

**COLLEGE OF INFORMATION TECHNOLOGY  
UNIVERSITI TENAGA NASIONAL**

**PRINTING AND EMBROIDERY ORDERING SYSTEM**

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**2009**

**PRINTING AND EMBROIDERY ORDERING SYSTEM**

**By**

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- ① Web databases
- ② Electronic commerce

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## ABSTRACT

Technology is very important for each one of us in facing the new global era. The evolution of technology will bring us to the new lifestyle and simultaneously it will possess our daily life activities. By having this technology, they may achieve their business target effectively and the business process will become efficiently. Because of the awareness of the technology in business, a company named Rydzsha Enterprise has taken a step forward in using the technology in the business for the efficiency and effectiveness of the business. This company is running a printing and embroidery business. Printing and embroidery business is about printing or embroidery logo or design on t-shirt, pants, caps and other items. This type of business has been evolving from time to time due to the high demand. Because of high demand from customers and the awareness of the success in e-commerce business Rydzsha Enterprise decided to replace the manual system to the computerized system to achieve the target and the standard quality in their business system.

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background**

##### **1.1.1 Project Background**

The purpose of Printing and Embroidery Ordering System project is to develop a new system, a computerized system to replace the current system which is manual system. It also to make sure the company's business more structure and organized. In addition, it also to ease the customers who stayed far away from the particular business retail outlets, which enable them to order the desired items and have them delivered right to their doorsteps.

##### **1.1.2 System Background**

Printing and Embroidery Ordering System is a system that handle the ordering activities through online. The system is used to make the business activities runs more efficiently in terms of business dealing, time saving and cut costing. In addition, this system will can increase the performance of the company. Customer can easily use this system to make

an order through online and the customer's data will be kept in a more organized and secured manner.

Nowadays, we can see internet technology has be a medium for a company or individual to promote or sell their product globally. A lot of e-commerce business that we can find in internet such as ebay.com, mudah.com and many more. Business through online or e-commerce has become the important element in the business activities because everything can be done in short period and everything is at your fingertips. Limited time because of daily life routine and the far distance to make a business deal were the factors why this Printing and Embroidery System was developed. This system will make the business company more efficient and effective. The system also will be an easy and secure way for both company and customers to deal with their business matters. For example, customers who are in different state can make an order and send their own design by themselves through online. The only thing they have to do is to register their account and fill the details that the company need in the online form. All these things can be done without both the customers and the company personnel having the need to see each other. From this way, the customers can save a lot in terms of time, energy and money. As for the company itself, this system can make their business more organized and more secure in a way such as data keeping. To search or view the details of their respective customers, they just need to click on their name and all the details such an ordering, address and contact number will appear on the screen.

## 1.2 Problem statement

Presently, the customers have to meet the company's staffs if they want to make an order. It is difficult for them to meet each other if they stay in different or far distance area for instance if the customer are from Selangor while the company located in Perak it is difficult for both parties to discuss about the business deal. In fact, it will cause a waste in term of time and money. They may have to spend some money and to meet the company's staff for the business purpose.

While dealing with customers, the company's staffs has to ask all the details about the customers such as name, address, contact number and what type of item they want to order and the design they want to propose. All the details and the order must be record on a piece of paper and must be kept in customer ordered file. It will be complicated if they want to find the customers detail and if they want to check the customers order because it might not be arranged well. Possibilities of missing files are higher because the safety of files and documents are not guaranteed. If customer's documents are missing, it will be hard for the company and subsequently it will affect the company's business.

## 1.3 Objective

### 1.3.1 Project's Objectives

- To replace the manual method with computerized ordering system.
- To make the company's business more structure and organized.

### 1.3.2 System's Objectives

- To ensure consistency of business process in term of ordering making and business dealing.
- To help customers to make an order through online and propose their own design.
- Save time and money while doing business dealing online.

## 1.4 Scope

### 1.4.1 User Scope

This system is focuses on printing and embroidery company named Rydzsha Enterprise in Ipoh, Perak. This system will be developing to replace the manual system with the computerized system whereby it will make the business process more efficient. It will focus on two target users, customer and company itself and focused on customers favoring to make orders online as well. The other user is administrator who will handle the details of customers and the ordering that customers have made.

#### 1.4.1.1 Customers

The system is developed and focused on customers favoring to make orders online. The customers can either order any amount of t-shirts of the provided designs or propose their very own desired designs. All they have to do is register an account, fill up an online form providing name, address, contact numbers and so on. To make an order, customers have to login then choose type of item. If customers want to propose their own design, they just need to upload the design. For an example, if a customer comes out with a



t-shirt design, they can upload the design they proposed and they can view the design. But before that, they have to choose the type of shirt, color, size and printing method. Then, they need to choose an amount of the item. Once the ordering is completed and submitted, the company will receive the data.

#### **1.4.1.2 Company**

The system also focused on company as a user. The administrator can check the order that make by customers, in the database. Then they can check the report such as ordered items and the amount of order in the shopping cart, work status. The uploaded design will be transfer from the online system to the computer system to enable the embroidery and printing task.

#### **1.4.2 System Scope**

The system will enable customers to make an order of items and propose their very own desired designs online. They are required to do registration to create an account, fill up an online form providing name, address, contact numbers and so on. To make an order, customers have to login then choose type of item. If customers want to propose their own design, they just need to upload the design. The data of order will be stated in the shopping cart. For payment method, the customers need to make an online payment at maybank2u. Once the order is completed the goods will be delivered to their respective homes. The guideline on how to make an order through online will also be included in this system.

### 1.5 Expected Benefits

- ❖ The system will handle and ensure the customers data and ordering details are more organized and secure.
  - The customers data will be more organize keeping in database and the possible of missing data can be avoided.
  
- ❖ Both customers and company's staffs have no need for meet ups while doing their business dealing.
  - Both parties don't have to arrange any appointment for business purposes and the business transaction can be done anytime and everywhere as long they are connected to the internet.
  
- ❖ The customers can do the ordering through online and the business transaction can be done a lot faster.
  - The customer will make an order through the system and the company will receive all customers and orders submitted data. The transaction can be done in just a few minutes by following the instruction that has been provided in the system.

## **1.6 Requirements and Constraints**

### **1.6.1 Requirements**

The functional requirements for this system are:

- The system will show the details of customer
- The system will show customer details order
- This system allowed customer to view their proposed design
- This system will show the work progress status
- The system will show the report to company about things total order, total design and total customer

### **1.6.2 Constraints**

- Some of user may not familiar with this system because they familiar with the manual method.

## CHAPTER 2

### LITERATURE REVIEW

This chapter will be explain about the literature review on related topic to project, the software to be used in development the system and the similar current system in more detail.

#### 2.1 Literature Reviews on Topics Related To Project

##### 2.1.1 E-Commerce

Electronic commerce, commonly known as e-commerce is an online business conducting. It captures the excitement and focus of this fast emerging market. E-commerce consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks.

The definition of e-commerce also includes business activities that are business-to-business (B2B), business-to-consumer (B2C). By implement e-commerce in the business, the business transaction can be done much better and faster. Users can get the controlled

access to the business computer systems and serve themselves. The Internet's role in business is a way for parties, customer and business personnel to communicate with each other. It is also a way for a customer to communicate with a company's computer systems without human intervention. In fact, the Internet is a communication medium like the many others we use in business every day. [1]

It is suitable to implement e-commerce in printing and embroidery business to evolve and develop the business and also to make the business more competitive. The components that requires in the business no matter the business is doing online or real world is the product to sell or service offer. Then, the platforms of the business or in other word the place to do the business. In traditional or real world business this can be a physical store, catalogue or phone number. In e-commerce business, the place that you should have to do the business is the web site.

## **2.2 Reviews of Possible Development Tools and Software to Be Used**

### **2.2.1 Software Review**

#### **2.2.1.1 PHP**

PHP originally stood for Personal Home Page. PHP is a computer scripting language originally designed for producing dynamic web pages. It is for server-side scripting, but can be used from a command line interface or in standalone graphical applications. PHP is a general-purpose scripting language that is especially suited for web development.

PHP generally runs on a web server, taking PHP code as its input and creating web pages as output. It can also be used for command-line scripting and client-side GUI applications. PHP can be deployed on most web servers, many operating systems and platforms, and can be used with many relational database management systems. It is available free of charge, and the PHP Group provides the complete source code for users to build, customize and extend for their own use. PHP primarily acts as a filter, taking input from a file or stream containing text or PHP instructions and outputs another stream of data; most commonly the output will be HTML. It can automatically detect the language of the user. From PHP 4, the PHP parser compiles input to produce byte code for processing by the Zend Engine, giving improved performance over its interpreter predecessor. [2]

#### 2.2.1.2 MySQL

MySQL database is the world's most popular open source database because of its fast performance, high reliability, ease of use, and dramatic cost savings. MySQL is a relational database management system (RDBMS) which has more than 11 million installations. The program runs as a server providing multi-user access to a number of databases.

MySQL is owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now a subsidiary of Sun Microsystems, which holds the copyright to most

of the codebase. The project's source code is available under terms of the GNU General Public License, as well as under a variety of proprietary agreements.

MySQL is popular for web applications and acts as the database component of the LAMP, BAMP, MAMP, and WAMP platforms (Linux/BSD/Mac/Windows-Apache-MySQL-PHP/Perl/Python), and for open-source bug tracking tools. Its popularity for use with web applications is closely tied to the popularity of PHP and Ruby on Rails, which are often combined with MySQL. PHP and MySQL are essential components for running popular content management systems such as Drupal, Joomla! , WordPress and some BitTorrent trackers. [3]

#### 2.2.1.3 Apache HTTP Server

The Apache HTTP Server, commonly referred to simply as Apache, is a web server notable for playing a key role in the initial growth of the World Wide Web. Apache was the first viable alternative to the Netscape Communications Corporation web server (currently known as Sun Java System Web Server), and has since evolved to rival other Unix-based web servers in terms of functionality and performance. Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation. The application is available for a wide variety of operating systems, including Unix, Linux, Solaris, Novell NetWare, Mac OS X, Microsoft Windows etc. [4]

Apache supports a variety of features, many implemented as compiled modules which extend the core functionality. These can range from server-side programming language support to authentication schemes. Virtual hosting allows one Apache installation to serve many different actual websites. Apache features configurable error messages, DBMS-based authentication databases, and content negotiation. It is also supported by several graphical user interfaces (GUIs) which permit easier, more intuitive configuration of the server.

Apache is primarily used to serve both static content and dynamic Web pages on the World Wide Web. Many web applications are designed expecting the environment and features that Apache provides. Apache is used for many other tasks where content needs to be made available in a secure and reliable way.

### **2.2.2 Hardware Review**

The requirement for hardware to be used in developing the system are PC with processor Pentium Duo and above, Network Interface Card (NIC), 80Gb hard disk and above, graphic card, 1Gb RAM, monitor, mouse, keyboard and etc.



### 2.3 Review of Current System

Presently, the company does not use a computerized system in their business dealing or business transaction. They take order from customer by using manual method whereby the two parties which are customer and company's representative have to see each other. The customers need to do an appointment before they can make an order.

It is difficult for them to meet each other if they stay in different or far distance area.

While dealing with customers, the company's staffs has to ask and take notes about the customers details such as name, address, contact number and what type of item they want to order and the design they want to propose. Rather than proposed their own design, they also can get existing designs from the company. The company provides the pamphlets of design that they have for customers who does not have any designs. After designs are choose, customers must explain clearly where to put the designs and what color they need. If there any changes about the design, they have to inform the company quickly.

All detail and the orders are record in a paper and kept in file. If they want to check the customer details or customer orders, they have to search from file by file. The printing work started when the company has received the deposit from the customers. For account section, details about money transaction, item's price and ordered price are stated in computer by using Microsoft excel. After the printing done, they have to check back the order and make sure they fulfill the order and customer requirements. Once all tasks are complete, the staff has to send a message to customer to collect their items. For payment

method, customers can either paid directly to the company or bank in to the company's account.

## **2.4 Review of Similar System**

Review of the similar system is the study of the systems that have similarity with the system to be build. It is also to compare the similar systems with the system to be build in terms of the functions that have been applied or not into the systems.

### **2.4.1 [www.mercumaya.net](http://www.mercumaya.net)**

Mercumaya.net is website that focuses on selling the web-hosting business. This website is one of the example website in Malaysia that running an e-commerce business.

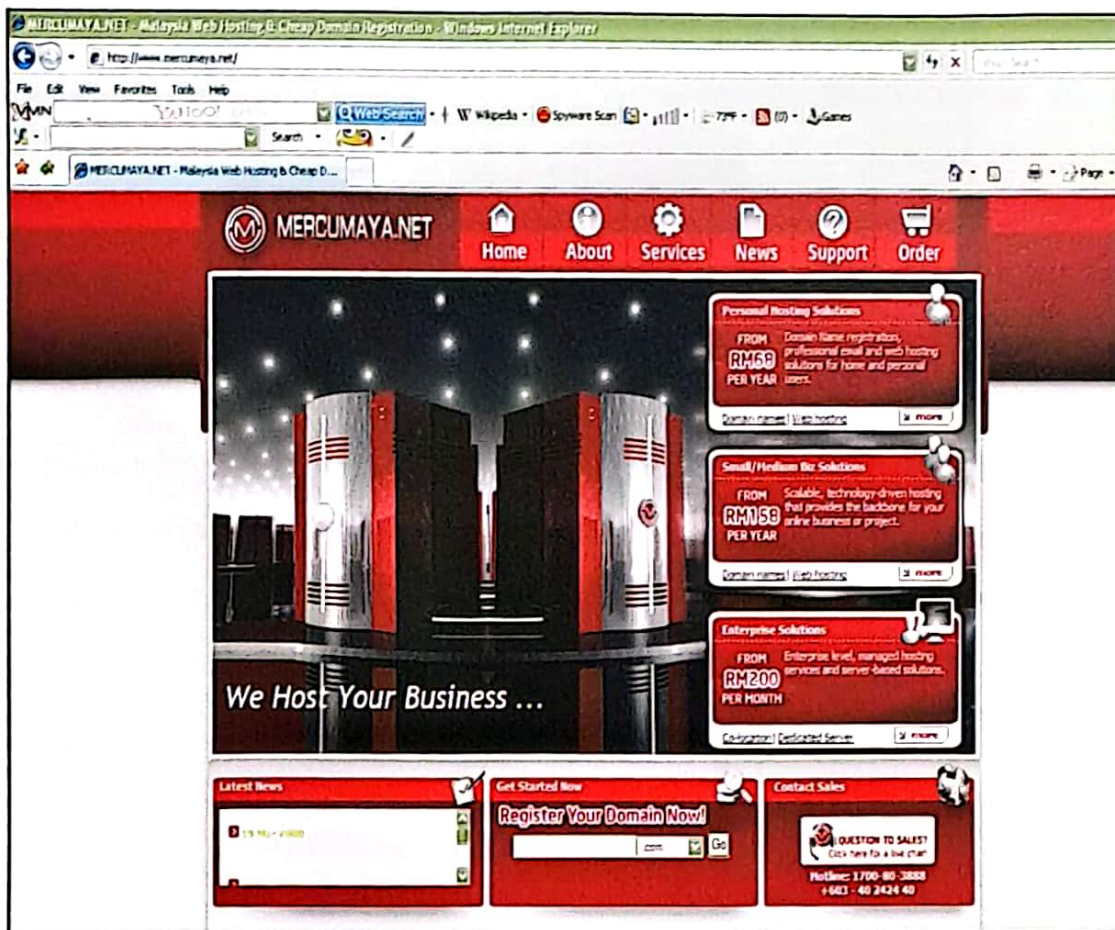


Figure 2.1: www.mercumaya.net

In this homepage, we can see the 'Home', 'About', 'Services', 'News', 'Support' and 'Order' button. They use graphic button that can ease the user to understand and use it. These entire buttons refers to their own section. They do some promotion by putting their best web-hosting package advertisement on the homepage. This website is using white and red color background. They also put some graphic to make the website looks nice. At bottom of homepage, there are three sections. The first one is the 'Latest News' section for user to get the latest information. All the information will be posted and announce in this section. The second section is 'Get Started Now' section whereby this section is for

users register their own domain. The last section is 'Contact Sales'. This section is developed for user to ask the sales or details about the business or package by chatting. The hotline number also provided for users to call the company if they have any inquiries.

