system.

3.1.3 Modules

- **E-commerce Module:**

  This module concentrates on e-commerce transactions Adding, Viewing, Searching and buying products. This module includes functions for the three types of actors (buyer, seller, and Admin).

  1. Seller/buyer can search for a product.
  2. Buyer/seller can view product details.
  3. Buyer/seller can buy and confirm buying a product.
  4. seller can add a product and its details.

- **Statements module**

This module concentrates on statements including Viewing or searching for any trips, feedback, comments and users. This module includes functions for the four types of actors (seller, buyer).

1. Seller/buyer can view product.
2. Seller/buyer can view ratings and feedback for a product.
3. Seller/buyer can view list of products.
4. Seller/buyer can search for a product.
5. Seller can view his/her products.
6. Admin can add products.

- **Feedback module**

This module concentrates on feedback including Viewing, Adding any feedback (rate and comments). This module includes functions for the three types of actors (seller, buyer).

1. Seller/buyer can add rate for any product.
2. Seller/buyer can add comments for any product.
3. Seller/buyer and Guest can view rate and comments for any product.

3.1.4 Requirement:

In this section, we will list all requirements from the two types which are nonfunctional requirements which describe how the system works, and functional requirements which describe what the system should do.

3.1.4.1 Functional requirement:

- **For Seller:**
    - ❖ The ability of sell their products.
    - ❖ See his product and edit it or delete it.
    - ❖ View a list of all of his sold products.
    - ❖ The ability of buying other products.
    - ❖ Add new categories if needed.
    - ❖ Contact customers by their phone or address.

    - ❖ Edit profile.

- **For buyer:**
    - ❖ The ability of buying other products.
    - ❖ The ability to search for products.
    - ❖ The ability to monitor a product.
    - ❖ Edit profile

- **For Admins:**
  - ❖ View the list all products.
  - ❖ View the list of all orders in the website.
  - ❖ Add users.
  - ❖ Add products.
  - ❖ Update (delete, modify) products.
  - ❖ Add categories(delete).
  - ❖ See users' operations in the site.

  - ❖ Block users and delete them.

3.1.4.2 Nonfunctional requirement

1. Usability: OneTech System design should be simple, clear, easy to understand and use by everyone with no previous background of how to use one.

2. Reliability: gives the results on time (when the client buy something it will be reflected on every related statement in company side.

3. Dependability: Buying with no errors and crashes, the system will the buying or selling products in time to both sides, the seller and the buyer with very low latency (< 1 sec).

4. Portability: compatible and can run on different net browsers (pc and mobile).

5. Availability: the system will be available to the customers through the website.

6. Maintainability: backup file contains the full data.

3.2 Requirements prioritization and negotiation

As we noted from above, this system divided into 3 increments: buying and selling, Statements, and Feedback.

1. **buying and selling:** includes all the functionalities needed to Adding, Viewing, Searching buying products.
2. **Statements:** includes all the functionalities needed to Viewing or searching for any product, feedback, comments and users.
3. **Feedback:** clients can be able to Viewing feedback and comments for any product.

3.3 Requirements validation

Through the validation process we used the following techniques:

1. Group Session: we arranged meeting and interview with the stakeholders and proposed the requirements that resulted in the previous process to gain feedback.
2. Walkthroughs: checking the feasibility, opinion and approval on each requirement from sector specialists.
3. Perspective-based reading: each single use case is reviewed independently by all team members.

3.4 Requirements management

"OneTech" was developed using Agile method, so any changing in requirements has three possibilities, first, requirements change before release was developed, in this case no need for any plan because it's easy to change them, second requirements change while the development process, and after module has been released, in this case the whole module should be change according to what actors asking for.

3.5 System Design

This section display UML diagrams for "OneTech "such Static Context Diagram, Use Case Diagram, Sequence Diagrams, Activity Diagrams, Scenarios, State Diagrams, Class Diagram and Database Schema

