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**Matjary**

A graduation project document submitted to the Dep. of Information Technology  
as partial fulfillment for the Requirement for the Degree of B.Sc. in Information  
Technology

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**January 2021**

## **Abstract**

## **Dedication**

## Acknowledgment

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# **Chapter One**

## **Introduction**

## **1.1 Introduction:**

Technology is important at this time and it has been used in many things in our lives, and one of the most common areas is e-commerce, and due to the (Covid-19) pandemic, stores have been closed and people have stopped working.

Hence the idea and importance of establishing our project, which integrates the sales and purchases system within the store with an online marketplace that allows people to shop from their homes from that store,

What prompted us to establish this project is that the customer can buy directly from the store or remotely through the website that displays the store's products (established),

This project will help meet the needs of people in the event that work is stopped and shops closed, and it will also help in the continuity of the shop's work

## **1.2 Problem Statement:**

Close and disruption of companies and shops from work after the Corona pandemic (covid-19)

## **1.3 Objectives:**

The main goal of our project is to develop a website for enterprises that will be used by them to promote their products and to manage the enterprise online.

- Recording daily operation Such as (Invoices (Sales - Purchases) – Quotation).
- The ability to hire employees to manage the enterprise more effectively.
- Launch an online store to promote the products of the enterprise.
- Grow the enterprise's community by targeting online customers.

## **1.4 Methodology**

In our project we use agile methodology for many reasons such as:

- eliminates the chances of absolute project failure.
- Better visibility into project performance.
- Better project predictability.
- Reduced risk.
- For continuous changes that happen in our project.

## **1.5 Tools used in the project:**

- Development Tool: Visual studio.
- Platform: Web-Based.
- Programming Language: C# - ASP.NET CORE
- Database: SQL Server.
- Document Tool: Microsoft Office.
- Printer and Laptops.

## **1.6 Project Scope:**

This project is intended for small companies that have products that they want to sell, as it allows the employee to manage the sales, purchase, store, and issuance of invoices or quotations.

It is also linked to an electronic store in order to deal with requests remotely.

It does not include mathematical operations such as the ledger, carry-over, and dealing with various currencies, nor does it include the credit, debtor, depreciation and other aspects.

This project will apply Geographically in Yemen.

It takes two months - four months to complete it.

## **1.7 Project Organization:**

##

# **Chapter Two**

## **Theoretical Background**

## **2.1 Introduction**

In this chapter, we talked about the most prominent concepts included in our project, starting with the spread of the Corona virus and the rapid transformation of enterprises to electronic commerce due to its ease of displaying and ordering products on the Internet, then we talked about the most prominent operations that take place within the project such as dealing with daily operation, management and marketing of the enterprise, finally we mentioned tow of similar works.

## **2.2 Background**

Content for your online store can help your business become a supplier that stands out from the rest and significantly influence your conversion rate. Since the goal of online store content is to inform potential customers and persuade them to make purchases, it should be informative, interesting and search engine optimized.

Content for your online store can help your business become a supplier that stands out from the rest and significantly influence your conversion rate. Since the goal of online store content is to inform potential customers and persuade them to make purchases, it should be informative, interesting and search engine optimized.

Whether it's for clothing or technology, more and more people now shop online and frequently. According to Business Insider, 78 percent of Americans 15 and older have purchased something online. Most online shoppers browse offers on the Internet regularly and make an online purchase a few times a month or more.

There are millions of online stores, and the competition is always just a click away. Because the e-commerce market is highly competitive, online shop operators should be aware of how critically important content is for their online store and the

influence they have on purchasing decisions. So it's important for content to guide users to action and prompt them to make a purchase.

Most content for online stores include product descriptions. In general, stores provide a better overview for users if the various products are divided into categories. With thousands of products available, it can be hard to keep track, so each category should be fully described so that users will know what to find where.

Online store is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet using a web browser or a mobile app. Consumers find a product of interest by visiting the website of the retailer directly or by searching among alternative vendors using a store search engine, which displays the same product's availability and pricing at different e-retailers. As of 2020, customers can shop online using a range of different computers and devices, including desktop computers, laptops, tablet computers and smartphones.