The order section whereby the customers can choose the package that they want. Before proceed to buying section, the customers need to login first. We can see the side button at the left side of the page. By clicking on certain buttons, it will bring customers to other section. This website also includes the shopping cart section where the package that customers choose to buy will stated for customers to view or refer. This shopping cart will shown the package selected and the amount of the package and the price of all the selected items.

The strength of this website is placed in the system itself. The promoting of the package that they provide is been displayed in the advertisement on the homepage so that the customers will know what is the best package to have. The news is in the homepage also to make customers up to date with the new information. The functions that have been implemented in this system really help the customers. But the weakness of this website is, in certain page is too crowded with the information and any other stuffs. It should be more organize so that customers can find what they want easily.

## 2.4.2 www.eddiebauer.com

This website is about the men and women accessories such as shoes and bags selling.

This is an e-commerce website from oversea. Users can buy and order their favorite items through this online website.

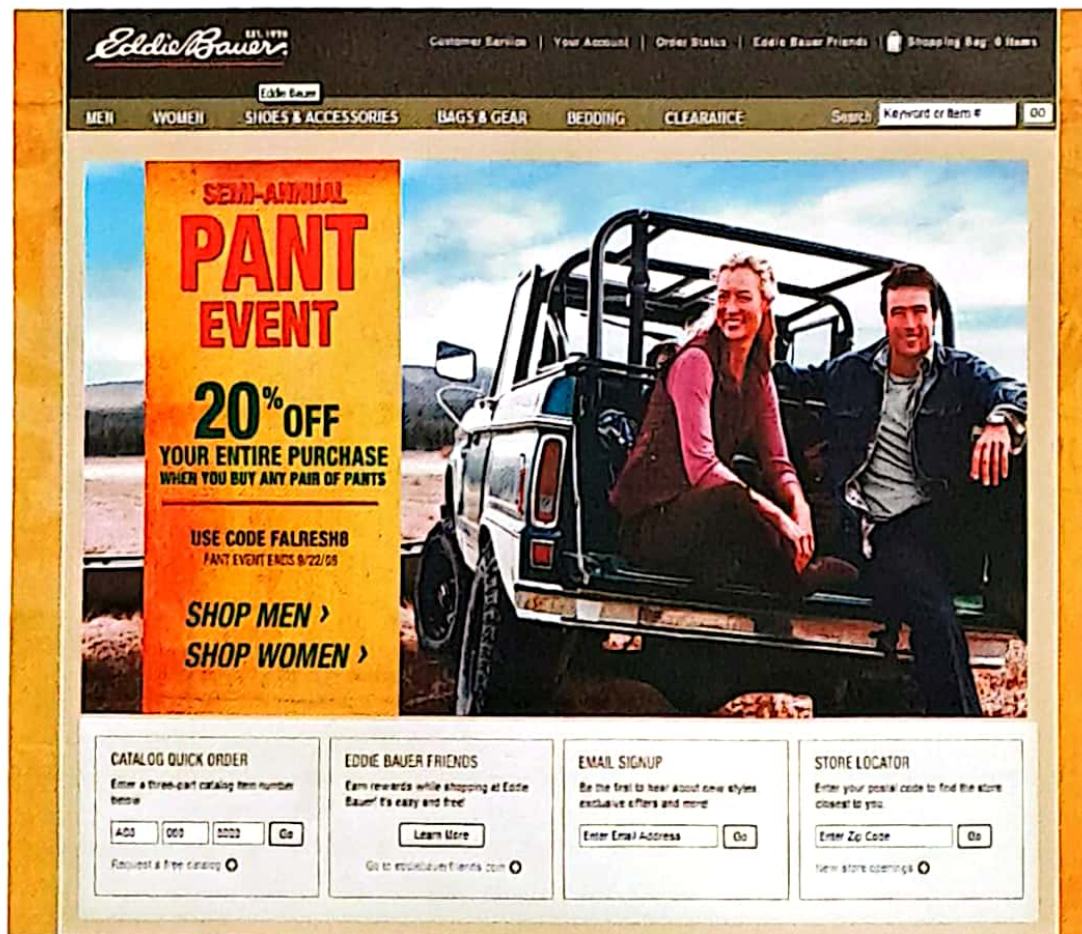


Figure 2.2: www.eddiebauer.com

The developer used brown and green color as a background. They also put some picture as a promotion advertisement. From the homepage, we can see the 'customer service', 'your account', 'order status', 'bauer friend' and 'shopping bag' link button. The users

can go to each section by clicking at the link button. At the bottom homepage, there are four columns that are 'catalogue quick order', 'eddie bauer friend', 'email signup' and 'store locator'.

Users can request for a free catalogue by clicking at the link in catalogue quick order column. Then, fill the online form provided and send the request. The company will send the catalogue direct to user's house in one or two weeks.

For users who want to have their own account, all they have to do is fill the online form provided and then click the 'create button' account. Then they are free to access their own account by enter their email address and password. After log in, users can start to buying things and select the items they want. The items that they confirm want to buy will be record in shopping bag. The shopping bag will show the items that customers buy and the total price.

The strength of this website is the entire products to be sell is organized. It was placed in each section according to type and gender. So it ease the customer to search what products they want.

### 2.4.3 www.tshirtprinting.com.my

The website www.tshirtprinting.com.my is about company named 'Ideal AA Garment Sdn. Bhd. who is running a t-shirt printing business. This e-commerce business is from Malaysia.



Figure 2.3: www.tshirtprinting.com.my

From what we can see, on the top of the homepage, there are two small home and contact graphic buttons. Below it, there is a menu bar which contains company profile, skills, product, production chart, customers, contact us, and 'enquiries'. In the company profile, there is information such as company information and company organization chart. In skills, they listed the services provided such as printing and embroidery. Product shows

the images of items that they sell like t-shirt, cap, towel and whatsoever. Information like the flow on how to make an order and how the printing or embroidery processes are done are shown in production chart. Customers who are used to make a business deal with the company are listed in customers section. For users who want to know more about the business or want to discuss with the company, they just need to click at contact us button. For enquiries, users can click to enquiries section in the menu bar.

In the middle of homepage, there are some information such as services the company provide and what type of order they accept. Some pictures of t-shirt, workplace and gallery are shown in the homepage. The strength of this website is the company has shown the entire product that they sell and the customers that used to make a business dealing with them. By showing the previous customers who used to make a business dealing with them, it can attract more customers to deal with them. The weaknesses that the author found in this website are there is no instruction on how to make an ordering. Lack of information for customers in term of new product or prices. No keyword searching and no account registration.



## 2.5 Decide On System Functionalities

Table 2.1: Comparison of Similar System

FEATURES	MERCUMAYA	EDDIEBAUER	IDEAL AA GARMENT
URL	www.mercumaya.net	www.eddiebauer.com	www.tshirtprinting.com.my
Background Color	Red / White	Green / Orange	White
Register / Log In	√	√	X
Categories	√	√	√
Help	X	X	X
Shopping Cart	√	√	X
Ordering Section	√	√	√
Site Map	√	X	√
About Us	√	√	√
Contact Us	√	X	√

<b>Items Image</b>	√	√	√
<b>Language</b>	English	English	Malay
<b>Services</b>	√	√	√
<b>Scroll Bar</b>	√	√	√
<b>FAQ's</b>	√	X	X
<b>Font</b>	Mix	Mix	Arial
<b>Font Size</b>	Mix	Mix	Mix
<b>News</b>	√	√	X
<b>Company's Policy</b>	√	√	√
<b>Picture Image</b>	√	√	√
<b>Keyword Searching</b>	√	√	X

From the research on the similar system, the author has listed the main functions on this project below:

- a) Sign up
- b) Log in
- c) User info
- d) Online ordering function
- e) Upload design function
- f) Shopping cart
- g) Work progress status
- h) Contact Us and FAQ's
- i) Keyword searching

## CHAPTER 3

### METHODOLOGIES

This chapter will be covered about methodologies available. Methods to gather data contributing towards the project are explained in more detail. The results of the gathered data are being process and organize into information that is required in the next processes.

#### 3.1 Research Methodologies

Methodology is the analysis of the principles of methods and rules. It also defined the systematic study of methods that applied within a discipline or particular procedures.

There are three concepts in methodology, which are a collection of theories and concepts or ideas; comparative study of different approaches; and critique of the individual methods, all this concept relate to a particular discipline or field of inquiry.

Scholarly literature often includes a section on methodology of the researchers because it refers to more than a simple set of methods, rather it refers to the rationale and the philosophical assumptions that underlie a particular study.

Somehow, research methodology defines about what the activity of research is, how to proceed, how to measure progress, and what constitutes success. By using several types of methodologies, we can gather the information needed.

### **3.1.1 Survey**

The process of conducting a study from representative samples of specific populations is called surveying. If a questionnaire is used, it may be comprised entirely of closed questions, multiple-response questions, Lickett scale questions (differential sliding scale or rating scale questions) or open-ended questions, or may be a combination of all question styles. [5] Other instruments that can be used during a survey are data recording sheets for observation or a short list of structured interview questions.

### **3.1.2 Observation**

Observation is a methodology that involves watching and recording behaviors and activities within a defined area. The researcher plays the role of passive observer and is, therefore, outside the actions being observed and recorded.

### **3.1.3 Questionnaire**

Questionnaire is a method for collecting data beyond the physical reach of the researcher, that is, from a large or diverse sample of people. To avoid any confusion or uncertainty since the researcher may not be present to explain what was meant by any one particular

question, the questionnaire must contain clear questions, worded as simply as possible. Thus, the questionnaire should be designed to fulfill a specific research objective, it should be brief and the sequence of the questions logical.

#### **3.1.4 Interview**

An interview may be tightly structured, semi-structured, unstructured, in depth or conversational. This methodology involves two parties, which are the researcher and the interviewee in a one-to-one situation and it may take some time to be done. The researchers will use the same interview question schedule to interview several people at different times.

#### **3.1.5 Focus Group**

A focus group is a small group contain 3 - 8 persons form by researcher whose members are brought together for a comprehensively discussion of a specific issue or topic. An interview schedule, organizes time and place plans by researcher. A tape recorder is the important element for the success of the use of this methodology. The techniques of conducting the focus group; are similar to conducting an in-depth interview, the researcher needs, however, to be able to manage up to eight people talking about the issue or topic. [6]

Table 3.1: Comparison of Research Methodologies

	Advantages	Disadvantages
<b>Survey</b>	<ul style="list-style-type: none"> <li>The use of surveys permit a researcher to study more variables at one time than is typically possible in laboratory or field experiments, whilst data can be collected about real world environments.</li> </ul>	<ul style="list-style-type: none"> <li>Several sources of bias such as the possibly self-selecting nature of respondents, the point in time when the survey is conducted and in the researcher him/herself through the design of the survey itself.</li> </ul>
<b>Observation</b>	<ul style="list-style-type: none"> <li>The observer just need to watching and record whatever they observe. No need to them to prepare any questionnaire or something related to it.</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to have exact information and it may take a long time to gather the information.</li> </ul>
<b>Questionnaire</b>	<ul style="list-style-type: none"> <li>Most of researcher use questionnaire because this type of research methodologies is easy and very helpful for them to get information specifically.</li> </ul>	<ul style="list-style-type: none"> <li>Problem may happen if the question is not met the client needs or requirements.</li> </ul>
<b>Interview</b>	<ul style="list-style-type: none"> <li>An interview is helpful for researcher to maker sure all needs or requirements from the client is being gathered.</li> </ul>	<ul style="list-style-type: none"> <li>The interviewer need to be well prepared and make sure interviewee or client really understand the question and what requirement that they want.</li> </ul>

<b>Focus Group</b>	<ul style="list-style-type: none"> <li>• More information will be easily gathered within different opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• Hard to make decision because of contra opinion.</li> </ul>
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### 3.2 Research Methodology of Choice

The author has choose survey as a research methodologies to gather the information needed and to obtain what requirements to be implement in the system to be build.

Survey is a methodology which can use different instruments such as observation, interview or a written list of questions called a questionnaire. Surveying is the process of conducting a study from representative samples of specific population. If a questionnaire is used, it may be comprised entirely of closed questions, multiple-response questions, or open-ended questions, or may be a combination of all question styles. Data recording sheets for observation or a short list of structured interview questions are two other instruments that can be used during a survey. The author prepared questionnaire in about 21 questions about topics related to the project. The survey questionnaire will be completed by respondents and the author will get the information and opinion from the respondents that can be use in developing the system. The reason why the author chooses this type of methodology is because the advantage it has. The advantage by using surveys is surveys allow a researcher to study more variables at one time than is typically possible in laboratory or field experiments, whilst data can be collected about real world environments.



### 3.3 Review on Several Software Development Methodologies

The Systems Development Life Cycle (SDLC) is a conceptual model used in project management. It describes the stages involved in an information system development project from an initial feasibility study through maintenance of the completed application.

[7] There are several SDLC methodologies have been developed to guide the related processes including the waterfall model (the original SDLC method), v- model and the spiral model. Mostly, numerous models are combined into some sort of hybrid methodology. The important phases that is essential for developers in SDLC, such as planning, analysis, design, and implementation.

#### 3.3.1 Waterfall Model

One of the models in SDLC is the waterfall model and it was a popular version of the systems development life cycle model. The waterfall model describes a development method that is linear and sequential. Each phase of development has different goals in this waterfall model. This model is seen as flowing steadily downwards (like a waterfall) through the phases of feasibility, analysis, design, implementation, testing and maintenance. One of the advantages of waterfall development is that it allows for departmentalization and managerial control. Besides, a schedule can be set with deadlines for each stage of development and a product can proceed through the development process and can be deliver on time. However, there also have disadvantages on this model. The disadvantage of waterfall development is that it does not allow for much

reflection or revision. Once an application is in the testing stage, it is very difficult to go back and change something that is not well thought out in the concept stage.