3.5.1 Static Context Diagram
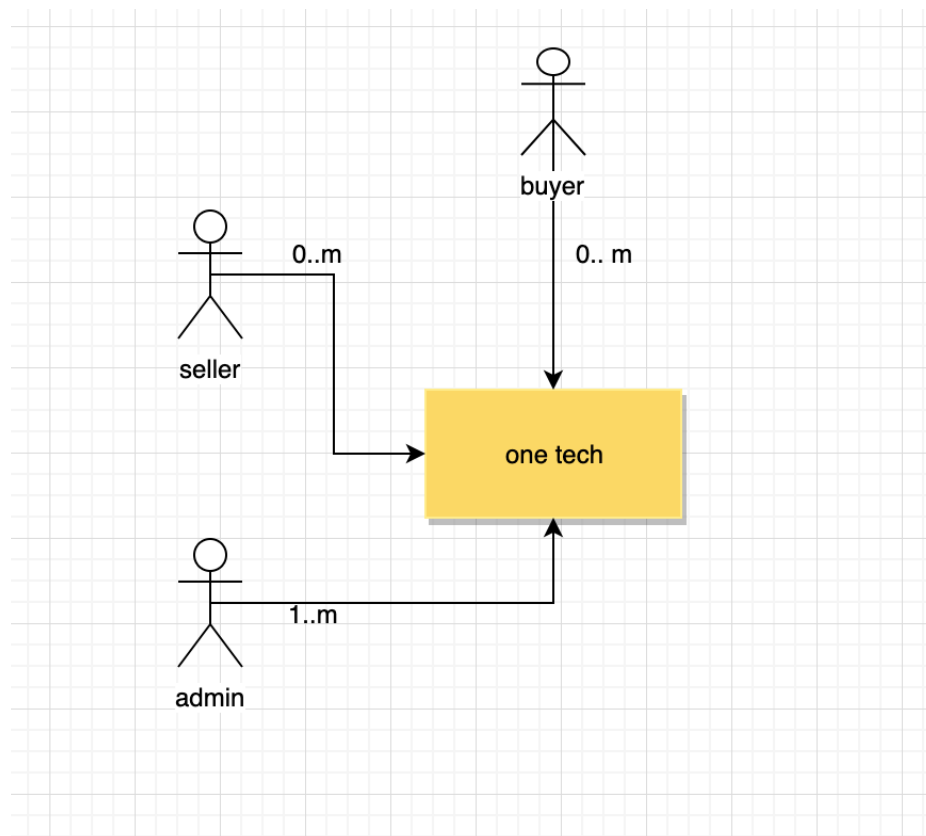
3.5.2 Use Case Diagram
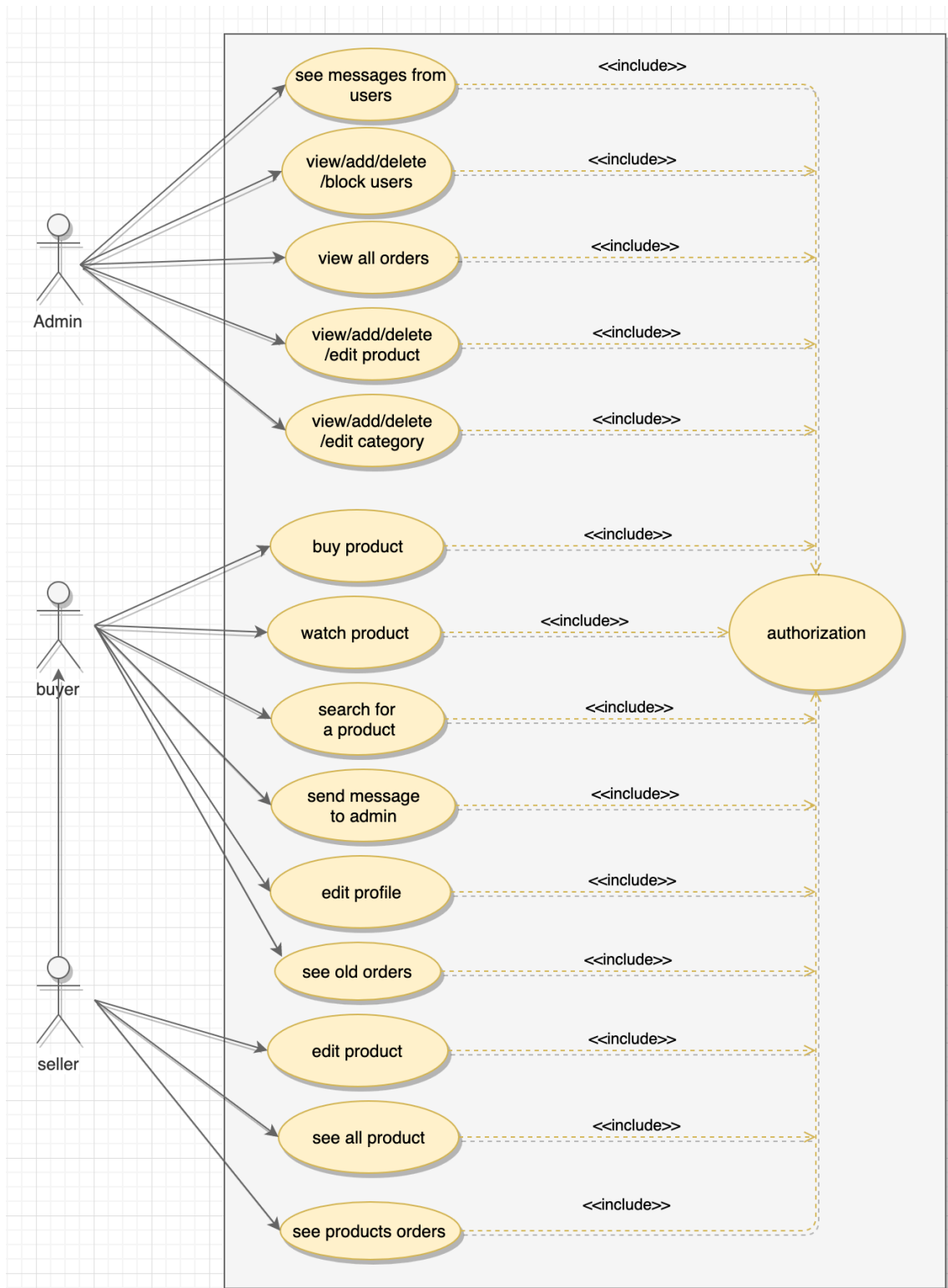
Modules Use Case Diagram (Packages):
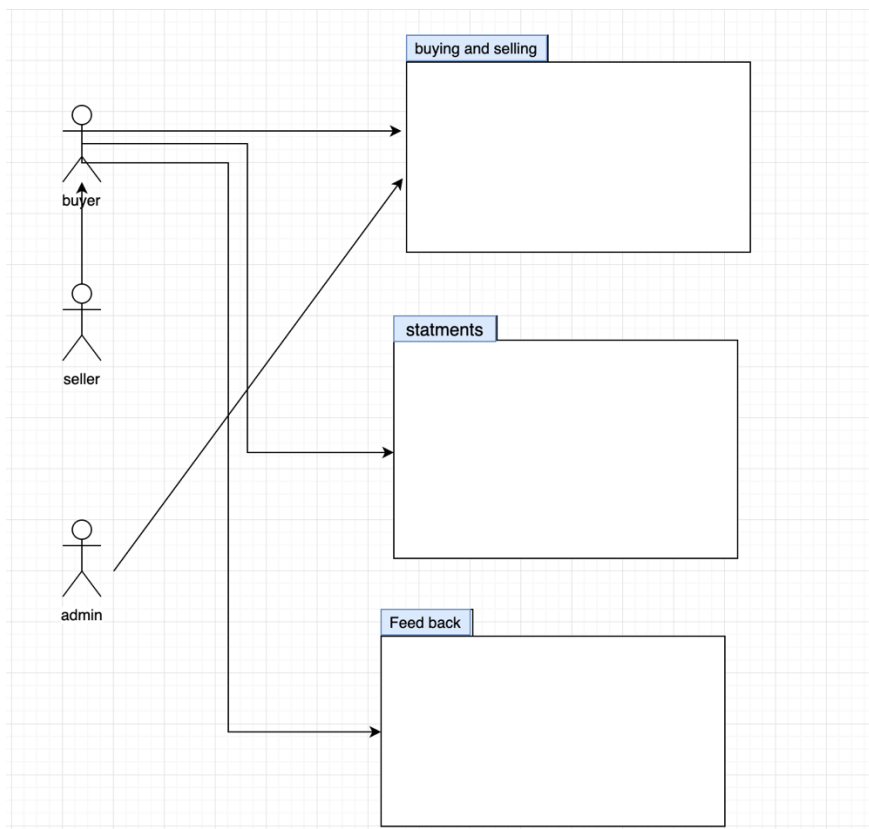
1. E-commerce model (Packages):