An online shop evokes the physical analogy of buying products or services at a regular "bricks-and-mortar" retailer or store center; the process is called business-to-consumer (B2C) online store. When an online store is set up to enable businesses to buy from another businesses, the process is called business-to-business (B2B) online store. A typical online store enables the customer to browse the firm's range of products and services, view photos or images of the products, along with information about the product specifications, features and prices.

Online stores usually enable shoppers to use "search" features to find specific models, brands or items.

## 2.3 Related Works

### 1- Zid.sa

Zid is an e-commerce in a box - solution that any retailer can use to start their eRetail. Zid helps them to build their own eStores (with their own name and identity) and integrates them with the supply chain players to enable them to manage and with ease. All of that with affordable cost and decent quality.



Zid provides a lot of services to their customers such as consulting hours which is used to work improvement and performance in any department associated with e-commerce, marketing, and financial management, also, Zid offers to the customer many professional service providers who specialize in photographing products, designing the brands, helping the customer in electronic marketing for his store, and other services that contribute to the growth of e-commerce.

Advantages:

- Integrated online store
- Automatic Invoices
- Various payment options
- Shipping and delivery services
- Reports to measure store performance
- discount coupons

Disadvantage:

- A limited number of products for some packages.



## 2- Salla.sa

Salla a Saudi-based e-commerce platform that allows users to set up their e-commerce store in Arabic and sell their products and services to customers. In addition, users can set up their own branded store (with their own domain name) by selecting a design of their liking available on Salla.



The owners of the e-commerce stores can then manage their inventory by using Salla's website or app. Salla provides different types of reports and tools that help store owners with automatic invoices, integration, customer database, the ability to block customers, pin favorite products, have offers and discounts, and more.

Advantage:

- Marketing tools to increase customers sales
- Supporting all payment methods
- Detailed reports to measure store performance
- Ease of listing products and managing inventory

Disadvantage:

- Additional costs are incurred when modifying the store design.

So, in our project, we are focus to build an easy tool for local and small enterprises which is used to manage the enterprise and provide the enterprise with an electronic store in order to keep pace with technical development.

# **Chapter Three**

## **System Analysis and Design**

### 3.1 Use Case Diagram

A use case diagram at its simplest is a representation of a user's interaction with the system

Basic Use Case Diagram Symbols and Notations :

#### 1- System

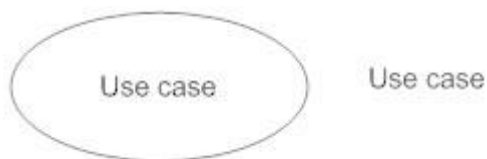
Draw your system's boundaries using a rectangle that contains use cases.

Place actors outside the system's boundaries.



#### 2- Use Case

represent the system's functions.



#### 3- Actors

Actors are the users of a system.



#### 4- Relationships

The relationships between an actor and a use case with a simple line.