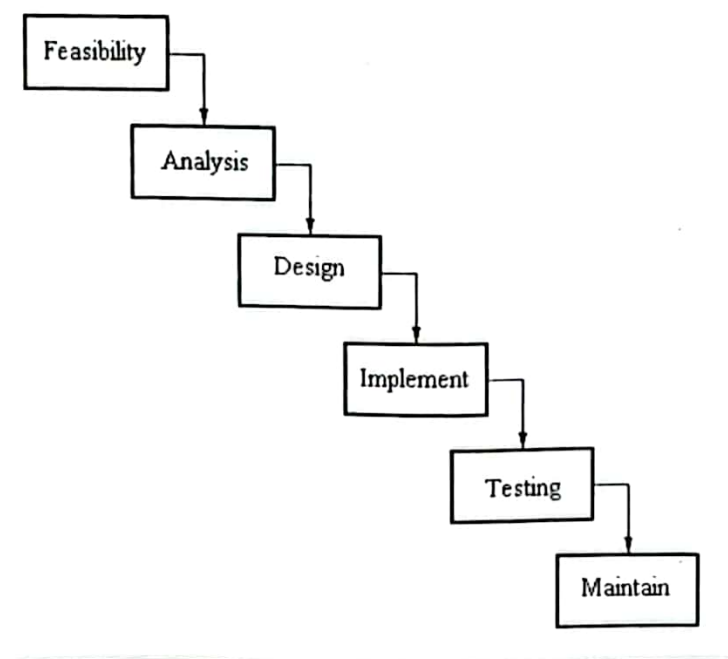


Figure 3.1: The Waterfall Model

### 3.3.2 Spiral Model

The spiral model is a software development process. This model combines elements of design and prototyping-in-stages, in an effort to combine advantages of top-down and bottom-up concepts. The spiral lifecycle model is the other name for this model and the development method (SDM) used systems in information technology (IT). The features of the prototyping model and the waterfall model are combined in this model of development. The spiral model is intended for large, expensive and complicated projects. Each phase starts with a design goal and ends with the client (who may be internal)

reviewing the progress thus far. At each phase of the project, analysis and engineering efforts are applied, with an eye toward the end goal of the project. [8] There are several advantages by using spiral model. Spiral model estimates things such as budget, schedule, etc to get more realistic as work progresses, because important issues are discovered earlier is one of the advantage in spiral model. Other than that, it is more able to cope with the changes that software development generally entails. Instead, software engineers can get their hands in and start working on a project earlier and the software is produced early in the software life cycle. There are also several disadvantages by using this model. Demands considerable risk-assessment expertise is some of disadvantages of the spiral model. Furthermore, it has not been employed as much proven models such as the WF model. Thus may prove difficult to sell to the client especially where a contract is involved that this model is controllable and efficient. This spiral model can be a costly model to use. By using this model, developer must give the full commitment on analysis phase because the project's success is highly depends on it. Other than that, this model doesn't work for smaller projects.

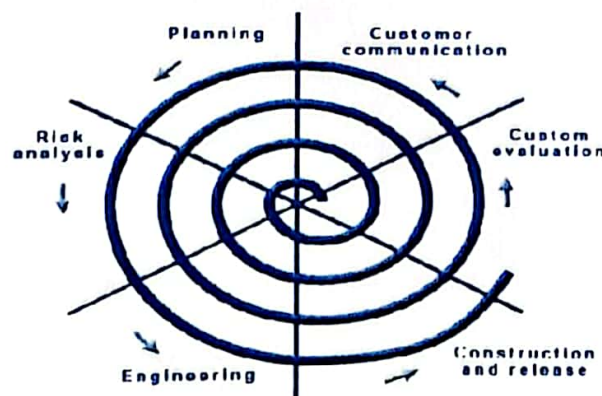


Figure 3.2: The Spiral Model

### 3.3.3 V Model

The V-model is a software development process that can be presume to be the extension of the waterfall model. To form the typical V shape, the process steps are bent upwards after the coding phase, instead of moving down in a linear way. The V-Model life cycle is a sequential path of execution of processes and each phase task must complete before the next phase begins. The V-model deploys a well-structured method in which each phase can be implemented by the detailed documentation of the previous phase. Testing activities like test designing start at the beginning of the project well before coding and therefore saves a huge amount of the project time.

The advantages of this V model is, it simple and easy to use. This model also has specific deliverables at each phase. Due to the development of test plans early during the life cycle, this model gives higher chance of success over the waterfall model. In addition, works well for small projects where requirements are easily understood by using V model. Nevertheless, there are also several disadvantages in this model. This V model is little flexibility and adjusting scope is difficult and expensive. The other disadvantage is software is developed during the implementation phase, so they no early prototypes of the software are produced. Furthermore, this model does not provide a clear path for problems found during testing phases.

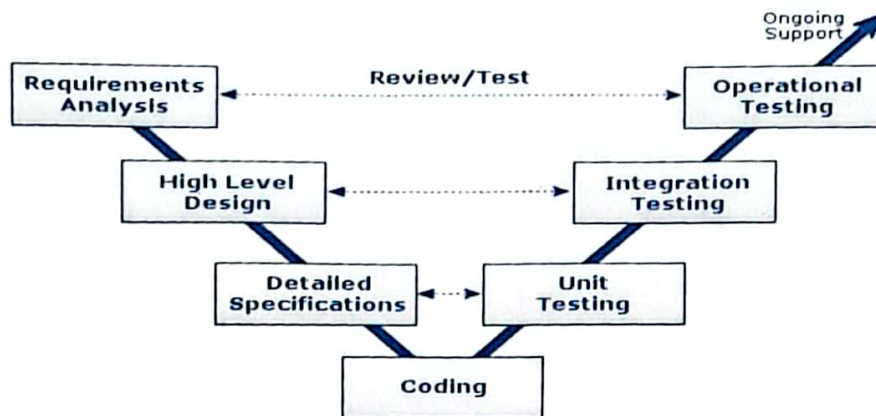


Figure 3.3: V- Model

Table 3.2: Comparison of Software Development Life Cycle

	Waterfall Model	V- Model	Spiral Model
<b>Advantages</b>	<ul style="list-style-type: none"> <li>• Allows for departmentalization and managerial control.</li> <li>• A schedule can be set with deadlines for each stage of development and a product can proceed through the development process and can be delivered on time.</li> </ul>	<ul style="list-style-type: none"> <li>• Simple and easy to use and the model also has specific deliverables at each phase.</li> <li>• Due to the development of test plans early during the life cycle, this model gives higher chance of success over the waterfall model.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimates things such as budget, schedule, etc to get more realistic as work progresses, because important issues are discovered earlier.</li> <li>• Able to cope with the changes that software development generally entails.</li> </ul>

<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>• Does not allow for much reflection or revision.</li> <li>• The project is not partitioned in phases in flexible way (each phase to be done before progress can be made to another phase).</li> </ul>	<ul style="list-style-type: none"> <li>• Proactive defect tracking i.e: defects are found at early stages even may be in the development phase before application is tested.</li> <li>• Avoids the downward flow of the defect.</li> </ul>	<ul style="list-style-type: none"> <li>• No fixed phases for requirements specification, design or testing.</li> <li>• Risk analysis is too rigid.</li> </ul>
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### 3.4 Software Development Methodology of Choice

By studying and doing research on the system development life cycle (SDLC) available, the author decided to use the waterfall model as a software development methodology in developing the system. Reasons why the author choose waterfall model as software development method are due to advantages that highlighted in this methodology. By using this model, the system will be better structured and more effective. In waterfall model, it's easy to adapt the author's system to it because the waterfall model is suitable for small and medium size projects. This waterfall model has six phases. The phases in this development method are feasibility, requirements analysis, design, implementation, testing, and maintenance. Every phase have their own goals where in early stage, the developer can estimate the budget for the future stage of development and the phases also will make entire process be fully working. This method also provides less complexity

when going through each phases. Because of these phases, each step needs to be done correctly because each step is a must, so it will help to make sure all requirements is being completed and this will make the system more efficient and reliable.

The requirements for developing the 'Printing & Embroidery Ordering System' can be gathered from the beginning of the methodology. This waterfall development model also allows for departmentalization and managerial control. Besides, by using this model, a schedule can be set with deadlines for each stage of development and a product can proceed through the development process and can be delivering on time. So, the waterfall model is the most sufficient model to be use in developing the 'Embroidery and Printing Ordering System'.

## **CHAPTER 4**

### **ANALYSIS**

This chapter will be covered the analysis part where it will explain about the result from the survey that had been made. The software to be used in developing the system will be explained in this chapter as well.

#### **4.1 Survey Questionnaire**

For research methodologies the author decided to use survey method for data gathering. The author has prepared 21 questions to be answer by respondent. The questions provided is regarding the users familiarize in computer usage, e-commerce business and about the t-shirt printing services. The examples of the questions are shown in appendix section.



## 4.2 Result of the Survey

The author has done a survey about related topic with the project. Most of the respondents that completed the survey are university students and the person who are familiar in using a computer. The result of the survey is stated below in pie chart.

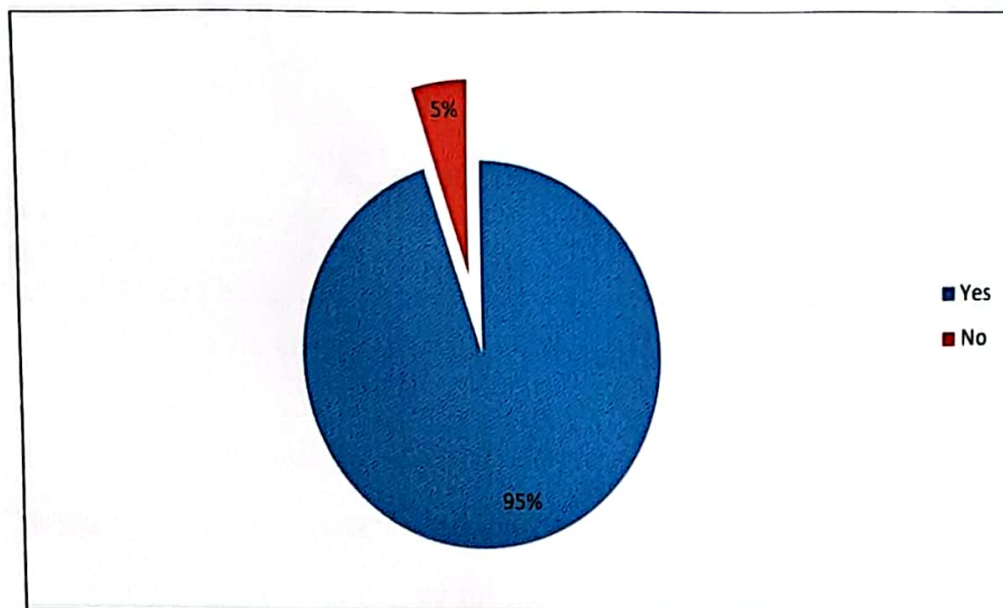
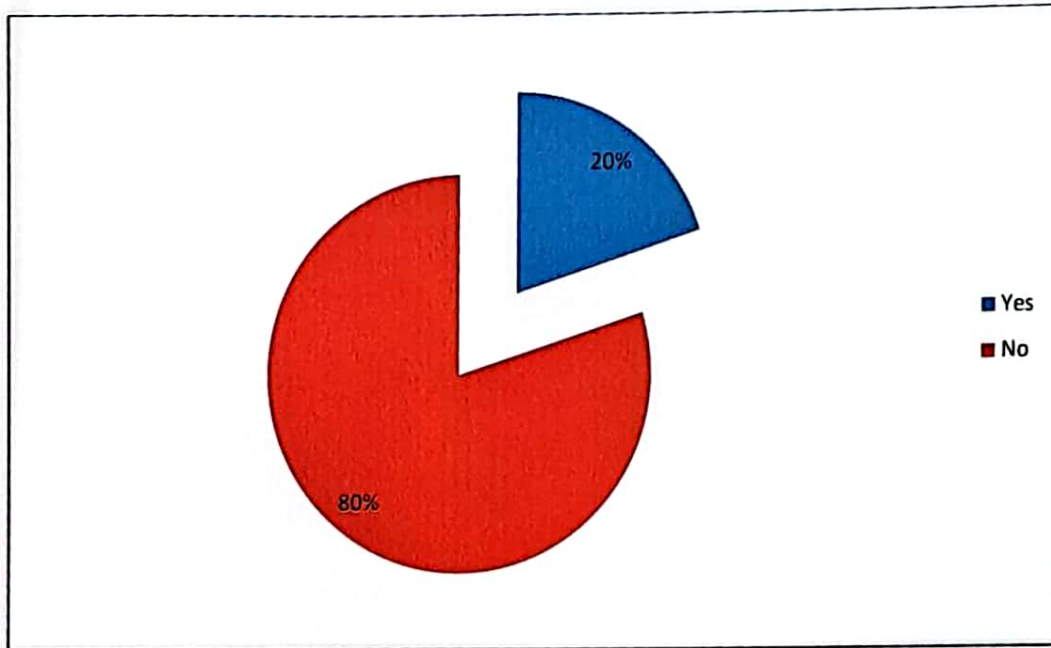


Figure 4.1: Percentage of People Who Own a Personal Computer.

From the surveys that have been made, the author discovers that 95% respondent own a personal computer and constantly surfing the internet and 5% do not have any computer.

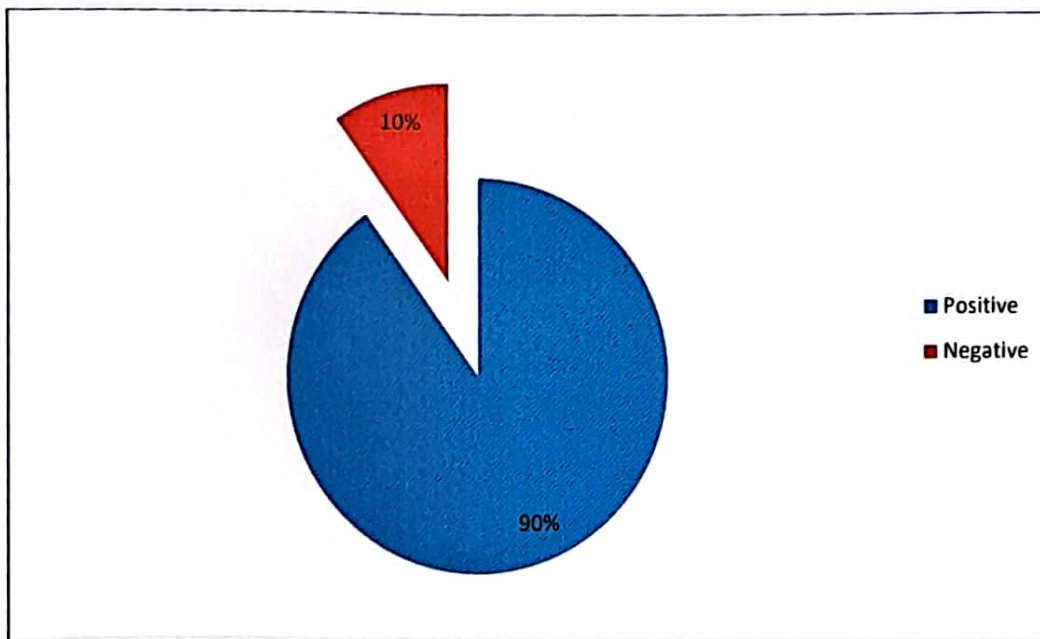
This is because most of the respondents are students and they need to own a personal computer or laptops for they to do the thing like assignment or for surfing the internet.

The 5% who do not have any computer are the person who didn't work at all like housewife and old people.



**Figure 4.2:** Percentage of People Who do a Transaction Over The Internet

From the survey on people who do transactions over the internet, the author found that 80% of them never do a transaction over the internet because they don't have any purpose to do so even though they are aware about the online system and they do not familiar with e-commerce or purchasing something online. It only 20% of respondent used to make transactions online. The transactions that the 20% people do are like transfer money, pay the bill and buying things through online.



**Figure 4.3:** Percentage of Positive and Negative Opinion About E-Commerce Business

From the surveys also, the author identify that 90% of respondent give a positive opinion about e-commerce business because of IT technologies using nowadays and 10% give the negative opinion. It is because most of them said that technologies is a part of life nowadays and it make everything can be done better and faster through the technologies. The respondents who give negative answer said the e-commerce business is unnecessary and the safety is not guaranteed. It is also because they are familiar and satisfied with manual method of business.