2. Statement Module (Package):

3. Feedback Module (Package):

3.5.3 Sequence Diagrams

1. Add categories
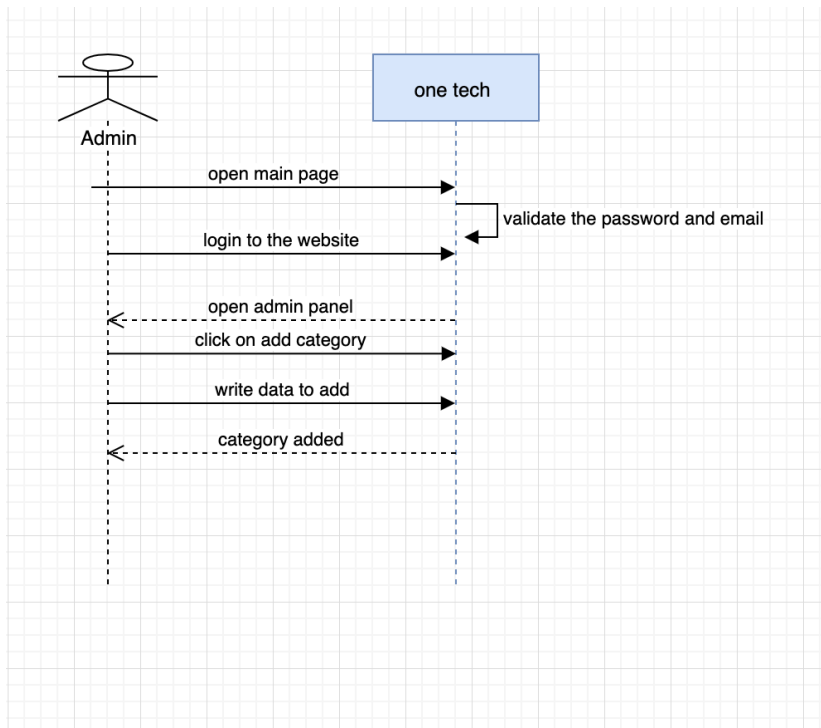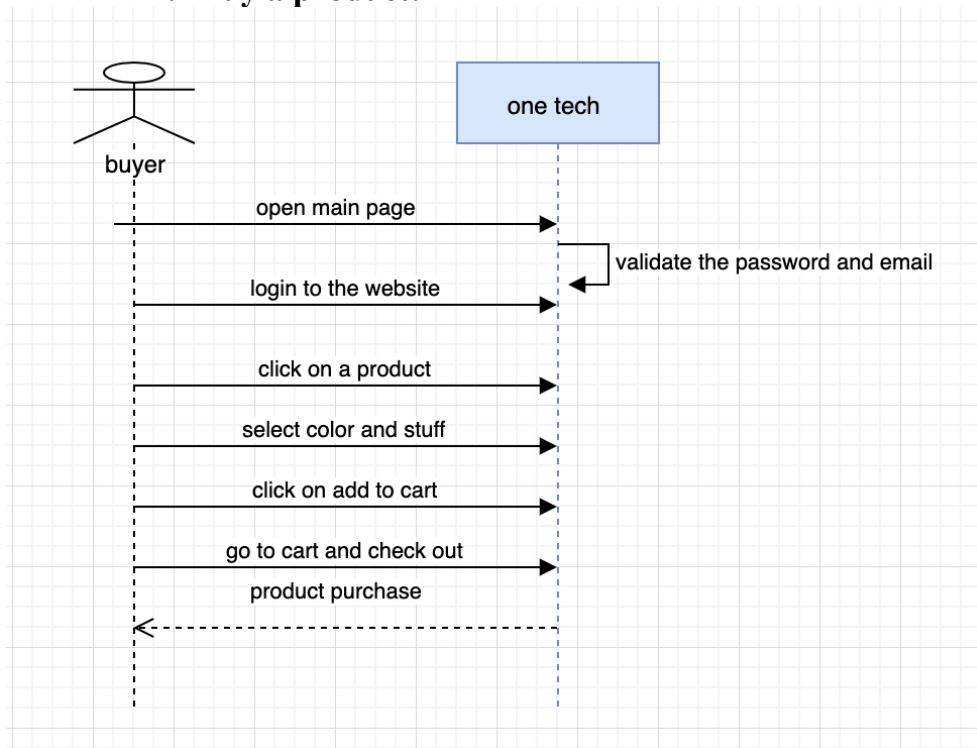
2. Buy a product:
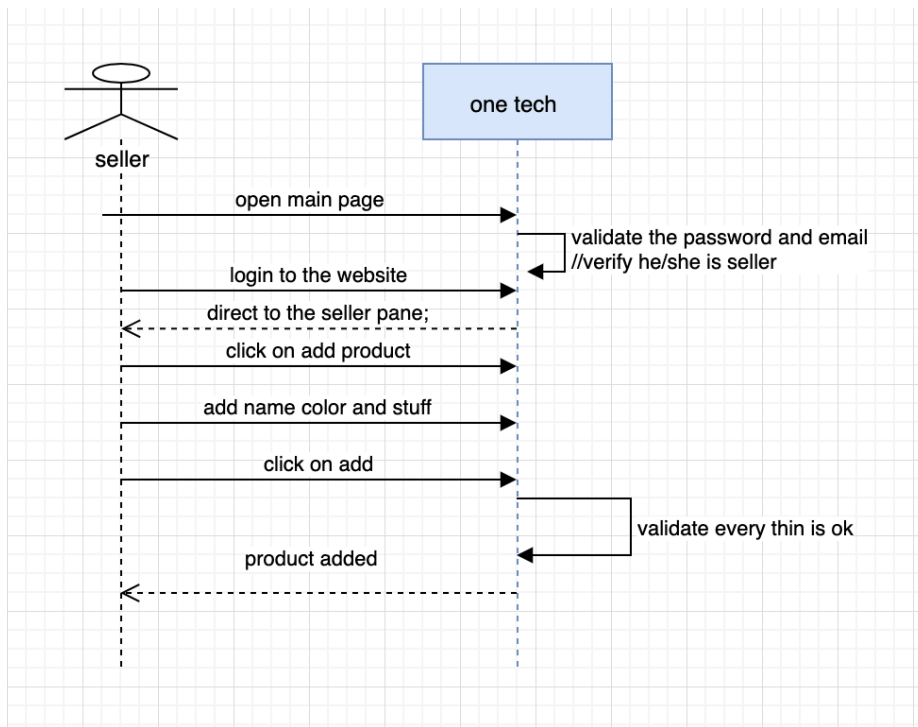