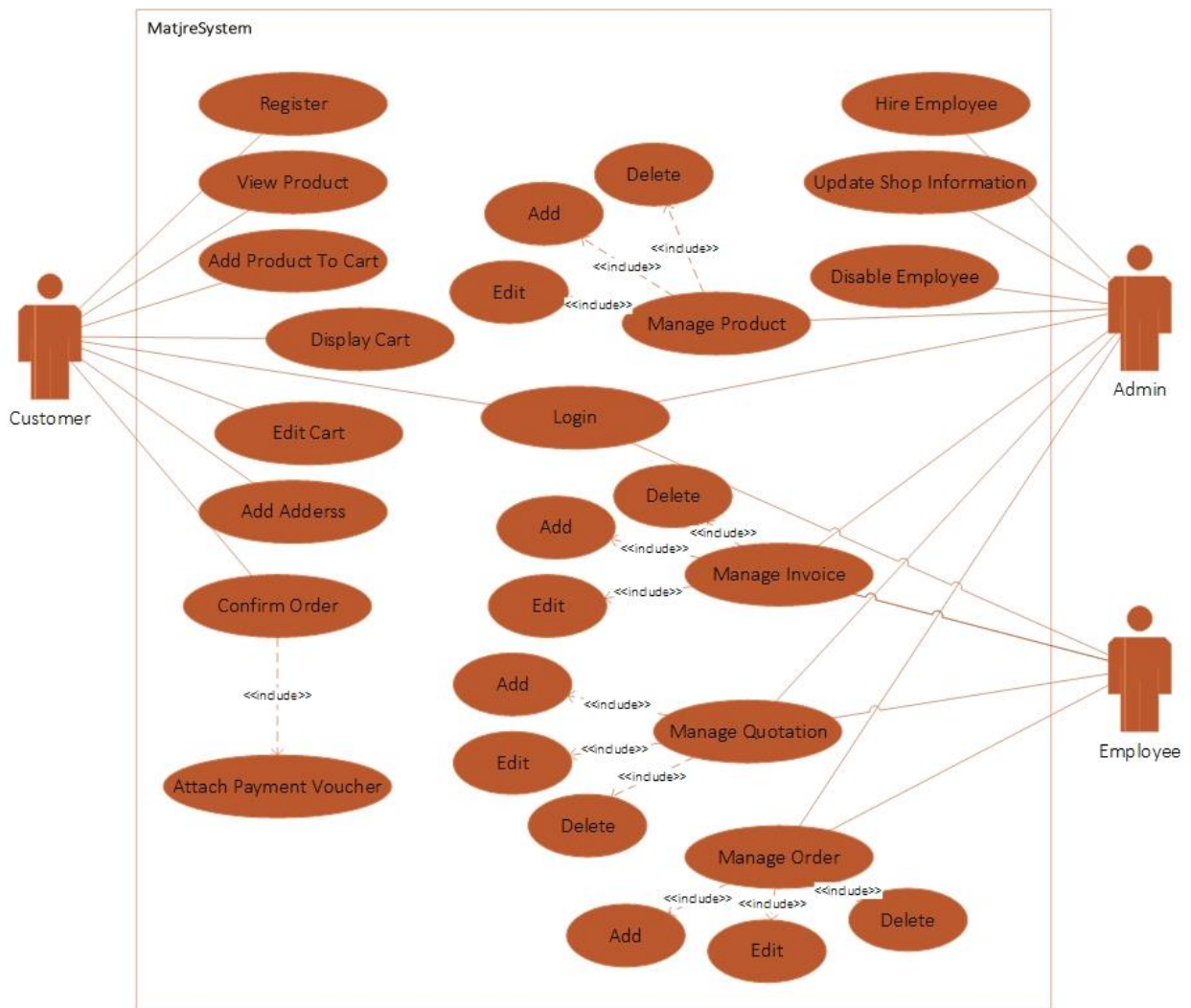
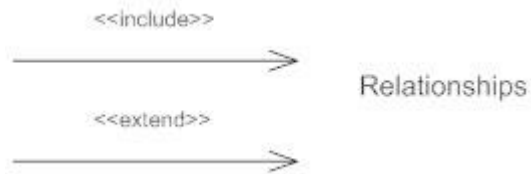


Figure 3.1 : Use Case Diagram

Table 3.1.1 : Register

Use case Number:	UC-01
Use Case Name:	Register
Overview:	Customer register new Account in system
Actor(s):	Customer
Normal Flow:	<ol style="list-style-type: none"> <li>1. Open Browser and enter our site</li> <li>2. Customer Clicks register</li> <li>3. The Customer Enters information like: FirstName, LastName, Password, Confirm Password, Email, mobile</li> <li>4. The Customer Clicks Register button</li> <li>5. If the information is correct, a verification email page appears and send verification email to your Email.</li> <li>6. The customer must confirm his account via the email sent to him</li> </ol>
Alternate Flow	6.1. Error Message(s) appear(s) in same page(register)