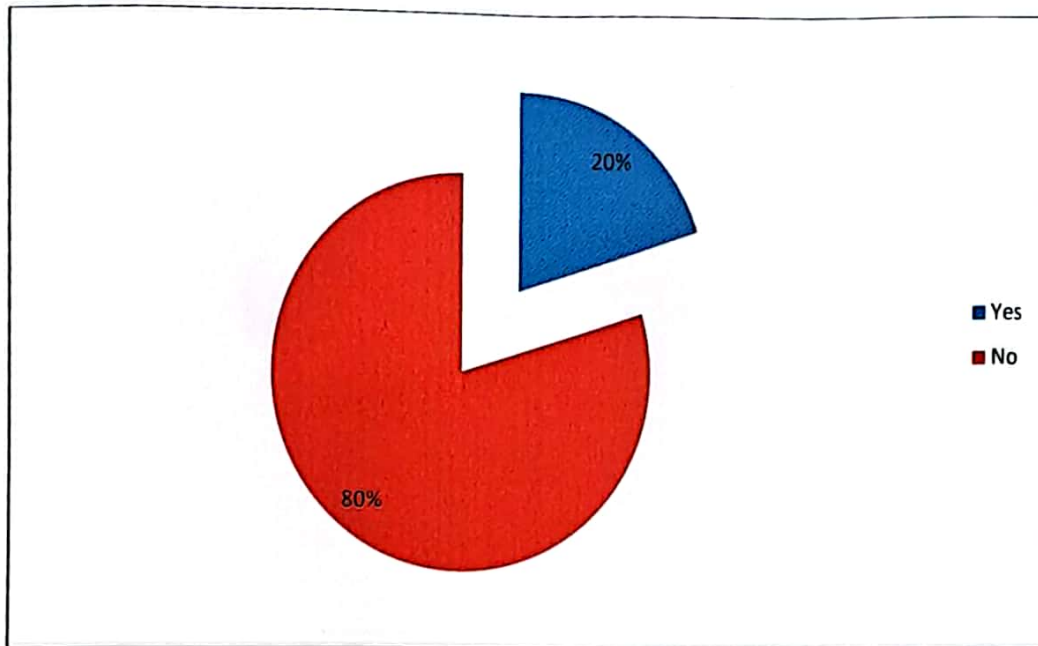
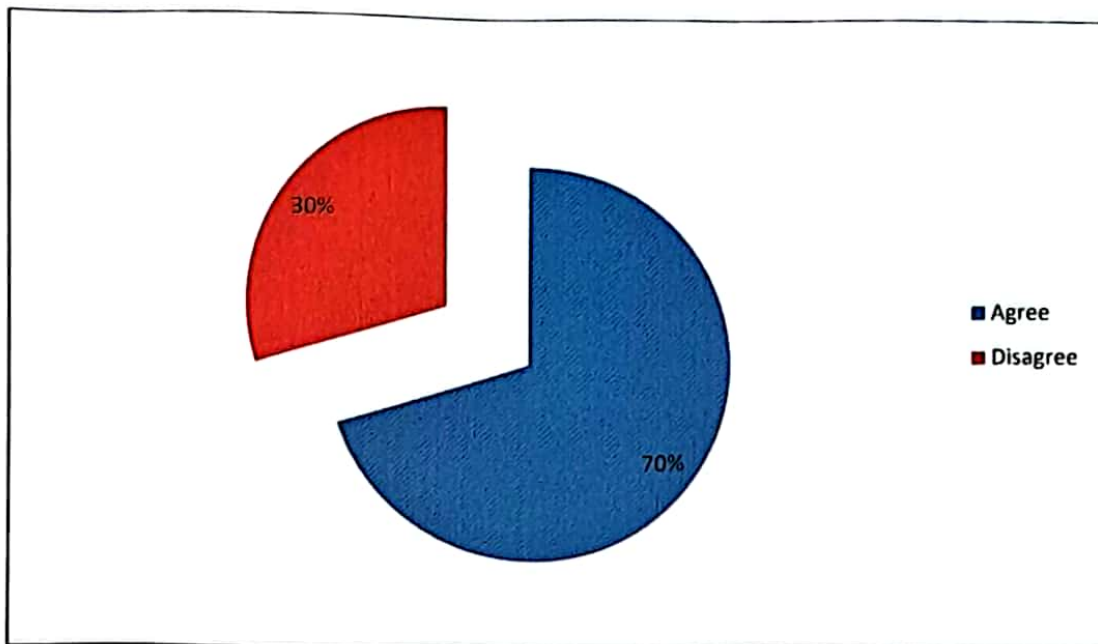


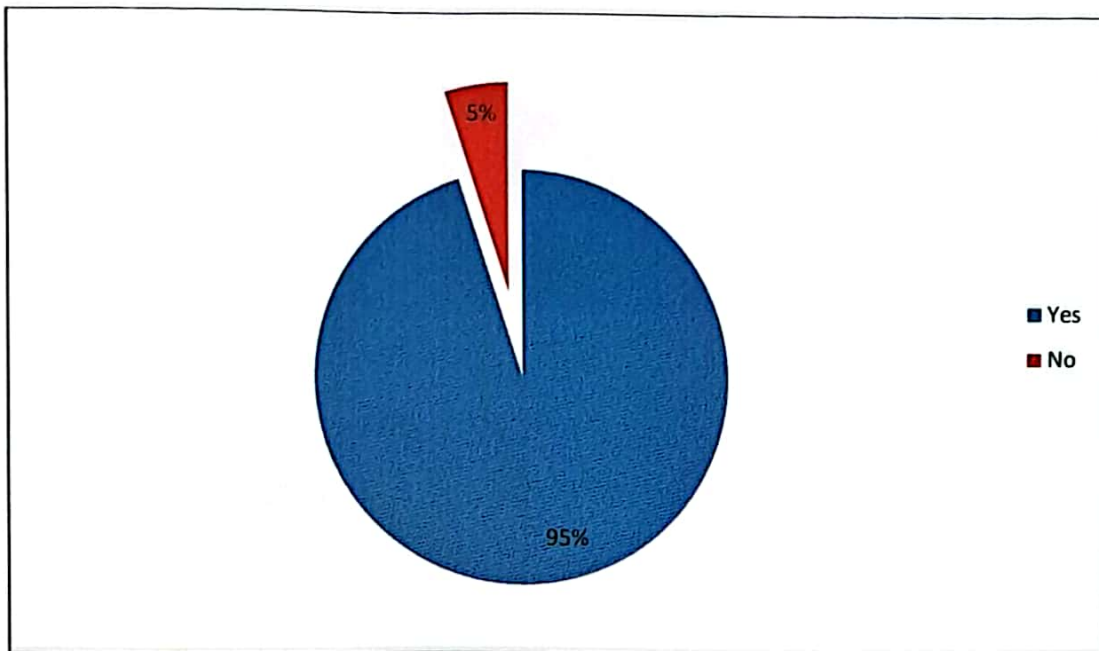
Figure 4.4: Percentage of People Who Used To Make a T-Shirt Printing Ordering

Speaking of t-shirt printing and embroidery ordering, only 20% of respondent used to make an order and 80% never make an order. Most of them didn't do an ordering because they don't have any purpose to do so while the 20% used to make an ordering because they are the organizer of some event which they have to provide t-shirt for the event and other reason is for class or group.



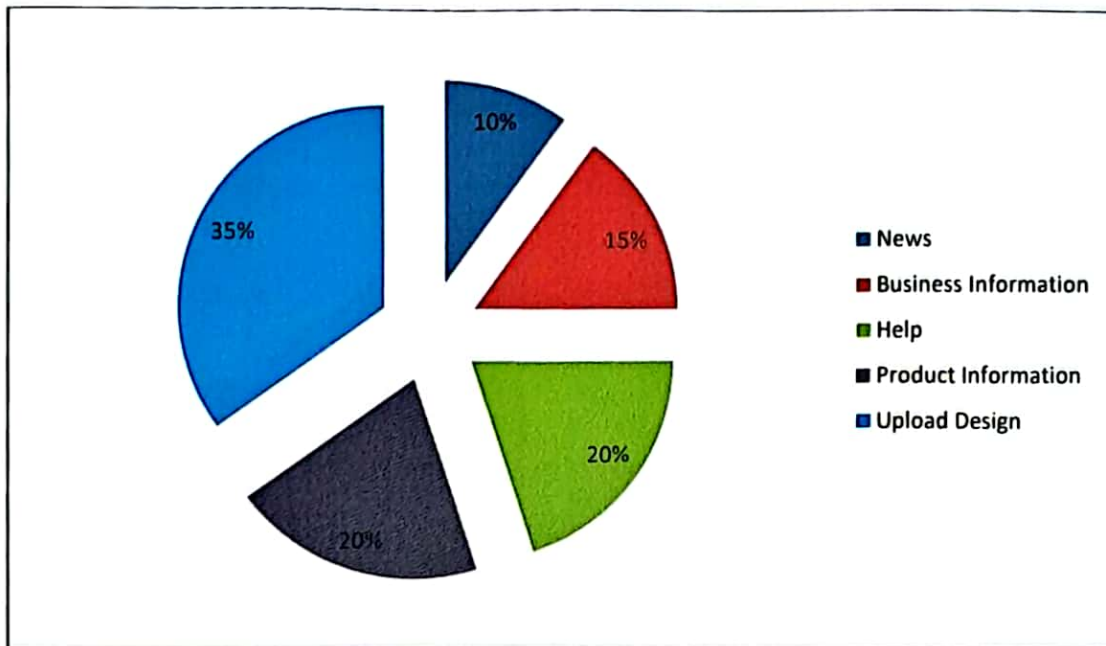
**Figure 4.5:** Percentage of People That Agree With The Online System

When it comes to the opinion about online system, 70% of them are agreed with the online system because it easy to use, precise and convenient and suitable to be utilize these day. Meanwhile 30% of them disagree with the online system because of the safeness of the system and they still don't have any confident on online system.



**Figure 4.6:** Percentage of People Who Need Instruction On Ordering System

In printing and embroidery ordering system, 95% respondent like to have the instruction on how to make and ordering through the online system because it will help the users or customers a lot especially who are novice in IT. It is only 5% say no because some of them already know what to do by follow their common sense and some of them say no because they don't want to use the system.



**Figure 4.7:** The Percentage of Features That People Want In Ordering System

Other features that they would like to have in printing and embroidery ordering system are news 10% because they want to keep themselves up to date with the current news about the company, information about the business 15% because they want to know if any new information about the business of special offer from the company, help section 20% so that if they had any problem, they manage to handle by referring to the help section, product information 20% for them to be notice with the new products available and last but not least upload design function 35% for them to propose their own design.

Base on the survey result, the author found that there were two types of users or customers which are the users who are familiar with IT and users who are unfamiliar with IT. It is not a big problem for people who are familiar with IT because they already have the basic knowledge on IT. To help the users who never had an experience on using

IT, the system to be developed must consist of instruction that will help a lot this type of users. To make the business more competitive, the company must set their target user and focusing on students, business companies and organizations. The system to be build also must be user friendly system for eases the users to use it.

### **4.3 Decide On Development Tools and Software**

Based on research from internet and study on similar system, the developer has made the decision on softwares to be utilized in this project. MySQL has been chosen to be used in this system. MySQL is an open source database and it will be used as a database to store the data properly in the table. Apart from MySQL, PHP also will be utilized in this system as a side scripting. PHP is a general-purpose scripting language that is specially suited for web development. It also can be deployed on most web servers, many operating systems and platforms and can be used with many relational database management systems.

Another software to be used is Apache HTTP Server. This software is used as a web server. This server operates by accepting HTTP requests from the client, and providing a HTTP response to the client. The HTTP response usually consists of an HTML document but can also be a raw file, an image, or some other type of document. If some error is found in client request or while trying to serve it, a web server has to send an error response which may include some custom HTML or text messages to better explain the problem to end users. Finally, the developer also chooses phpMyAdmin as Graphical



User Interface (GUI) to manage MySQL over the internet. It can create and drop databases, create/drop/alter tables, delete/edit/add fields, execute any SQL statement, manage users and permissions and manage keys on fields.

## **CHAPTER 5**

### **DESIGN**

This chapter will be discuss about the system to be develop, the flow of the system and the structure of the system in more detail.

#### **5.1 Explanation of the Proposed System**

The system to be build is to replace from the manual system to the computerized system, follow the current trend of business and to make the business system more structure and practical to be used by both business owner and customers as a users. The application in printing and embroidery ordering system include sign up, log in, user info, online ordering function, shopping cart, work progress status, upload design, Contact Us and FAQ.

Sign up is for user to create their own account to allow them login into the system. Log in is for user to log in into the system and proceed with the ordering. Meanwhile, user info will give the user's information such as address, name and so on.

In ordering section, online ordering function will allow user who have an account to make an ordering through online. For user who want to propose their own design, upload design function is for user to upload their propose design. It will receive by the company and the company will proceed with the printing and embroidery part. Shopping cart will show the user or customer the amount of shirt they ordered and the total price while work progress status will show the work status is it done or still in progress. Lastly the FAQ's and Contact Us will help the user on how to use the system or as guide for user and for user to contact if they have any enquiries.