3. Sell a product:

4. Watch product:
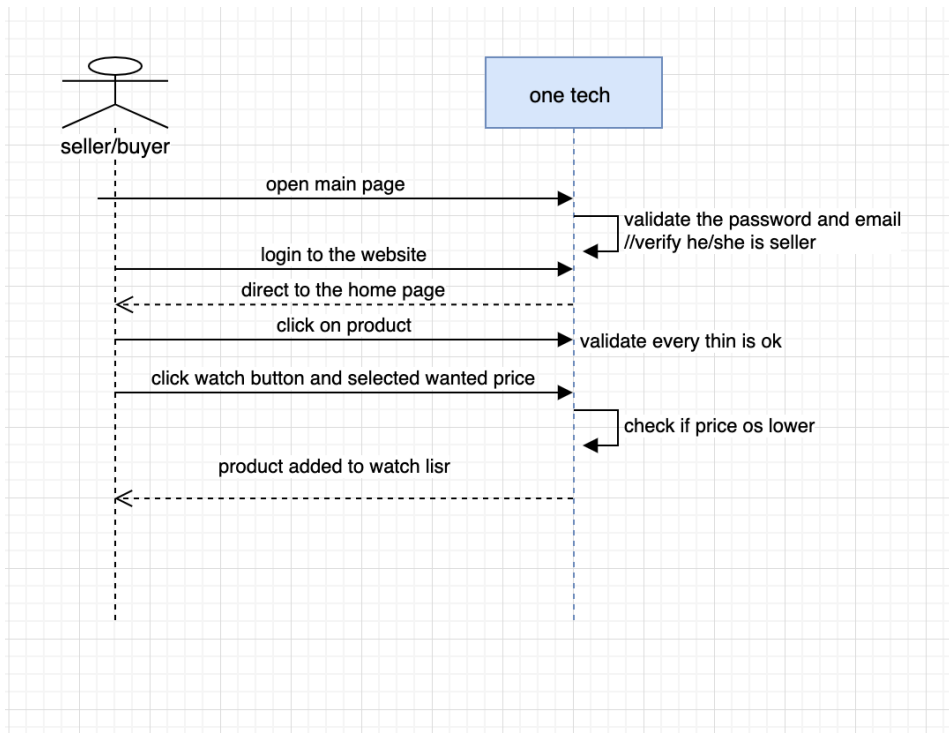
5. Show orders:
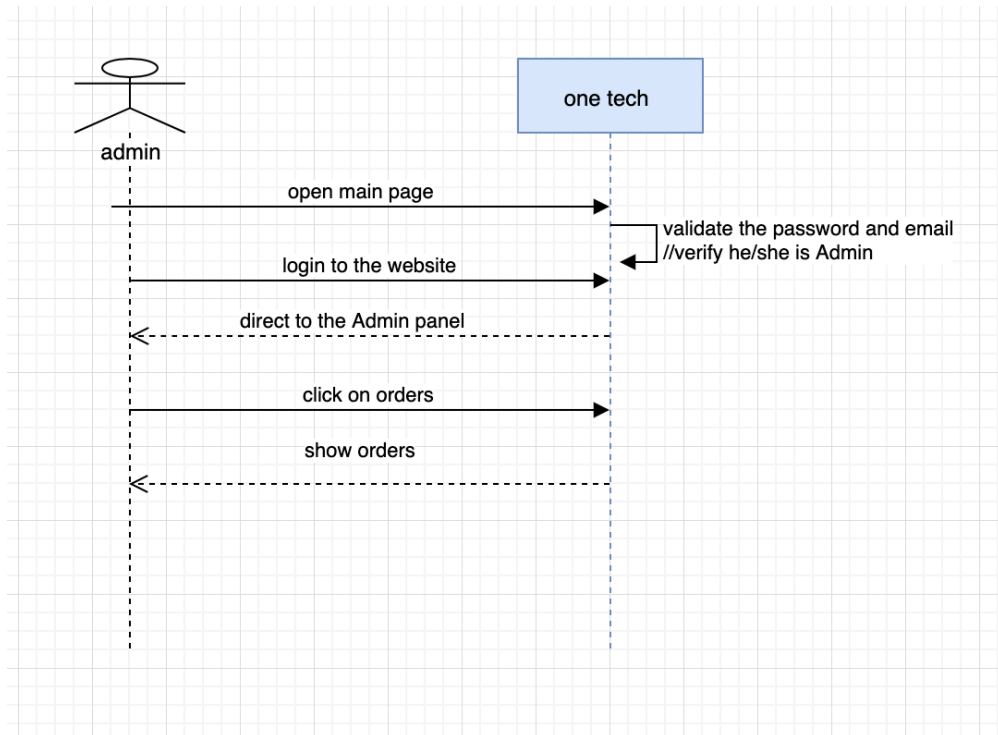
6. Add feedback:
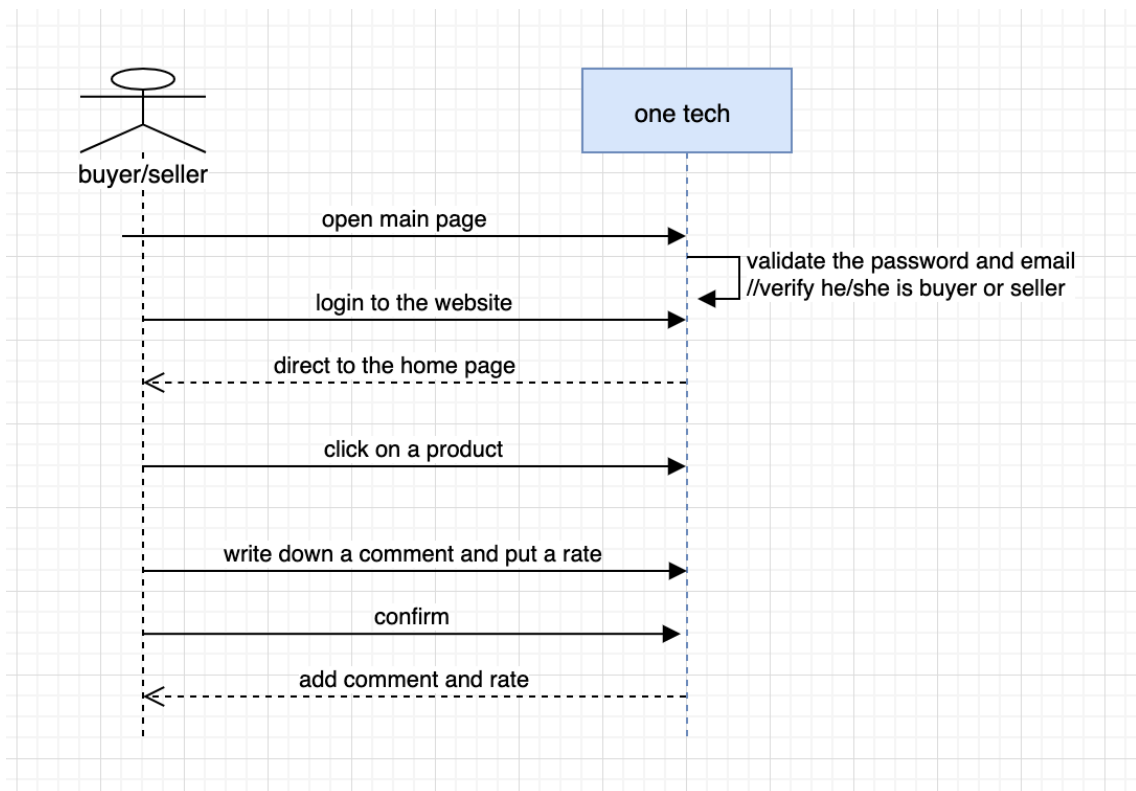
3.5.4   Activity Diagrams