Table 3.1.2 : Login

Use case Number:	UC-02
Use Case Name:	Login
Overview:	Login to the system
Actor(s):	1-Customer 2-Admin 3-Employee
Normal Flow:	<ol style="list-style-type: none"> <li>1. Open Browser and enter our site</li> <li>2. Customer Click login</li> <li>3. The Customer Enter Password and Email</li> <li>4. The Customer Click login button</li> <li>5. If the information is correct The View Products page appears for customer or Control page for Admin and employee</li> </ol>
Alternate Flow	5.1. Error Message(s) appear(s) in same page(login)

Table 3.1.3 : View Products

Use case Number:	UC-03
Use Case Name:	View Products
Overview:	Show list of products
Actor(s):	Customer
Normal Flow:	<ol style="list-style-type: none"> <li>1. Customer must be logged in</li> <li>2. The Customer will see list of products(picture ,title, cost)</li> <li>3. When Customer clicks any product will open information page of that product</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.1. If customer not logged the system will redirect him to login page</li> </ol>

Table 3.1.4 : Add product To Cart

Use case Number:	UC-04
Use Case Name:	Add product To Cart
Overview:	Add product To Cart
Actor(s):	Customer
Normal Flow:	<ol style="list-style-type: none"> <li>1. Customer must be logged in</li> <li>2. The Customer can click “Add To Cart” from <b>View Products page</b> with any product or from information <b>page</b> of that product</li> <li>3. After clicking page appears to Customer To determined properties of product like Color, size etc.</li> <li>4. The customer clicks ‘Add to chart’ to add product</li> <li>5. The system show dialog.....</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.1. If customer not logged the system will redirect him to login page</li> </ol>

Table 3.1.5 : Display Cart

Use case Number:	UC-05
Use Case Name:	Display Cart
Overview:	Show all products in your cart
Actor(s):	Customer
Normal Flow:	<ol style="list-style-type: none"> <li>1. Customer must be logged in</li> <li>2. The Customer clicks “My Cart”</li> <li>3. <b>My cart</b> page appears to Customer To browses his products</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.2. If customer not logged the system will redirect him to login page</li> </ol>

Table 3.1.6 : Edit Cart

Use case Number:	UC-06
Use Case Name:	Edit Cart
Overview:	Edit Cart you can remove any product
Actor(s):	Customer
Normal Flow:	<ol style="list-style-type: none"> <li>1. Customer must be logged in</li> <li>2. In <b>My cart page</b> customer can delete or add products</li> <li>3. When customer clicks on delete product the system will be shows him dialog to confirm delete</li> <li>4. When customer clicks on add products product the system will be redirect him to <b>View Products page</b></li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.2. If customer not logged the system will redirect him to login page</li> </ol>

Table 3.1.7 : Add Address

Use case Number:	UC-07
Use Case Name:	Add Address
Overview:	Add your address that you want receive the product to
Actor(s):	Customer
Normal Flow:	<ol style="list-style-type: none"> <li>1. Customer must be logged in</li> <li>2. In <b>My cart page</b> The Customer clicks on “Continue Button “ , The “<b>Add address</b>” page appears</li> <li>3. The Customer inserts data like Country, State, City, Street and other data of address</li> <li>4.</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.1 If customer not logged the system will redirect him to login page</li> <li>2.1. if no products in <b>My cart</b>, the “Continue Button “ will be disabled</li> </ol>

Use case Number:	UC-08
Use Case Name:	Confirm Order
Overview:	Confirm Order and Attach payment voucher
Actor(s):	Customer
Normal Flow:	<ol style="list-style-type: none"> <li>1. Customer must be logged in</li> <li>2. In <b>Add address</b>” page The Customer clicks “Continue” Button, The <b>Confirm Order</b> Page appears</li> <li>3. The Customer Attaches payment voucher and click send button , page appears to the Customer that has message tells customer the order is processing</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.1. If customer not logged the system will redirect him to login page</li> <li>2.1. Error Message(s) appear(s) in same page(<b>Add address</b> )</li> <li>3.1. . Error Message appear if no payment</li> </ol>