5.2 System and Algorithm Flowcharts

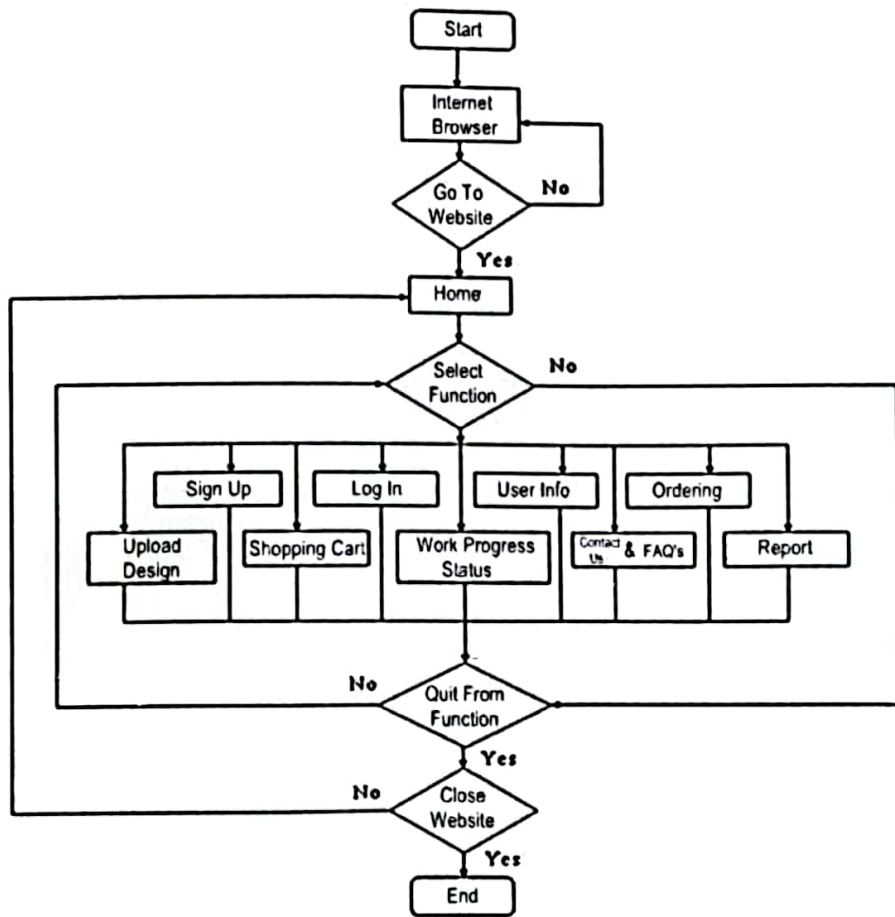


Figure 5.1: Overall System Flowchart Diagram

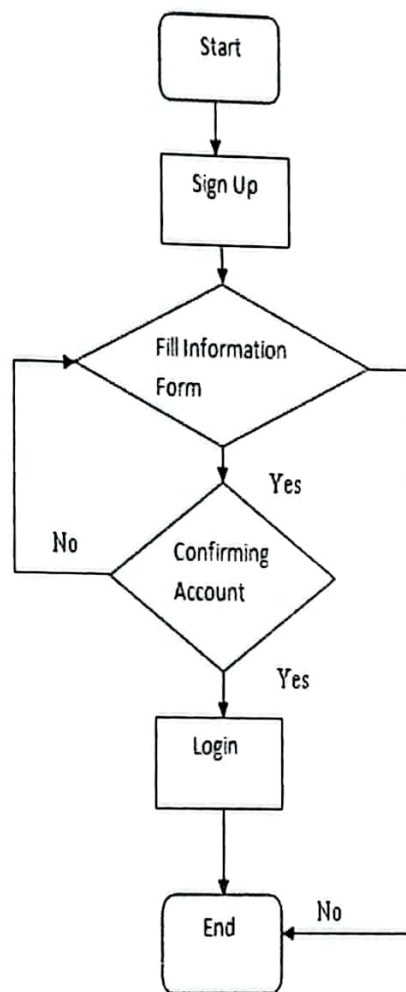
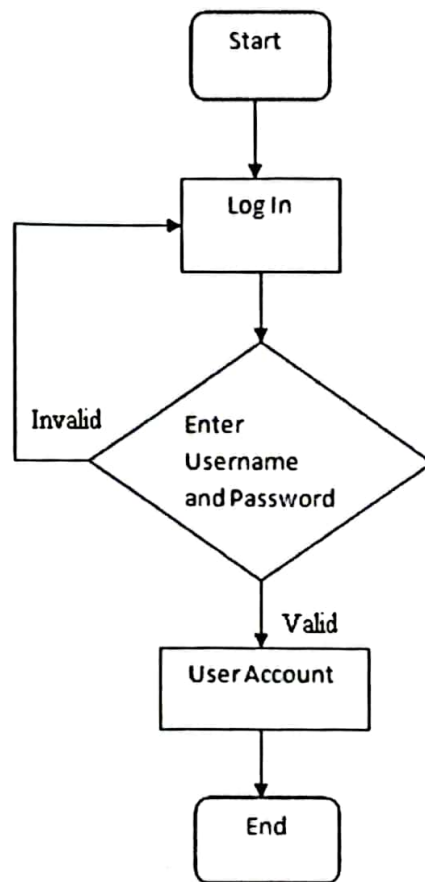


Figure 5.2: Sign up Flowchart Diagram



**Figure 5.3:** Log in Flowchart Diagram

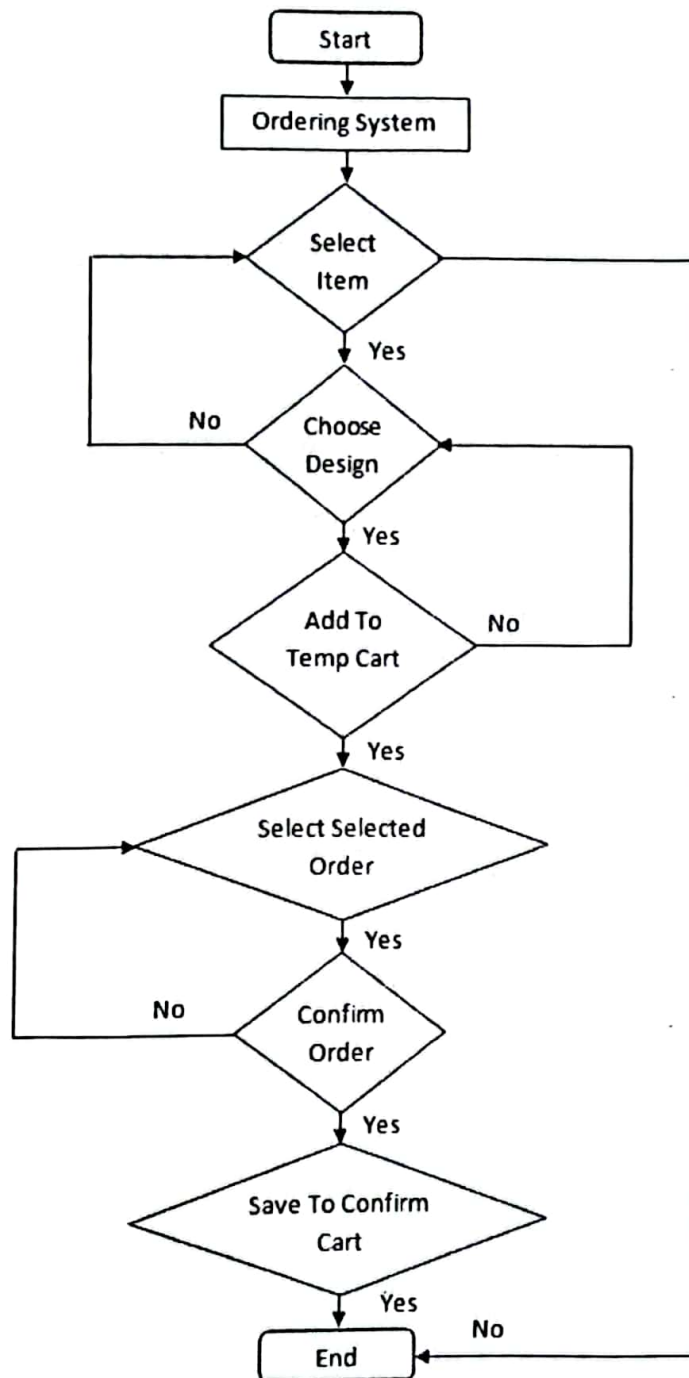


Figure 5.4: Ordering Flowchart Diagram

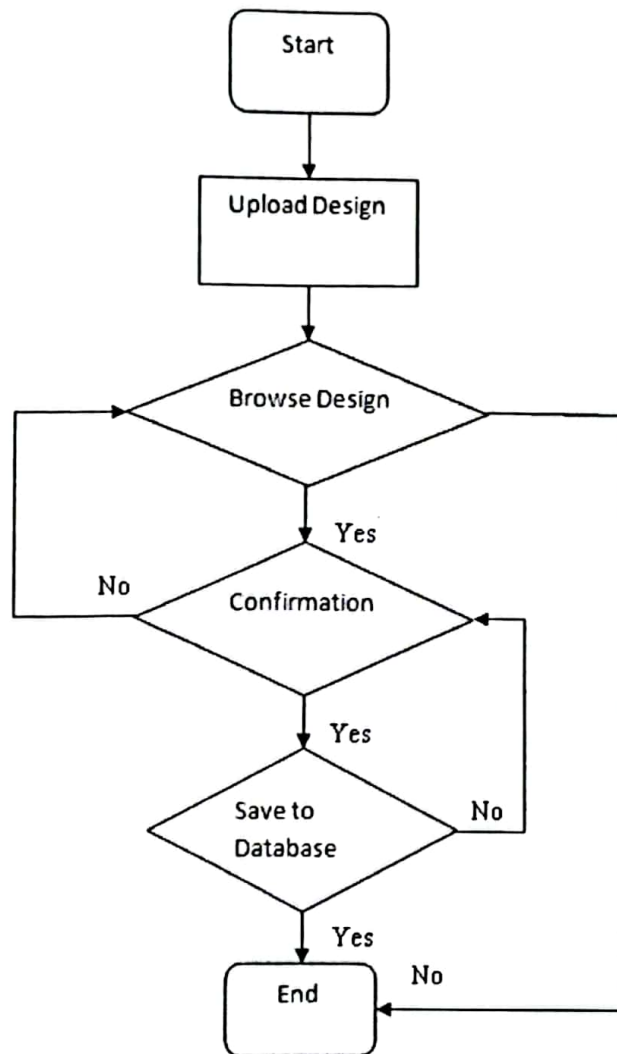


Figure 5.5: Upload Flowchart Diagram



### 5.3 System Structure Chart

**Table 5.1: Customer Log in, Sign up, Ordering System and Upload Design Structure English**

Process	Structure English
Customer log in	Begin If already sign up Enter username and password If invalid Re-type username and password. Else Valid. Else Go to sign up End
Customer sign up	Begin If already sign up Log in Else Click sign up button. Fill information. Confirmation. End
Customer ordering system	Begin If log in Click order button Fill ordering form Submit the form Else Log in first End
Upload design	Begin If log in If already click the order button Browse design Upload Else Click order button Else Log in first End