1. Add categories

2. Buy a product:

3. sell a product:

```
        ●
        │
        ▼
┌──────────────────┐
│ click on add product │
└──────────────────┘
        │
        ▼
┌──────────────────┐
│ website ask to choose │
│ color /quantity ...etc │
└──────────────────┘
        │
        ▼
┌──────────────────┐
│     click add      │
└──────────────────┘
        │
        ▼
┌──────────────────┐
│  website save the  │
│   order to the     │
│    database        │
└──────────────────┘
        │
        ▼
        ◉
```
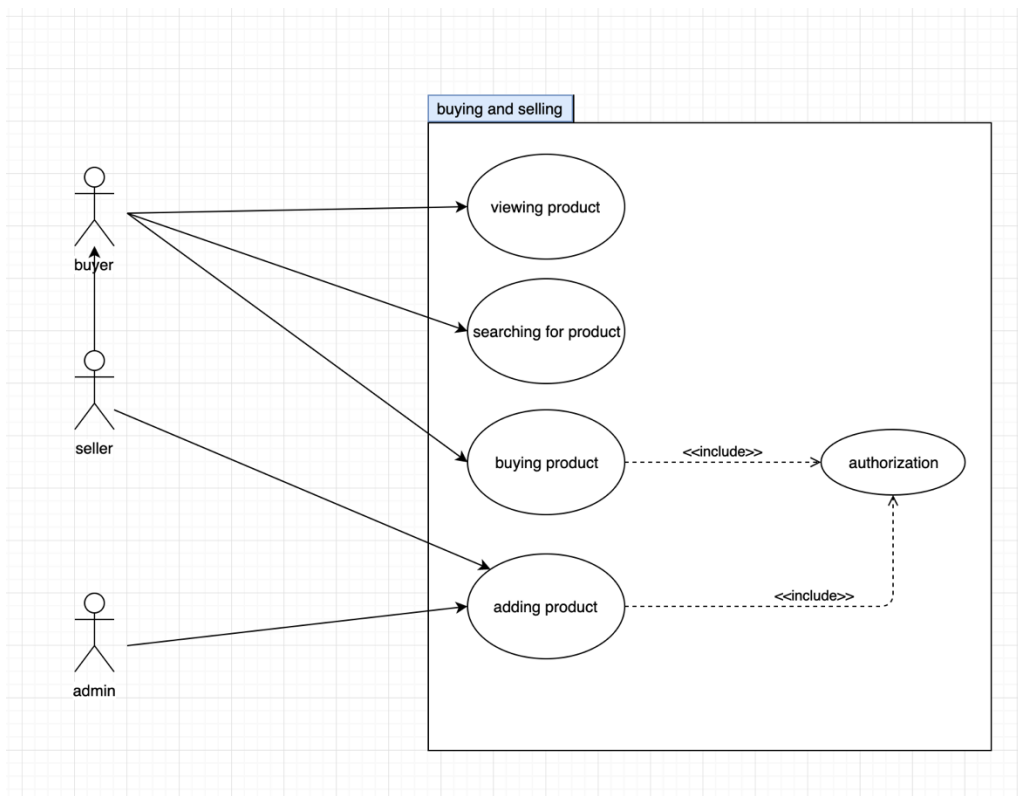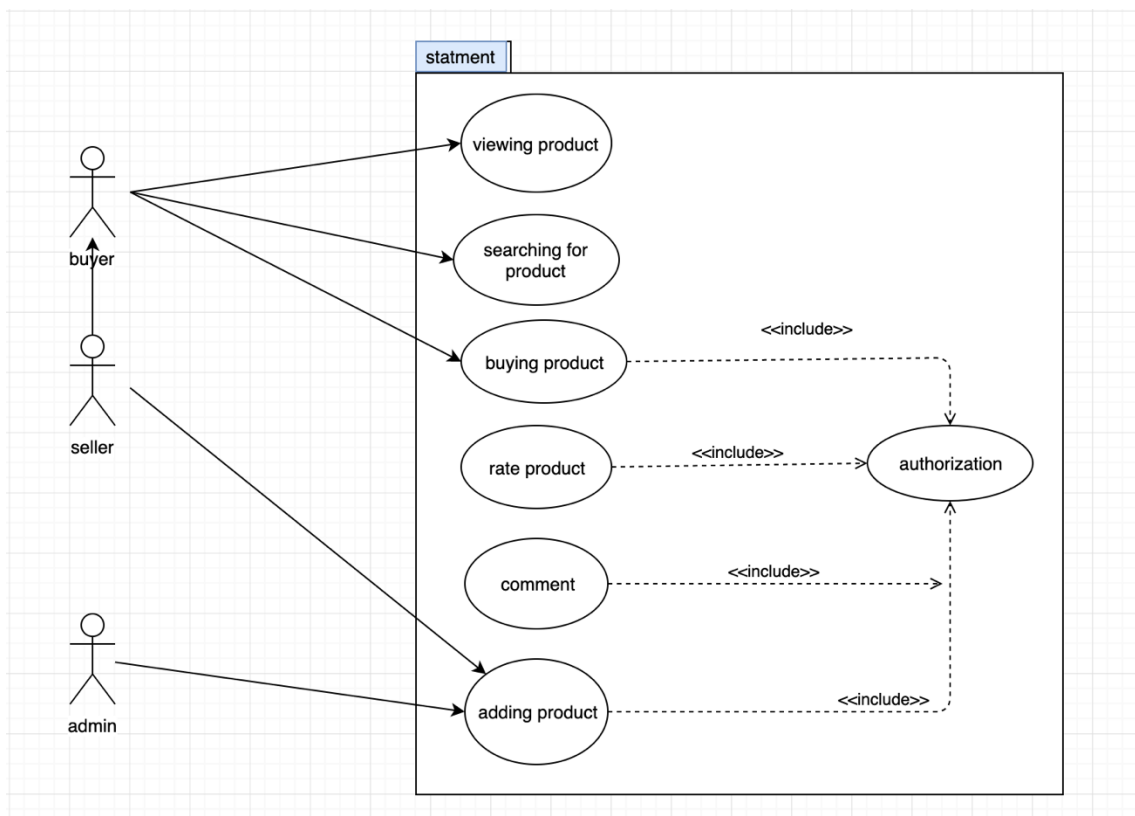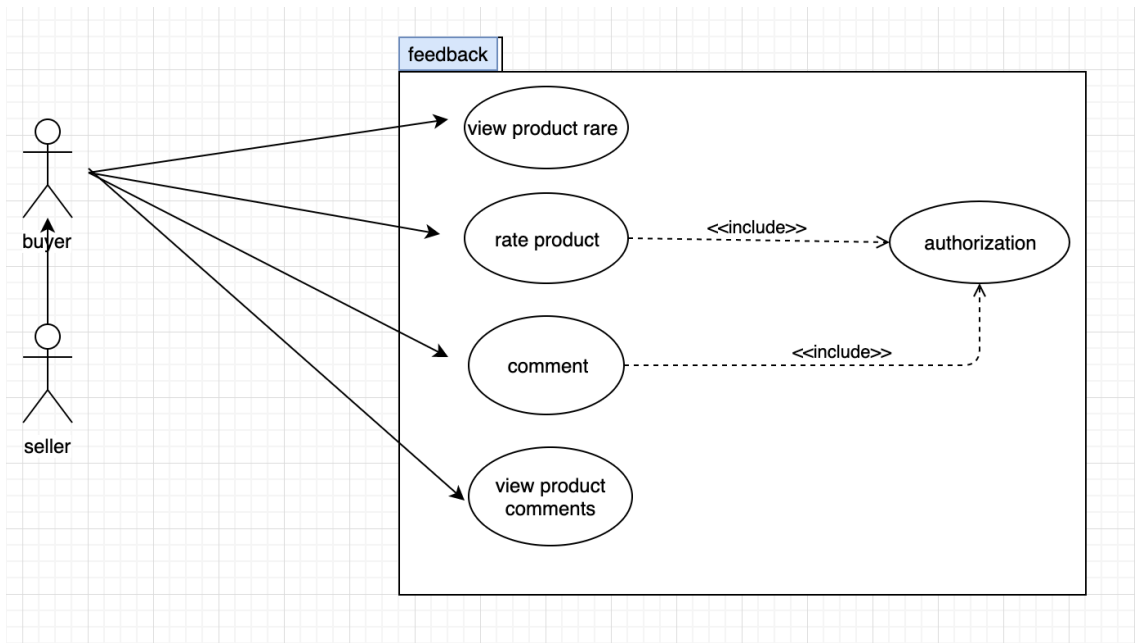
4. watch a product:

```
        ●
        │
        ▼
┌──────────────────┐
│  click on a product │
└──────────────────┘
        │
        ▼
┌──────────────────┐
│   click on watch   │
└──────────────────┘
        │
        ▼
┌──────────────────┐
│   website ask to   │◄──┐
│  choose a price    │   │
└──────────────────┘   │
        │              │
        ▼              │
       ╱╲         no    │
      ╱  ╲───────────┘
  if price is lower
      ╲  ╱
       ╲╱
        │ yes
        ▼
┌──────────────────┐
│  website add to data │
│       base         │
└──────────────────┘
        │
        ▼
        ◉
```
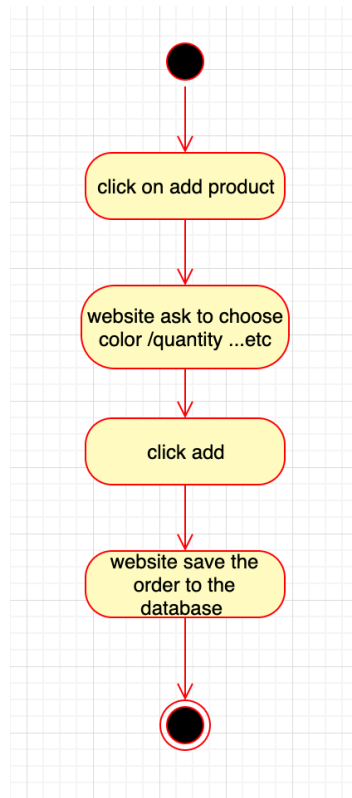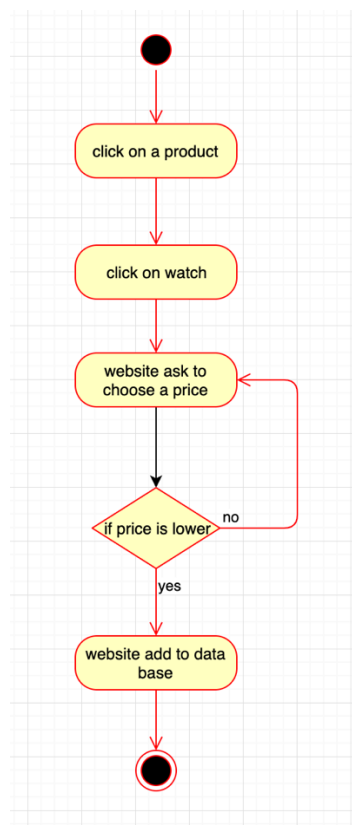
5. show order:
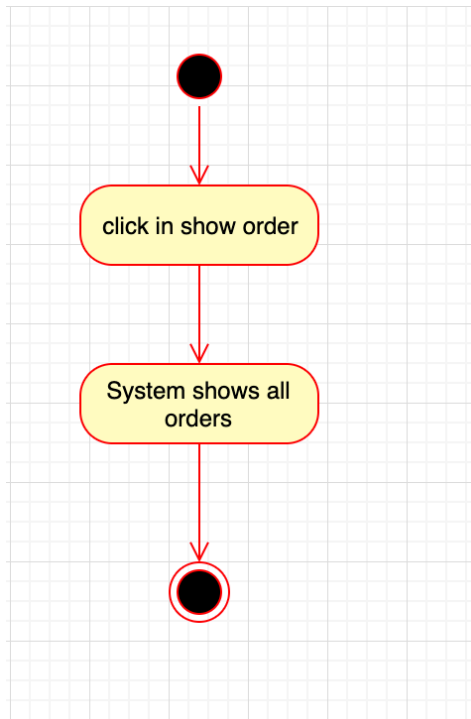
6. Add feedback:
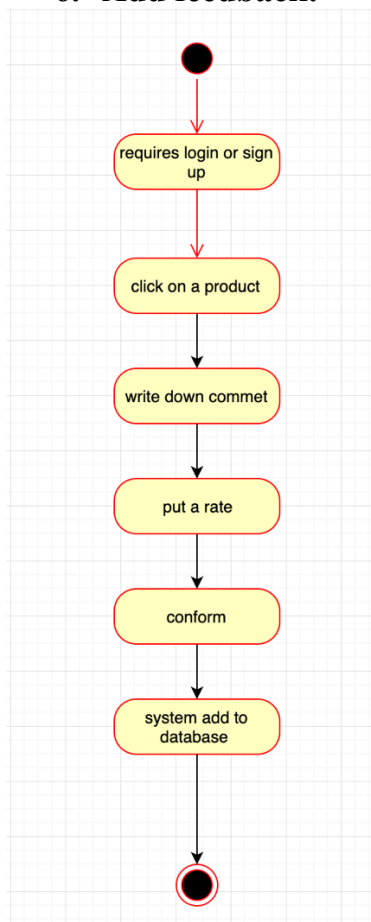
3.5.5 Textual description of use cases:

★ Identification Summary:

Title: Add categories.