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Table 3.1.8 : Confirm Order

Table 3.1.9 : Hire Employee

Use case Number:	UC-09
Use Case Name:	Hire Employee
Overview:	Add employees to the system
Actor(s):	Admin
Normal Flow:	<ol style="list-style-type: none"> <li>1. Admin must be logged in</li> <li>2. In Admin Control page Admin clicks on "employees"</li> <li>3. The admin clicks on "add new employee"</li> <li>4. The Admin Enters information like: FirstName, LastName, Password, Confirm Password,Email,mobile of Employee</li> <li>5. The admin Clicks Add button To add employee To system</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.2 If Admin not logged the system will redirect him to login page</li> <li>5.1. Error Message(s) appear(s) in same page</li> </ol>

Table 3.1.10 : Update Shop Information

Use case Number:	UC-10
Use Case Name:	Update Shop Information
Overview:	Admin Can changes information about his enterprise
Actor(s):	Admin
Normal Flow:	<ol style="list-style-type: none"> <li>1. Admin must be logged in</li> <li>2. The Admin clicks " <b>Shop Information</b>"</li> <li>3. The admin changes info like Name of owner, and title, phone, email, logo of system</li> <li>4. Admin clicks save button to save changes</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.2. If customer not logged the system will redirect him to login page</li> <li>4.1. Error Message appear</li> </ol>

Table 3.1.11 : Disable Employee

Use case Number:	UC-11
Use Case Name:	Disable Employee
Overview:	Disable any employee
Actor(s):	Admin
Normal Flow:	<ol style="list-style-type: none"> <li>1. Admin must be logged in</li> <li>2. Admin clicks " employees " in Control page</li> <li>3. The admin clicks on "list of employee"</li> <li>4. Admin chooses any employee and he clicks disable to disable him</li> <li>5. The system shows message that the employee is disabled</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.3 If Admin not logged the system will redirect him to login page</li> </ol>

Table 3.1.12 : Manage Products

Use case Number:	UC-12
Use Case Name:	Manage Products
Overview:	Admin manage product and inventory
Actor(s):	Admin
Normal Flow:	<ol style="list-style-type: none"> <li>1. Admin must be logged in</li> <li>2. Admin clicks "manage products" in Control page</li> <li>3. In this page the Admin will be see list of products, categories and information of store</li> <li>4. Admin clicks delete, edit , add new category to add category ,edit it or delete</li> <li>5. Admin can add, delete, edit product</li> <li>6. Admin can add , delete or edit from store</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.3. If customer not logged the system will redirect him to login page</li> </ol>

Table 3.1.13 : Manage Invoice

Use case Number:	UC-13
Use Case Name:	Manage Invoice
Overview:	Admin or employee can manage invoice
Actor(s):	Admin & Employee
Normal Flow:	<ol style="list-style-type: none"> <li>1. logged in required</li> <li>2. Admin or Employee click " Manage Invoice " in Control page</li> <li>3. Admin or Employee can add, delete, edit Invoice</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.4 If admin or employee not logged the system will redirect him to login page</li> </ol>

Table 3.1.14 : Manage Quotation

Use case Number:	UC-14
Use Case Name:	Manage Quotation
Overview:	Admin or employee can manage Quotation
Actor(s):	Admin & Employee
Normal Flow:	<ol style="list-style-type: none"> <li>4. logged in required</li> <li>5. Admin or Employee click " Manage Quotation " in Control page</li> </ol> Admin or Employee can add, delete, edit Quotation
Alternate Flow	<ol style="list-style-type: none"> <li>1.4. If customer not logged the system will redirect him to login page</li> </ol>

Table 3.1.15 : Manage order

Use case Number:	UC-15
Use Case Name:	Manage order
Overview:	Admin & Employee can manage order
Actor(s):	Admin & Employee
Normal Flow:	<ol style="list-style-type: none"> <li>1. logged in required</li> <li>2. Admin or Employee clicks " <b>Manage order</b> " in Control page</li> <li>3. In this page Admin &amp; Employee can accept any order from users after checks payment voucher</li> </ol>
Alternate Flow	<ol style="list-style-type: none"> <li>1.5 If Admin &amp; Employee not logged the system will redirect him to login page</li> </ol>