#### 5.4 Data Flow Diagram (DFD) and Entity Relation Diagram (ERD)

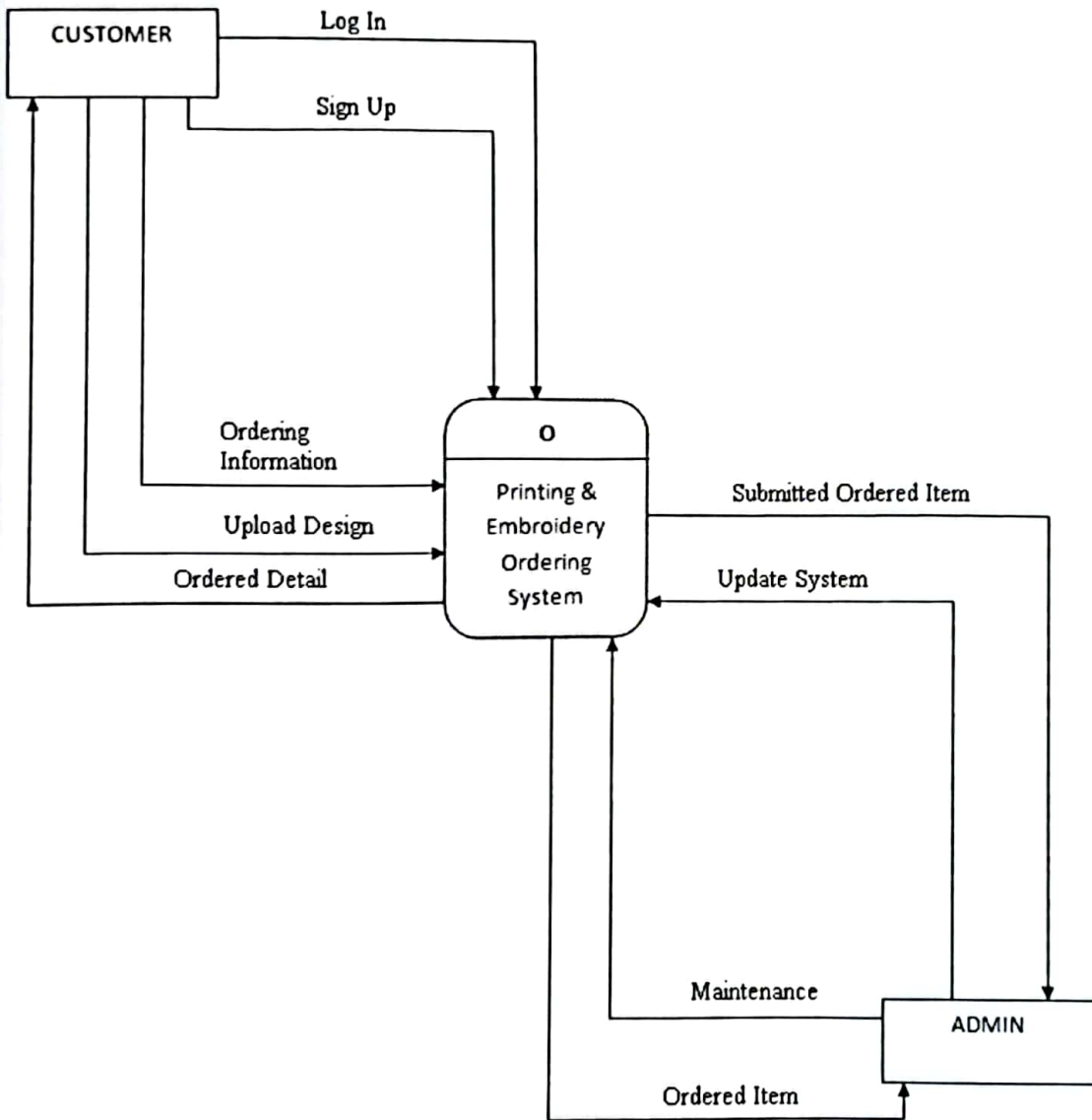


Figure 5.6: Context Level Diagram

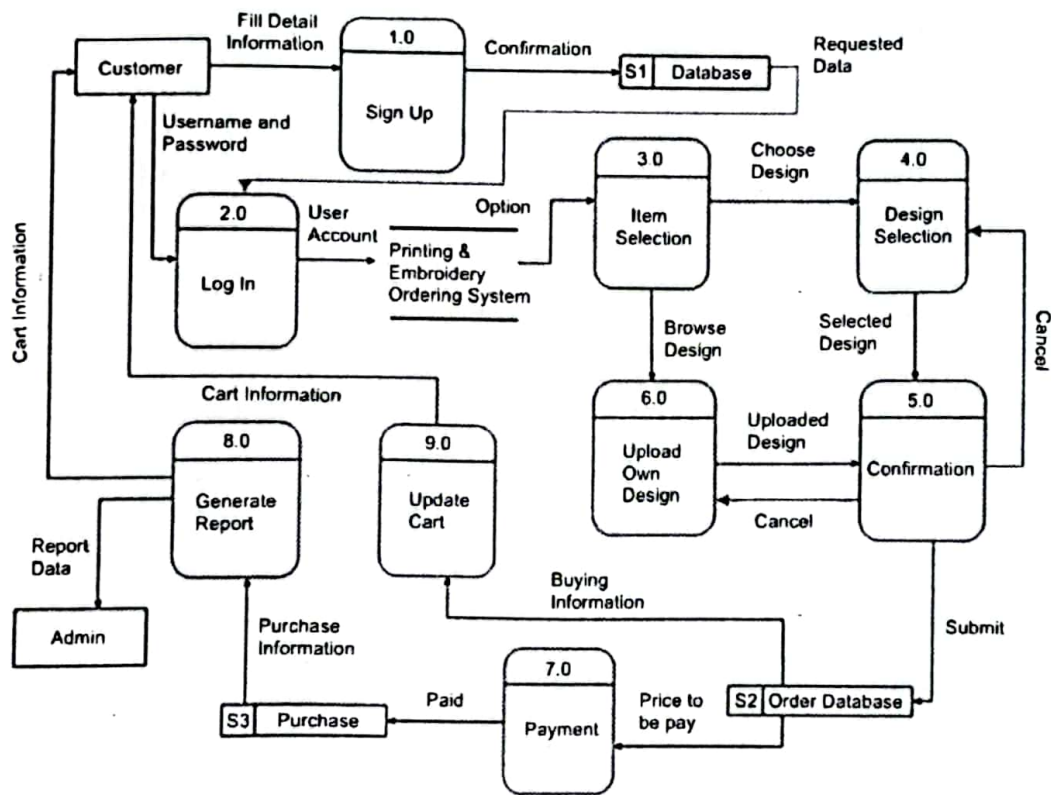


Figure 5.7: Data Flow Diagram Level 0

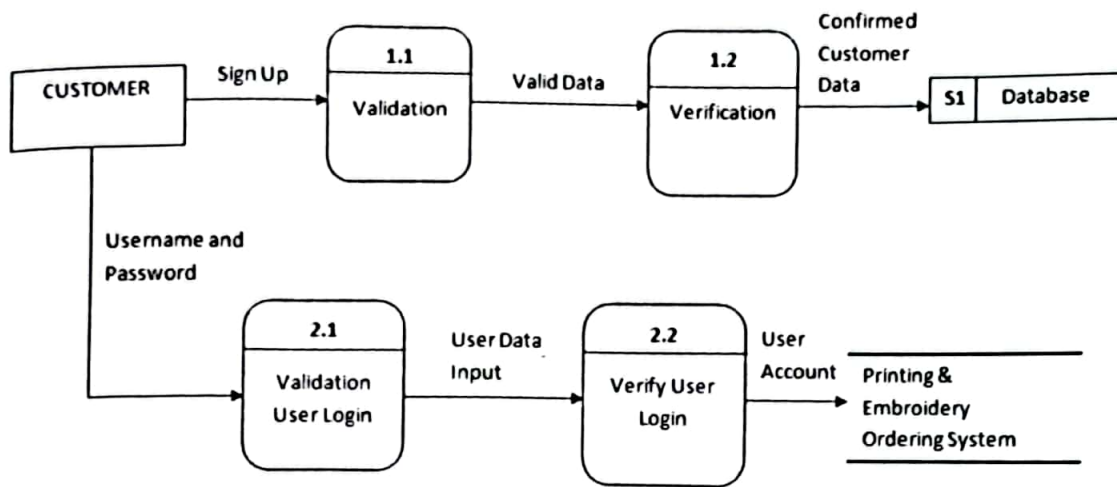


Figure 5.8: Data Flow Diagram Level 1

## 5.5 Entity Relationship Diagram (ERD)

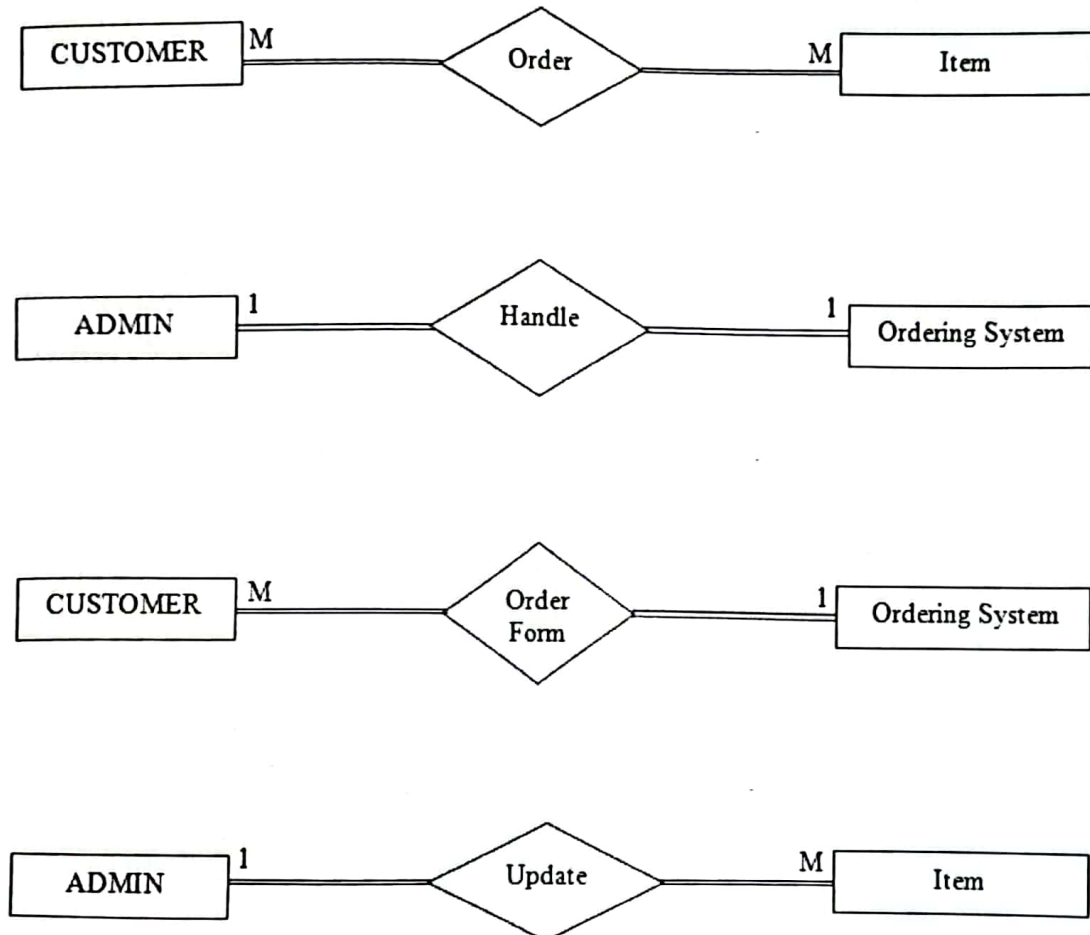


Figure 5.9: Relationship Types, Cardinality and Participation Constraints

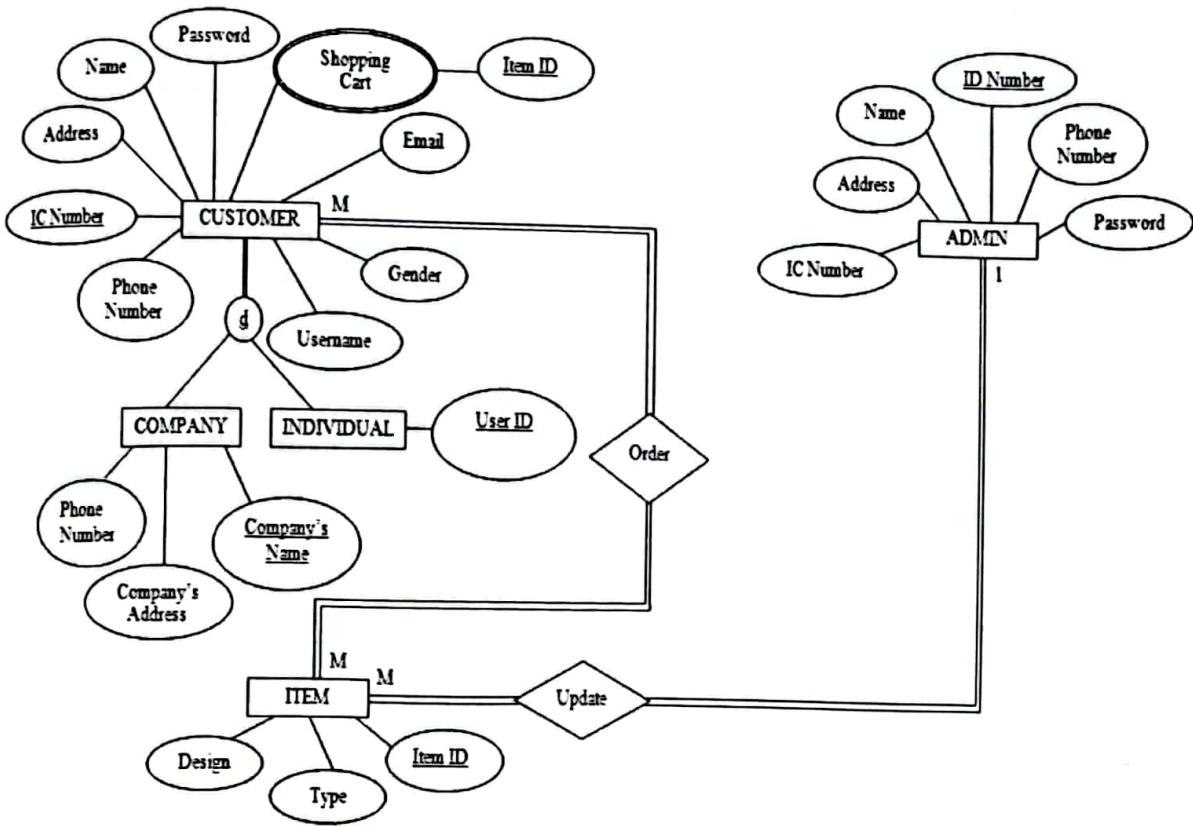


Figure 5.10: Entity Relationship Diagram (ERD)

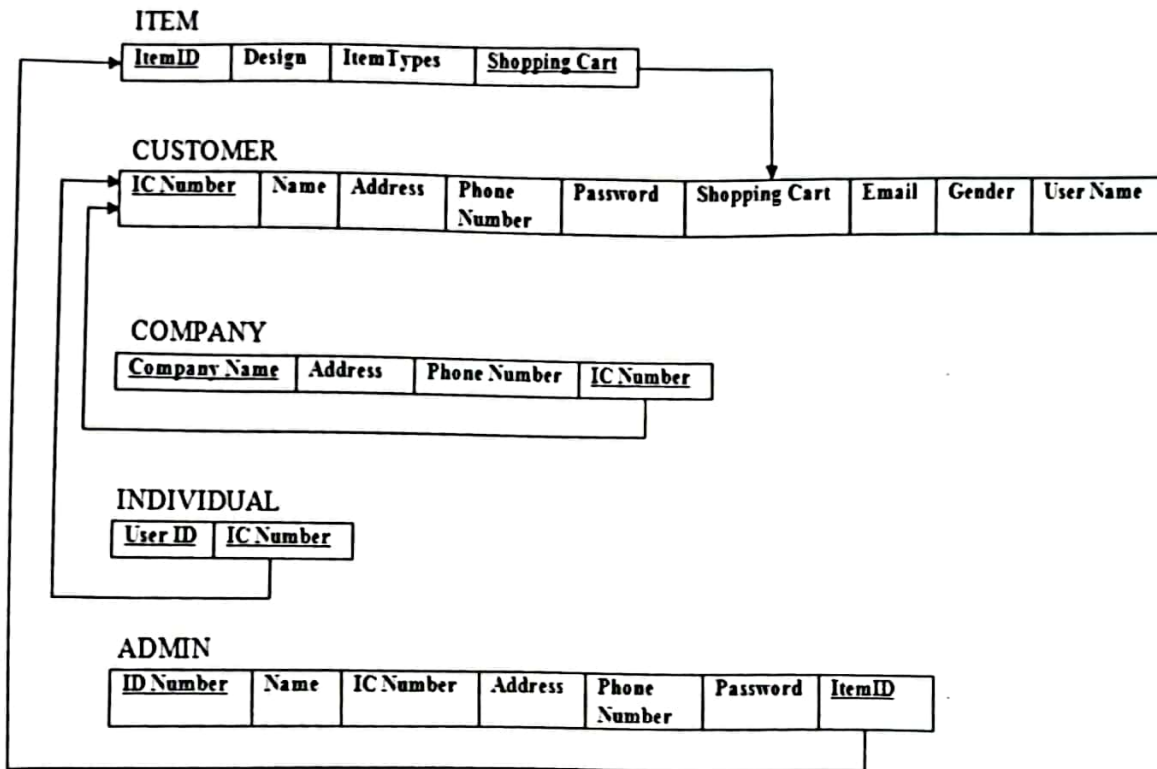


Figure 5.11: Database Scheme

## 5.6 Interface Design

Company Banner

Home Product Company's Profile Contact Us Order Help

Login

Username:

Password:

Log In

Advertisement & Picture

Don't have any account? Sign Up Here

Sign Up

Figure 5.12: Log In Interface Design



## Company Banner

Home Product Company's Profile Contact Us Order Help

Email :

Username :

Password :

Re-enter Password :

First Name :

Last Name :

Date of Birth :

Gender : Male  Female

Figure 5.13: User Sign Up Form Interface

## Company Banner

Home Product Company's Profile Contact Us Order Help

| Shopping Cart |

**Ordering Form:**

Name :

Address :

Phone Number : House  Mobile

Product :  Quantity:  Design:

Upload Design:

Design Image

Figure 5.14: Ordering Form Interface

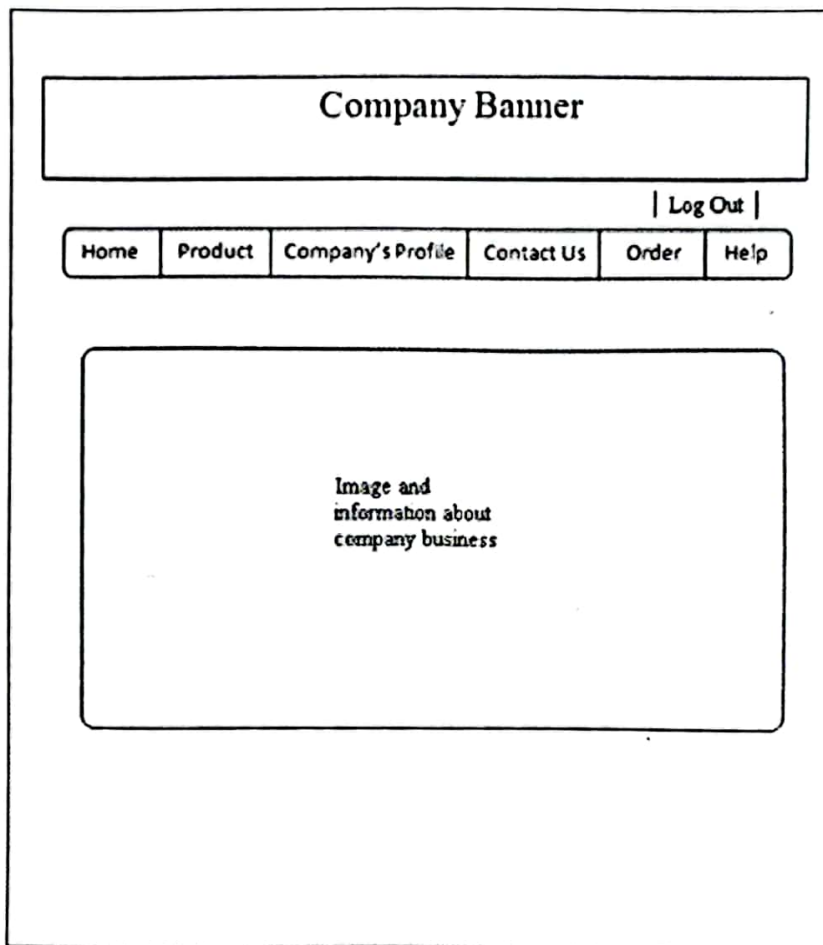


Figure 5.15: Home Page Interface

## **CHAPTER 6**

### **IMPLEMENTATION**

This chapter will explain about the outcomes of the project and it will also explain about the system by referring the screenshots taken by the author.

#### **6.1 Outcomes**

The system should be finished and ready to be used. This system should be user friendly as well, so that users will not face any difficulties while using this system. Users can easily interact with this system because users can easily understand the functionality of this system as everything has been made up easy for them. Admin also will be provided with admin page where they can easily maintain the system without bother the users dealing process.

#### **6.2 Screenshots of the system**

The system is ready to be tested and below is the screenshots of the system. This screenshots is a test result that has been done by the author.