Summary: this use case allows the administrator to add an categories that the user and customer can see even if they are not registered with the system.

Actor: Admin.

Creation date: 3/11/2019.   **Date of update:** 11/11/2019.

Version: 2.0   **Person in charge:**

Preconditions:

Admin must log in the system.

Flow of events:

Main success scenario:

1-The admin open main page	
3- The administrator logs on to the system	4-The system direct admin to admin panel
5- Admin click on Add categories.	
6- admin add category. and submit	7- system add category

Error sequences:

E1: the email and its password doesn't match any email and its password in the database

The E1 sequence starts at point 3 of the main success scenario.

 display message the id and password is not valid.

E2: admin cancel the add category. Process instead of confirm it.

The E2 sequence starts at point 6 of the main success scenario.

Post conditions:

Admin add category to one tech.

★ **Identification Summary:**

Title: buy a product.

Summary: this use case allows a user to but a product.

Actor: buyer/seller

Creation date: 3/11/2019.   **Date of update:** 11/11/2019

Version: 2.0   **Person in charge:**

Preconditions:

Seller/buyer must log in the LMS.

Flow of events:

Main success scenario:

1-The buyer/seller open main page	2- The website open main page
3- The buyer/seller logs on to the system	4-The website opens home page
5-The company click on a product.	6- The website view product details
7-buyer/seller click buy	8-system conform the operation

★ Identification Summary:

Title: sell a product

Summary: this use case allows a seller, who is registered in the one tech management system, to sell a product.

Actor: seller.

Creation date: 05/11/2019.   **Date of update:** 15/11/2019.

Version: 2.0   **Person in charge:**

Preconditions:

seller must be log-in in the system.

Flow of events:

Main success scenario:

1-The seller open main page	2- The website open main page
3- The seller logs on to the system	4-The website opens the one tech seller panel
5-seller click on add product.	6- The website opens the add page
7- The seller insert product details.	
8- The seller click add	10-website conforms the operation

Error sequences:

E1: the id and its password doesn't match any id and its password in the database.

The E1 sequence starts at point 3 of the main success scenario.

 display message the id and password is not valid.

E2: seller cancel the process instead of confirm it.

The E2 sequence starts at point 8 of the main success scenario.

6- The website informs the seller that the process canceled.

7-The seller goes to main page.

Post conditions:

seller add a product.

★ **Identification Summary:**

Title: watch a product.

Summary: this use case allows seller/buyer, who is registered in the one tech management system, to watch products.

Actor: seller/ buyer

Creation date: 05/11/2019.   **Date of update:** 15/11/2019.

Version: 2.0   **Person in charge:**

Preconditions:

Seller/buyer must be logged-in.

Flow of events:

Main success scenario:

1-The seller/buyer open main page	2- The website opens main page.
3- The guest buyer/seller loges in.	4-The website opens home page.
5-buter/seller select a product.	6-website show the product.
7-hover over watch button.	8-website ask for a wish price.

9-enert wished price and submit	10-add to data base

Error sequences:

E1:Seller/buyer put a higher price

Website alert that the price should be lower

Post conditions:

Buyer/seller must log-in.

★ **Identification Summary:**

Title: Add comment/rate.

Summary: this use case allows buyer/seller, who is registered in the one tech management system, to add comment/rate.

Actor: buyer/seller

Creation date: 07/11/2019.   **Date of update:** 17/11/2019.

Version: 2.0   **Person in charge:**

Preconditions:

Buyer/seller must be log-in to the system.

Flow of events:

Main success scenario:

1-The seller/buyer open main page	2- The website opens main page.
3- The seller/buyer logs on to the system	4-The website opens the one tech home page
5-The seller/buyer click on product wanted	6-The website view product details.
7-seller/buyer write down a comment	
8-seller put a rate and submit	9- the website confirm add comment

Error sequences:

E1: buyer/seller cancel the add comment process instead of confirm it.

The E1 sequence starts at point 8 of the main success scenario.

Post conditions:

Buyer/seller must be log-in.

★ **Identification Summary:**

Title: contact admin

Summary: this use case allows buyer/seller, who is registered in the one tech management system, to contact to the admins.

Actor: buyer/seller.

Creation date: 07/12/2019.   **Date of update:** 18/12/2019.

Version: 2.0   **Person in charge:**

Preconditions:

No precondition

Flow of events:

Main success scenario:

1-The user open main page	2- The website open main page
3- The user logs on to the system	4-The website opens the one tech's home page
5- The user click on contact us	6- The website open contact us page
7- The user adds the message and click submit	8- The website confirm the request and send it to admin

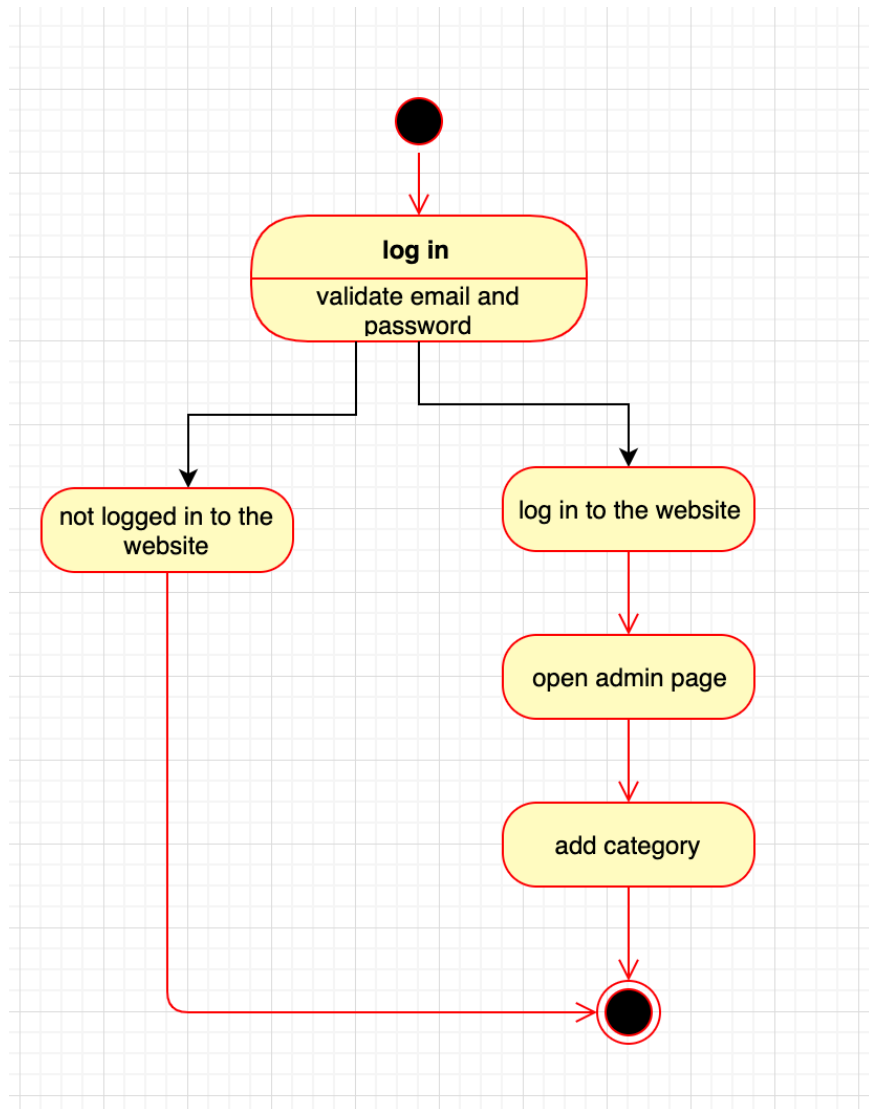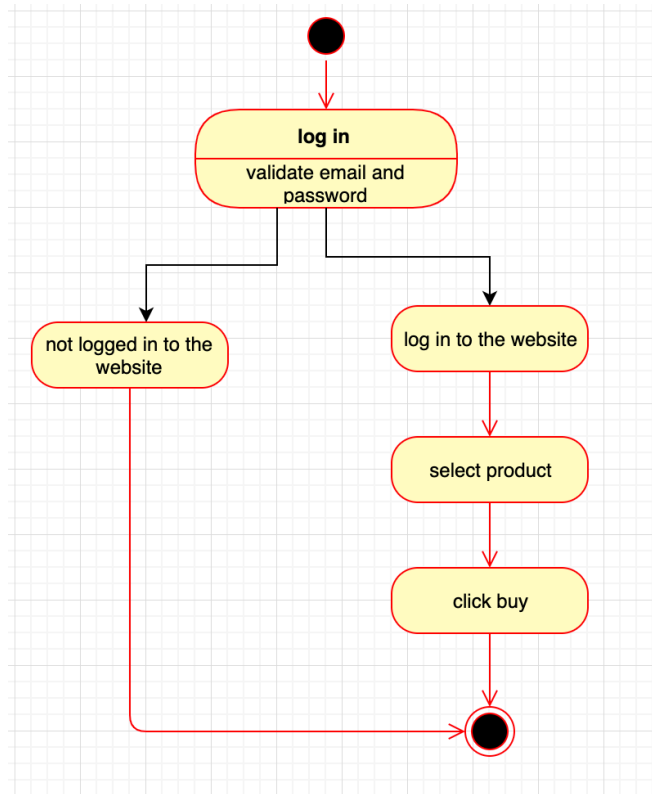**Error sequences:**