### 3.2 Context Diagram

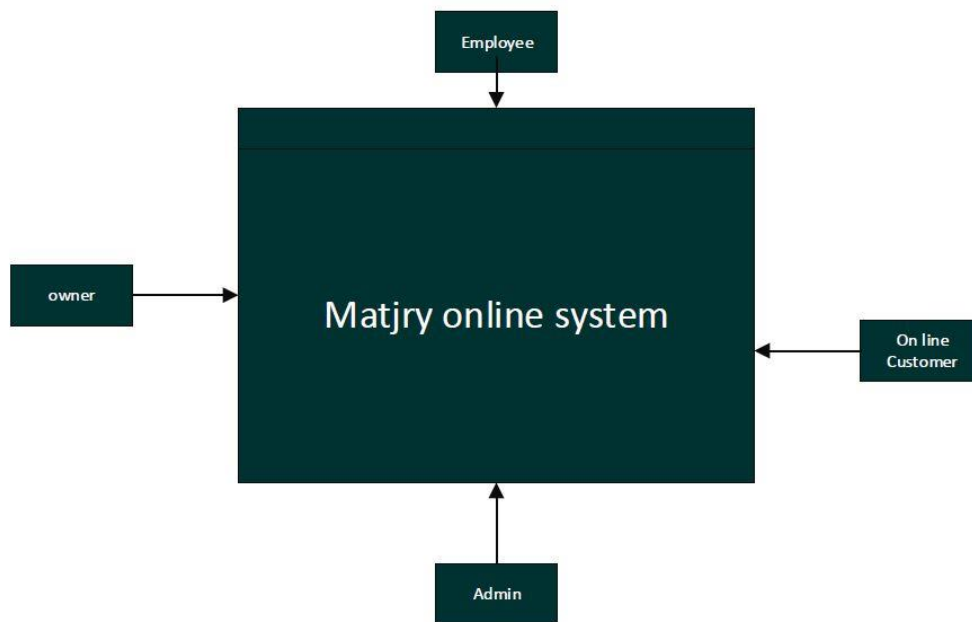


Figure 3.2.1 : Context Data Flow Diagram

### **3.3 Database Diagram**

It is a collection of data stored in tables.


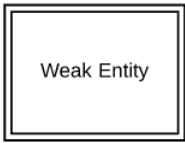
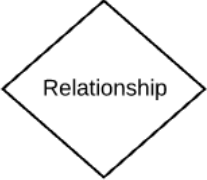




Each rectangle represents a table in the database.

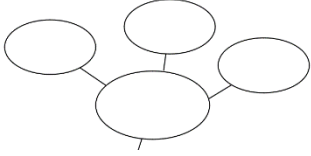
Each line between two tables shows that they have a relationship.

### 3.4 ERD Diagram

Table 3.1.16 : ERD Description

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database.

Symbols	Name	Description
	Strong entity	is the one whose existence does not depend on the existence of any other entity in a schema.
	Weak entity	Weak Relationships are connections between a weak entity and its owner.
	Relationship	Relationships are associations between or among entities.
	Weak relationship	Weak Relationships are connections between a weak entity and its owner.
	Attribute	Attributes are characteristics of an entity, a many-to-many relationship, or a one-to-one relationship.
	Multivalued attribute	Multivalued attributes are those that are can take on more than one value.
	Derived attribute	Derived attributes are attributes whose value can be calculated from related attribute values

	<p>composite attribute</p>	<p>is an <b><i>attribute</i></b> where the values of that <b><i>attribute</i></b> can be further subdivided into meaningful sub-parts</p>
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# **Chapter Four**

## **Interfaces**

# **Chapter Five**

## **Conclusion & Future Work**

## **5.1 Conclusion**

## **5.2 Future Work**

## **Reference**