## 6.2.1 Interface Design for User/Public

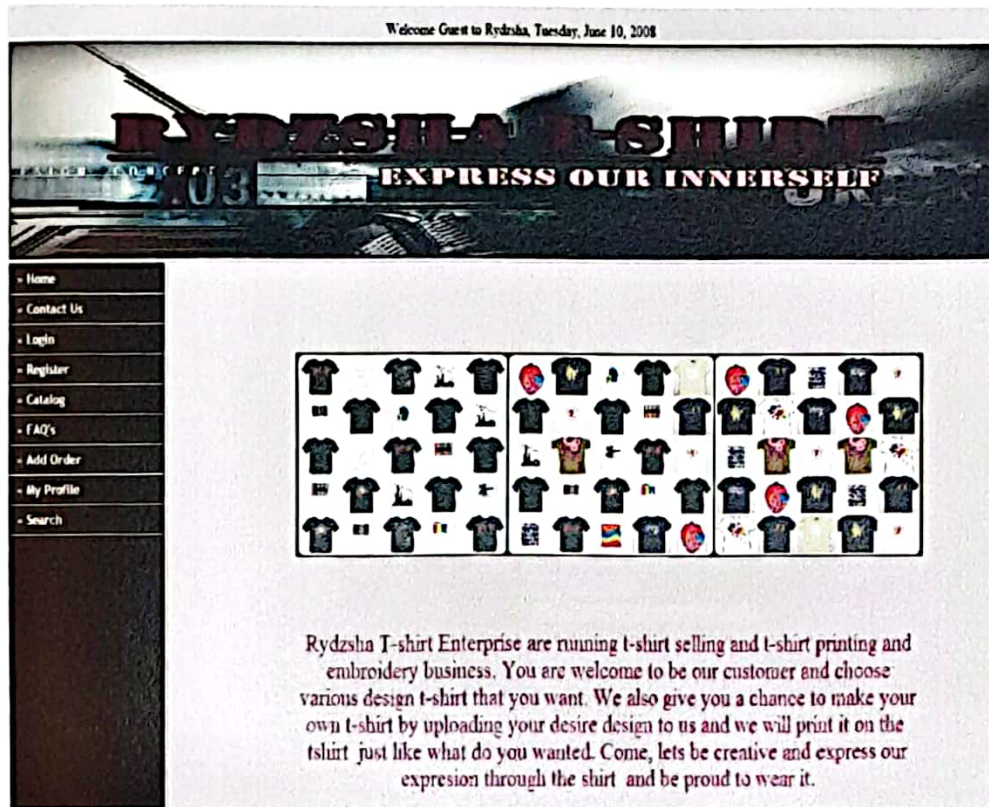


Figure 6.1: Main page for user

Figure 6.1 above show the homepage of this system. Everyone is allowed to go to this page even though they have not registered as a member yet. They also can view certain page without register as a member but they cannot make an order. Once they have registered they may login as a registered user.

Welcome Guest to RydsSha Tuesday June 10 2008

Navigation Menu:

- Home
- Contact Us
- Login
- Register
- Catalog
- FAQ's
- Add Order
- My Profile
- Search

Registration Form Fields:

- Name:
- Date of Birth:  (Calendar: Jun 2008)
- Gender:  (Male)
- IC Number:  (e.g. 860006385423)
- Phone Number:  (e.g. 601212545672)
- Address:
- Postal Code:
- State:  (Johor)
- E-mail:  (e.g. yyyy@yahoo.com)
- Username:
- Password:

Figure 6.2: Register page for user

Figure 6.2 above show the register page for user who does not have any account yet. They need to register first by fill all the require form before they can login into this system as registered user. They have to make sure that their details are correct so that easy for admin to contact or sending the order they have made.

Welcome Guest to Rydza, Tuesday, June 10, 2008

RYDZA & SHINE  
EXPRESS OUR INNERSELF

- Home
- Contact Us
- Login
- Register
- Catalog
- FAQs
- Add Order
- My Profile
- Search

User ID:

Password:

Login

Don't Have any account? [Register Here](#)

**Figure 6.3:** Page for Users/Public to Login

Figure 6.3 show the login page for registered user and admin. After login, user will be bringing to their user page while admin will be bringing to admin page. For users, they can proceed with their order while admin, they can check the order from users and do other admin function after login. The word "Guest" on the top of the page will be change to their username after they had login.

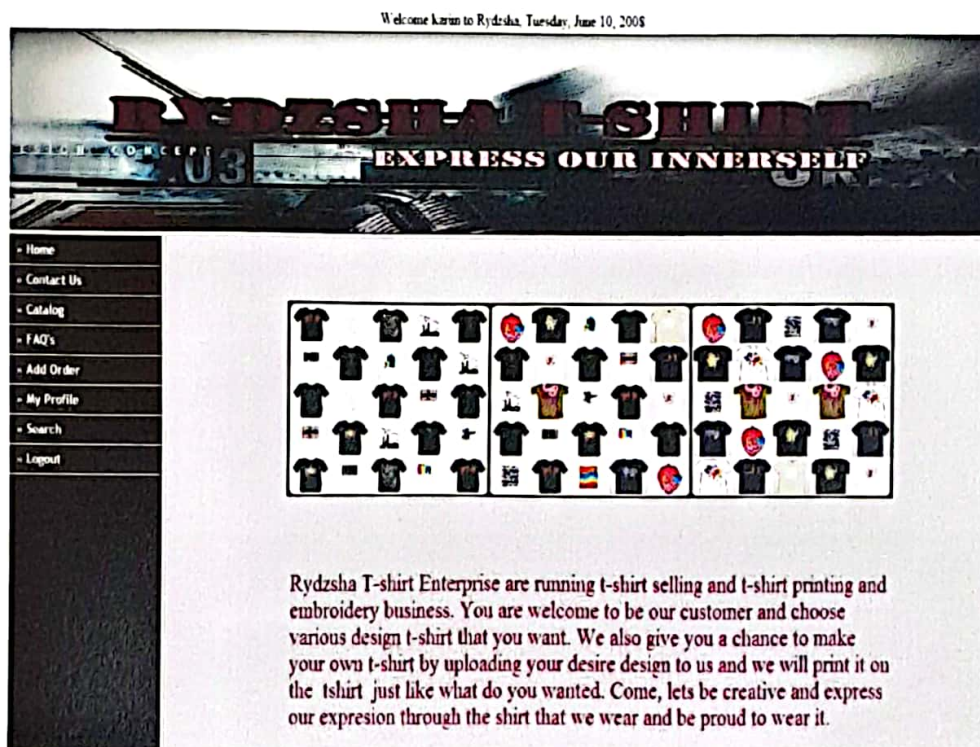


Figure 6.4: Home Page for Users After Login

Figure 6.4 show the user page after login. Once user had login into the system, user will be directed to their homepage. They can view anything and make an order. If they had finished, they can click on “Logout” button to log off from this system.



**RIPSAH SHIRT**  
EXPRESS OUR INNERSELF

**My Profile**

Name : Karim Bin Kassim  
 IC No : 1234567  
 E-mail : karim@gmail.com  
 Phone No : 2147483647  
 Address : No 19 Jalan Batu 6 Kg Tersusun Tambun  
 32140, Johor

To confirm the order, tick the selected order then click payment.

**My Cart**


Home My Cart Confirm Cart Edit Profile Payment Add Order

Date	Category	Quantity	Description	Price(RM)	Total(RM)	Confirm Order	Action
2023-06-16	Drinks Collection	1		120.00	120.00	<input type="checkbox"/>	<a href="#">Delete</a>
				<b>Total(RM)</b>	120		

Figure 6.5: My Profile Page for User

Figure 6.5 show the profile of the user. User can view this page after login by click on My Profile. This page will show the user profile like name, IC number, email, phone number and address. This profile also will show their My Cart. My Cart is just like temporary cart for user where they can delete the order that they had add if they want to cancel the order. If they not delete the order, it will remain in this My Cart. User also can edit their profile by clicking on the "Edit Profile" button. If user wants to confirm their order they can select which order they want to confirm by tick the

selected tick box and click at "Payment" button. After they had made a payment this their selected order will be transfer to My Confirm Cart. They can view their confirm cart by clicking on "My Confirm Cart" button. If they wan to add more order they can click on "Add Order" button.



**EXPRESS OUR INNERSELF**

**My Profile**

Name : Karim Bin Kassim  
 IC No : 1234567  
 E-mail : karim@gmail.com  
 Phone No : 2147483647  
 Address : No 19 Jalan Batu 6 Kg Tersusun Tambun  
 32140, Johor

**My Confirm Cart** | Back |


Date	Category	Quantity	Description	Price(RM)	Total(RM)	Status
2009-06-03	Customs Shirt	1	 <ul style="list-style-type: none"> <li>Material: Cotton</li> <li>Color: White</li> <li>Size: M</li> <li>Price: RM 25.00</li> <li>Design: Plain</li> <li>Buttons: 2x2</li> <li>Collar: Spread</li> <li>Length: Regular</li> <li>Buttons: 2x2</li> <li>Buttons: 2x2</li> </ul>	25.00	25.00	In process

Figure 6.6: My Confirm Cart Page for User

This Figure 6.6 will show the confirm cart of the user where it will stored and view the order that user had confirmed. It similar like the “My Profile” page but there is a little changing in the cart where in this confirm cart it contain order status. If the order is still in progress the status will display “In process” and if the order had done, the status will display “Done”. To go back to previous page which is “My Profile” page, user just needs to click on “Back” above the cart.

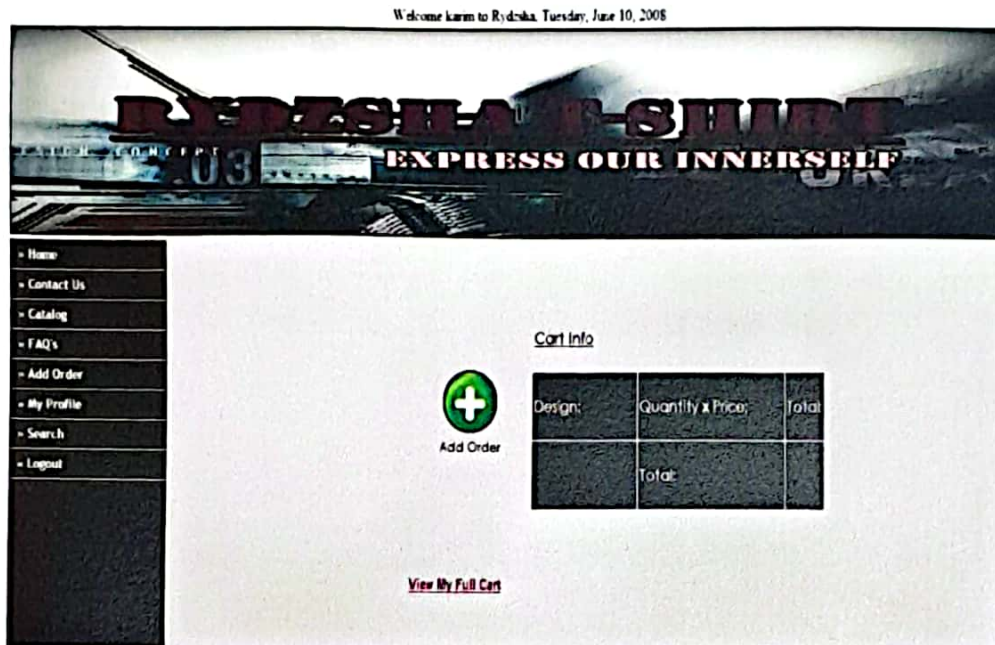
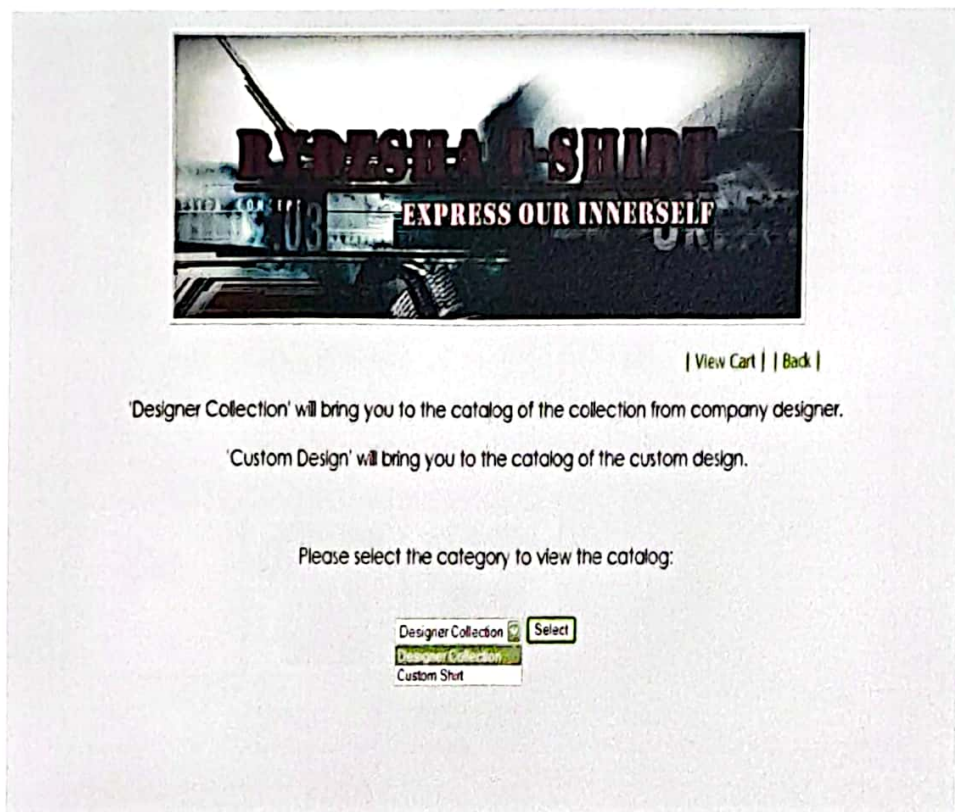


Figure 6.7: Add Order Page for User

Figure 6.7 show the add order page for user who want to make an order. To proceed with the order, user just needs to click on “Add Order” button then it will bring user to other page. In this page, it will show user the simple cart that contains the order they had made but it just a temporary cart. User can view their full cart as well, by click on the “view my full cart” link.



**Figure 6.8:** Select Category Page

Figure 6.8 will show the select category to view the catalogue. When the user click on "Add Order" button in Add order page, user will be directed to this page. User also will be directed to this page when they click on View catalogue button from menu bar. User need to choose which category they want to proceed with order. There only two category which are "designer collection" and "custom shirt". Designer collection is for user who wants to order t-shirt from design collection of the company's designer where custom shirt is for user who wants to custom their t-shirt with their own design.



Figure 6.9: Catalogue for Designer Collection

Figure 6.9 will show the catalogue of designer collection where it display the design t-shirt available with the design name and description of the design. If user wants to order selected t-shirt they can click on the t-shirt image they want and they will be directed to another page for they to fill the require form needed to order the t-shirt.