No errors

Post conditions:

The users can contact the admins.

3.5.6 State Diagrams

1. **Add category:**

2. Buy a product:

3. Sell a product:
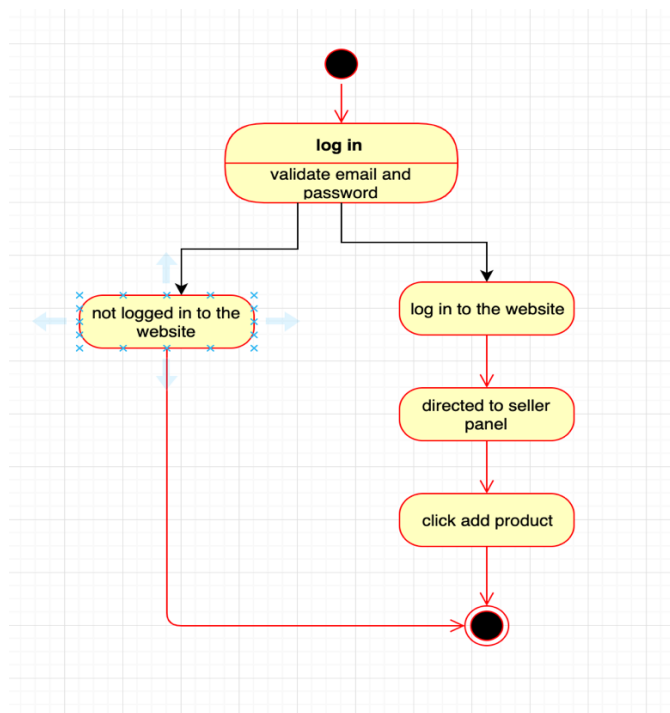
4. Add feedback:
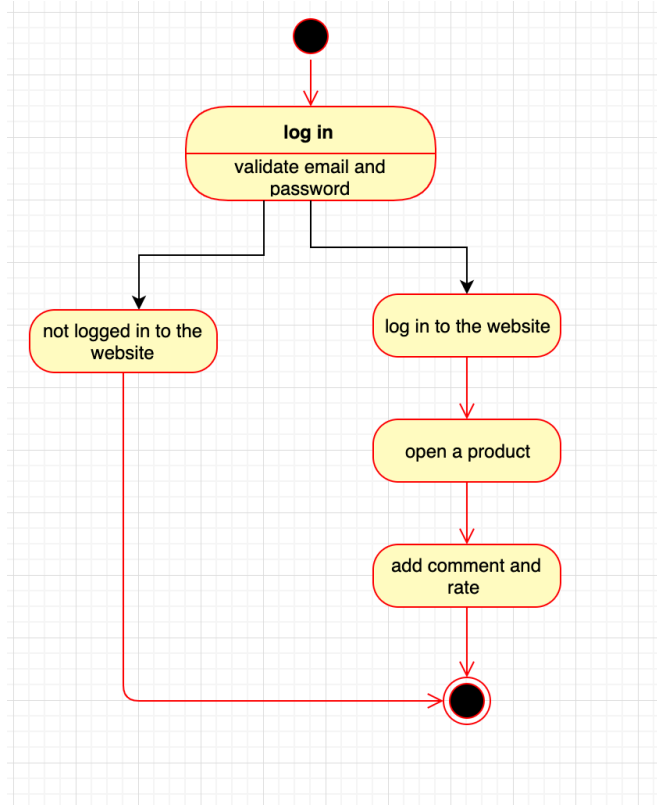
5. Contacts admins
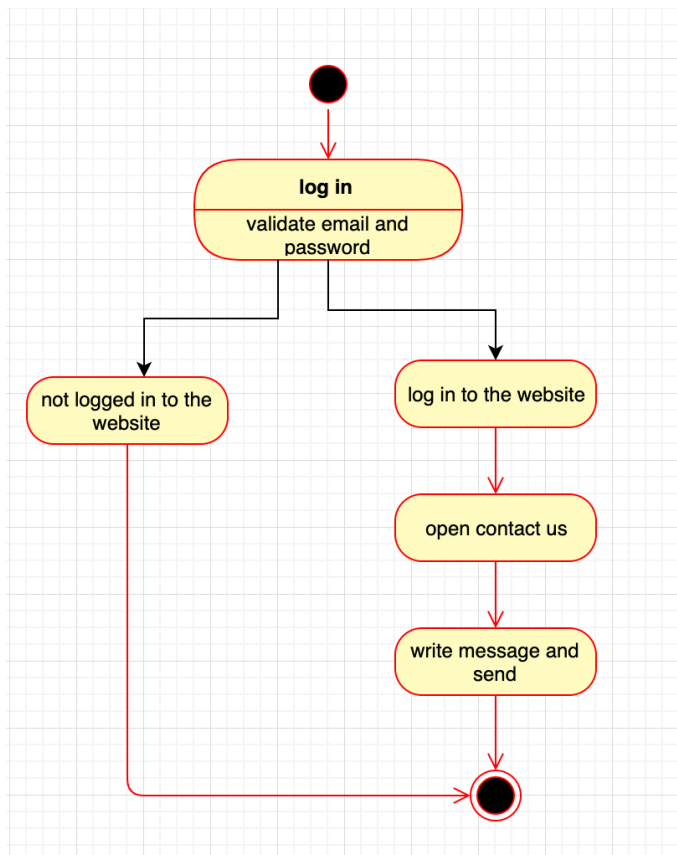
6. Watch a product

3.5.7 Class Diagram

can

watch_product
- -product_id:int
- -user_id:int
- id:int
- target_price:float

notifyuser():string

can

Admin
- -id: int
- -name: string
- -address: string
- -phone: string
- -type: string
- -email: string

- +adduser():boolean
- +deleteuser():boolean
- +edituser():boolean
- +add category():boolean
- +editcategory():boolean
- +deletecategory():boolean
- +editproduct():boolean
- +deleteproduct():boolean
- +addproduct():boolean
- +seeorder():string
- +seemessages():strings

manages

product
- -id:int
- -name:string
- -color:string
- -price:float
- quantity: int

seller
- -id: int
- -name: string
- -address: string
- -phone: string
- -type: string
- -email: string

search():string
buy():boolean
watch():
compare():
contact():string
sell(): boolean
see orders():

store
- user_id
- id
- name

buy/sell/manage

see

orders
- -user_id:int
- -product_id:int
- -store_id:int
- -quantity:int
- -color: string
- -price: float
- -total_price: float

has

buy

buyer
- -id: int
- -name: string
- -address: string
- -phone: string
- -type: string
- -email: string

search():string
buy():boolean
watch():
compare():
contact():string
order():

has

cart
- -id:int
- -product_id:int
- -quantity: int

has

has

CHAPTER FOUR

SYSTEM IMPLEMENTATION

This section of the document discuss programing languages that we use in the system implementation, why we use these languages, sample of reports and system implementation.

4.1 Programming Languages

We use HTML in the design it provides the basic structure of sites, which is enhanced and modified by other technologies like CSS which is used to control presentation, formatting, and layout. In addition to, using JavaScript and jQuery to control the behavior of different elements. And we use PHP which is server-side programming language. also we used laravel frame work to make things easier in programming.

4.1.1 Why Using these Programming Languages

 We use HTML in build our website as it has many advantages such it is easy to use and understand, all browsers support it and it's free, CSS is used to design and control the layout of a web pages because it easy to maintenance, and save time .In addition to, we use JavaScript because it is simple to learn and implement, it's popularity (used everywhere in the web), it reduces the demand on the website server and it is very fast because it can be run immediately within the client-side browser, PHP is used due to it's easy to connect to the database, easy to use , open source and can run on various types of platforms.

4.1.2 Why Using MYSQL server

We use MySQL server because it is easy to use, can run MySQL smoothly on several popular operating systems including Windows, Linux and Mac OS X, also it is support multiple programming languages such as Java, PHP, ..etc. And supports a number of storage engines.

CHAPTER FIVE

SYSTEM TESTING

This section display two steps for testing specification, the first step is Performing a High-Level Review of the Specification and the second step is Low-Level Specification Test, we will explain them below.

5.1 Performing a High-Level Review of the Specification

5.1.1 Pretend to Be the Customer:

Customer is the main focus of the system, so it is important to know who are the customers of this system, communicate with them and understand their needs and desires, it is also important to understand what their expectations of this system, knowing this makes it easy for the tester to review the requirements and make sure that they meet what the customer requested.

We communicate with some customers, we understand them and what they are need, how they act, what are their expectations from the system then we return to the specification document and review all requirement to be sure that they are achieve user needs and we find that all requirements go with customers.

5.1.2 Research Existing Standards and Guidelines:

It's important to know and understand standards and guidelines that related to your project field, understanding this help you to improve quality of the system so that the system goes with standards and guidelines.

we communicated with some e-commerce companies (mart.ps, open sooq) to get standards and guidelines that they are following in their work and should be apply in our system, and we take them in our consideration when we reviewed requirements specification.

5.1.3 Review and Test Similar Software:

It's important to review similar systems to help tester think about test situations and test approaches. It should also flag potential problems that may not have been considered through the other system.

We had review similar system which is ("mart.ps", "open sooq"), we review all part of it and take some test situation from it, and explore problems in our specification through review the other system.

5.2 Low-Level Specification Test

 After performing high-level review of the specification, we will go through the specifications to ensure that they have some attributes explained here:

- Complete: Is the specification include all the necessary functions that meet the needs of customers?
- Accurate: Is the proposed solution correct? Does it properly define the goal?
- Precise, Unambiguous, and Clear: Is the description exact and not vague? Is there a single interpretation? Is it easy to read and understandable?
- Consistent: Is the description of the feature written so that it doesn't conflict with itself or other items in the specification?
- Relevant: Is the statement necessary to specify the feature? Is it extra information that should be left out? Is the feature traceable to an original customer need?

- Feasible: Can the feature be implemented with the available personnel, tools, and resources within the specified budget and schedule?
- Code-free: Does the specification stick with defining the product and not the underlying software design, architecture, and code?
- Testable: Can the feature be tested? Is enough information provided that a tester could create tests to verify its operation?

Test cases:

test case ID	TEST OVJECTIVE	PRECONDITION	STEPS	test data	ecpected result	post-condition
TC_FR_01_01	successful user create account	system is running	1.in the name field enter full name 2.enter an valid email 3.enter valid password 4.enter valid address 5.enter user type	at least 4 characters non regestered email at least 8 characters enter streen ,region and city either buyer or seller	the user creats his/her account successfully	go to home page
tC_FR_01_02	error message on nsuccessfull user create account	1.system is ruuning 2.internet accsess	1.in the name field enter full name 2.enter an valid email 3.enter valid password 4.enter valid address 5.enter user type	name un valid has number non valid email short password empty address no type entered	an error message is displayed in the name field	return to regester form
tC_FR_01_03	error message on nsuccessfull user create account	1.system is ruuning 2.internet accsess	1.in the name field enter full name 2.enter an valid email 3.enter valid password 4.enter valid address 5.enter user type	name un valid has number non valid email short password empty address no type entered	an error message is displayed in the email field that it's not valid	return to regester form

TC_FR_03_01	successfully add product to cart	1.system is ruuning 2.internet accsess 3.logged in 4.enough quantity	1.user log in 2.select a product 3.select quantity 4.add to cart	enter valid quintity	added to cart successfully	stay in product details page
TC_FR_03_02	error message unsuccessfully add product to cart	1.system is ruuning 2.internet accsess 3.logged in 4.enough quantity	1.user log in 2.select a product 3.select quantity 4.add to cart	enter unvalid quintity	an error message is displayed that quantity you orderd is over the quantity we have	stay in product details page

tC_FR_02_01	successful add to watch list	1.system is ruuning	1.user log in	successfully logged in	added to watch list successfully	stay in product details page
		2.internet accsess	2.select a product			
		3.logged in	3.enter a wished price			
			4.add to watch list			
tC_FR_02_02	error message on unsuccessfull add to watch list	1.system is ruuning	1.user log in	successfully logged in	an error message is displayed that	stay in product details page
		2.internet accsess	2.select a product		price must be lower that the original price	
		3.logged in	3.enter a wished price	enter a higher price		
			4.add to watch list			

Test senario ID	requirment	test senario description	importance	no. of test cases
TS_FR_1	3.1.4	validate if the user can create a new account	high	3
TS_FR_2	3.1.4	validate if the user can add to his watch list	high	4
TS_FR_3	3.1.4	validate if buying more than the quantity we have	high	3
TS_FR_4	3.1.4	validate if users can contacts with admin	meduim	1
TS_FR_5	3.1.4	validate if the website is secured	high	4

CHAPTER SIX

SYSTEM EVOLUTION

6.1 Conclusion

In this document, we addressed the problems of buying and selling products that face normal people, for seller we addressed the internal daily operations they carry out (sell product, advertise the product and the ability of buying Etc.), and for the buyer we addressed many operation such finding the wish products, watch product, compare product, viewing products 's feedback). The main contributions of our work is to propose methods to solve these problems, so we propose 'one tech' system, a web application system that serves many actors (seller buyer), for e-commerce companies, one tech helps them managing and controlling their internal daily operations, buying and offer their products. For buyer helps them to find the best options for their demand, review them and register for it online. And most importantly System take care of making search convenient, effective and much easier for buyer.

6.2 Future Work

Many different adaptations and tests have been left for the future due to lack of time. Future work concerns new proposals to try different methods, or adding new features. There are some ideas that we would have liked to try during the development, but we couldn't complete them so we left them to the future. The following are some of these ideas:

- The way the buying product is confirmed can be changed: instead of paying in receive, we will add pay online through the system.
- We will develop a one tech mobile application and connect it with our website, this guide will help users to buy and sell easier.
- Add other features that can help the user more and make his/her operation easier and more fixable.