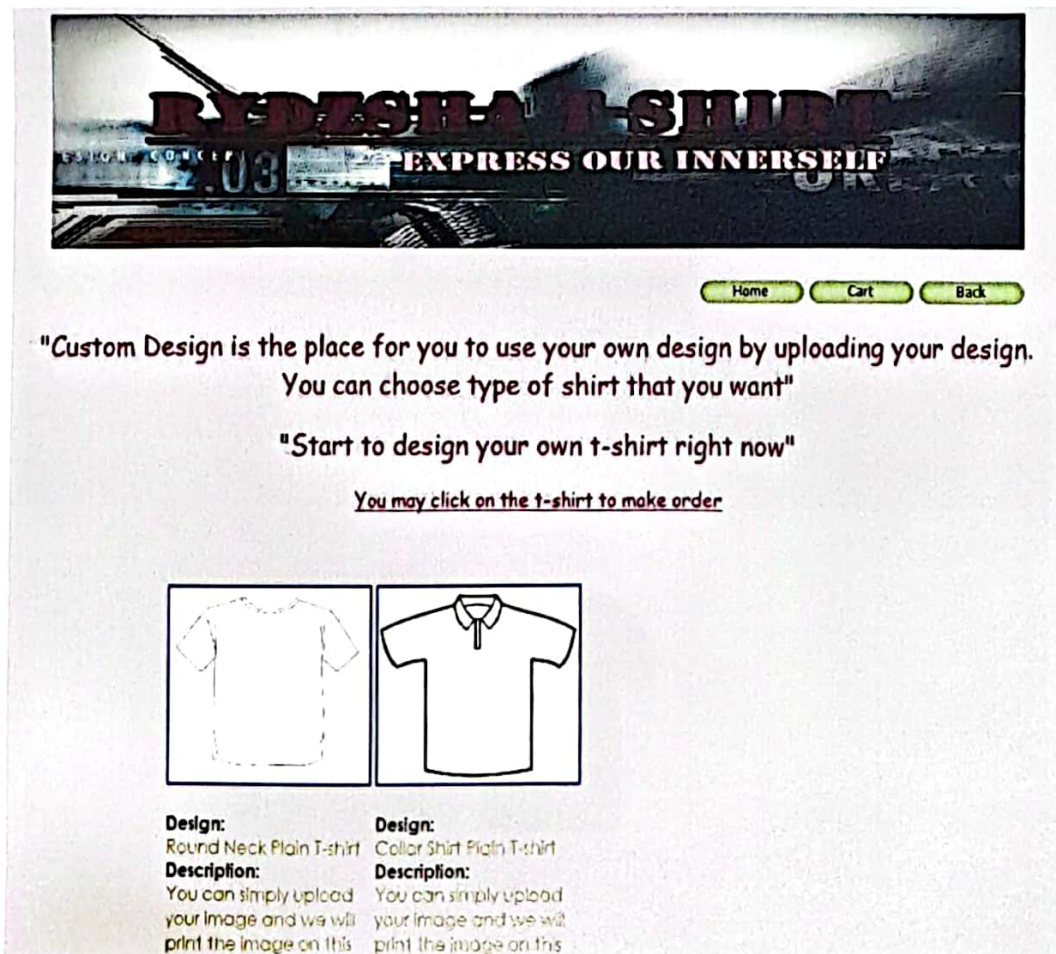


Figure 6.10: Catalogue for Custom Shirt

Figure 6.10 will show the catalogue of designer collection where it display the type t-shirt available with name and description. For this category, there only two type of t-shirt available which are round neck shirt and collar shirt. If user wants to order selected t-shirt they can click on the t-shirt image they want and they will be directed

to another page for they to fill the require form needed to order the t-shirt. For this category also, user can custom their t-shirt by upload their own design.

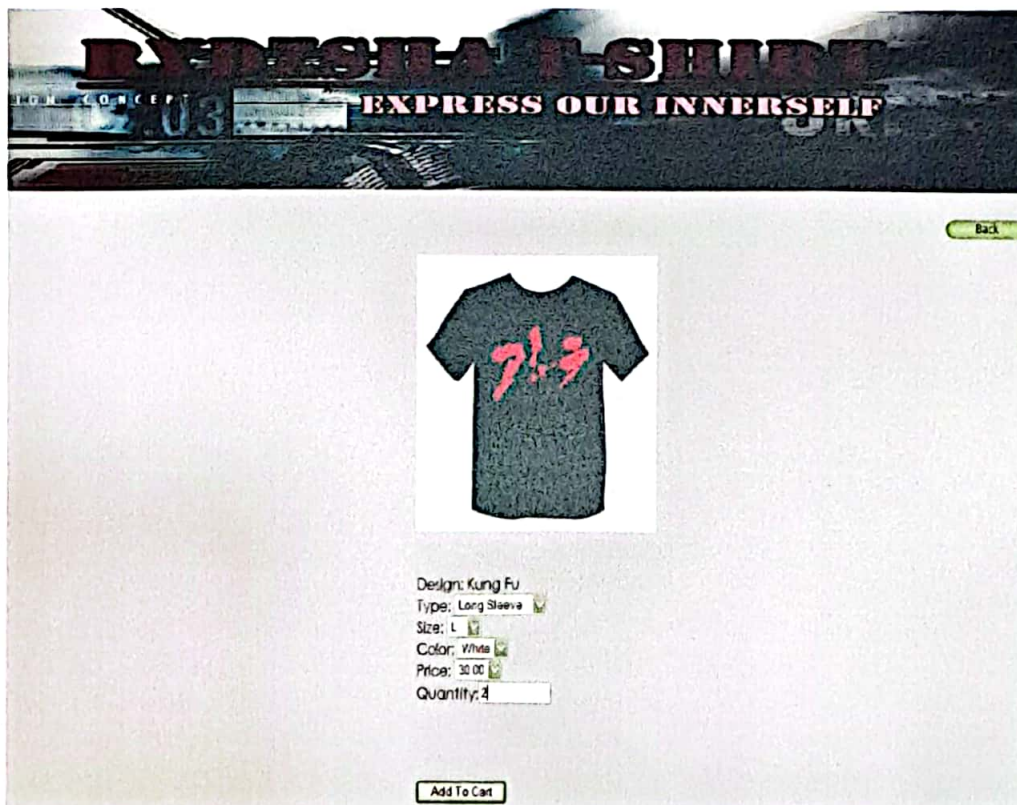


Figure 6.11: Order Form of Designer Collection

Figure 6.11 show the user the order form of designer collection. User need to choose the type whether they want short sleeve or long sleeve. Then they must choose the size and colour. The price are link with the type, if they choose short sleeve the price will



be rm25.00 and if they choose the other type, the price will change to the other stated price. Then user needs to enter how many t-shirt they want to order and click Add to Cart button to buy the t-shirt. The order will be place in my cart (temporary cart) until the user has confirm the order.

Refer this image to decide the location of uploaded design you want to place.

**Warning:** We will not approve design contain nudity and violence or your order will be cancel automatically.

Design: Color Shirt Piran T-shirt  
 Type: Long Sleeve  
 Size: L  
 Color: White  
 Price: 30.00  
 Quantity:

Size Image: Small  
 Image Price: 1.00  
 Location: A  
 Method: Printing

Figure 6.12: Order Form of Custom Shirt

Figure 6.12 show the user the order form of custom shirt. User need to choose the type whether they want short sleeve or long sleeve. Then they must choose the size and colour. The price are link with the type, the price is different according to the type. Then user needs to enter how many t-shirt they want to order. Then user can upload the design they propose and choose the image size. The image price also follow the size of image, each size has different price. Then user needs to choose the location to place the design by referring the image next to the form. Finally user can add the order

by click on Add to Cart button. The order will be place in my cart (temporary cart) until the user has confirm the order.

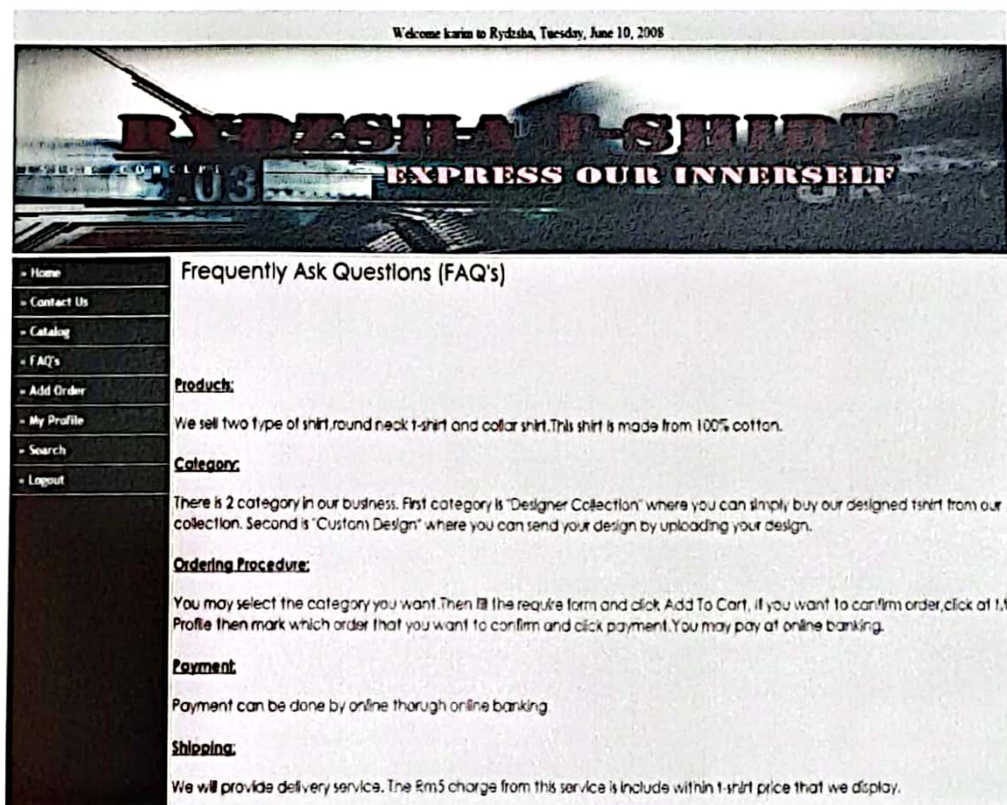


Figure 6.13: Frequently Ask Questions Page (FAQ's)

Figure 6.13 show user about the Frequently Ask Questions (FAQ's). This FAQ's can guide the user and inform the user about company procedure and how to make an

order. It shows the information that can make user easily understand the system and business procedure as well.

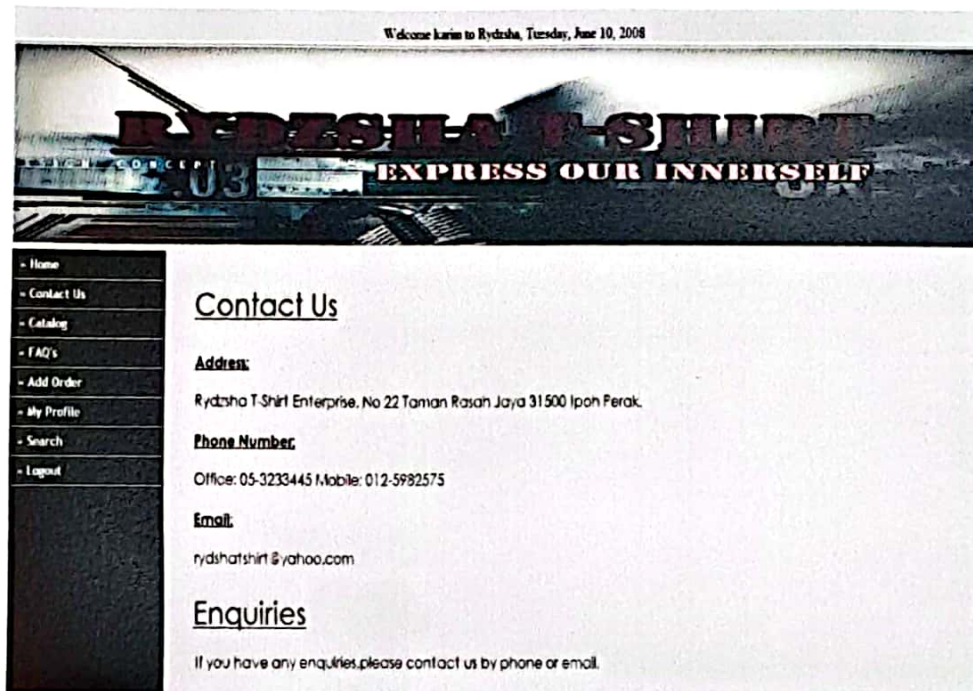


Figure 6.14: Contact Us Page

Figure 6.14 will show user the Contact Us page. If user has any enquiries, they can contact the company through phone number or email. Company address also available in this page for user.

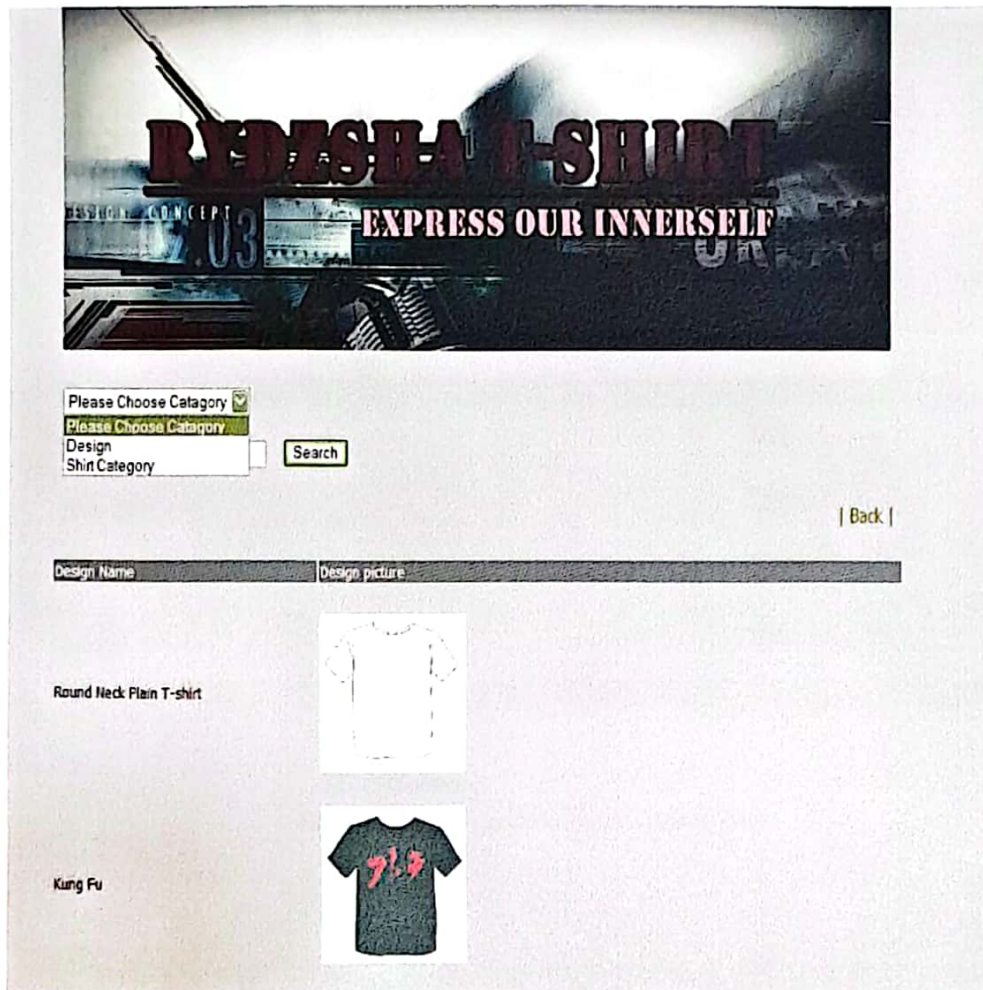


Figure 6.15: Search Page

Figure 6.15 shows the page about search function where user can search things like they want for example t-shirt design in this system. User just need to select the category and insert the keyword that they want and click search button. Then the system will display what the he or she want to search.




| Home |

Date Order	View Order
2009-06-04	<a href="#">View</a>
2009-06-03	<a href="#">View</a>
2009-06-02	<a href="#">View</a>
2008-06-10	<a href="#">View</a>

**Figure 6.16:** Customer Order Page for Admin View

Figure 6.16 shows the details order made by customer. This page is for admin only. It will display the order by date and to view which customer had make an order on certain date and the details of order, admin have to click on "View".



| Back |

Customer	View Order	Action	Status
Karim Bin Kassim	<a href="#">View</a>	<a href="#">Delete</a>	<a href="#">Change</a>
Khairul Azraie Bin Ahmad	<a href="#">View</a>	<a href="#">Delete</a>	<a href="#">Change</a>
Mohd Hirwan	<a href="#">View</a>	<a href="#">Delete</a>	<a href="#">Change</a>

Figure 6.17: Customer Order Page for Admin View

Figure 6.17 is the next page from figure 6.16. When admin has click on view on certain date. It will display the page with the user who had made an order on that date. Admin can view the order detail from this page. Admin can put the status and change the status according to the work progress by click the “Change” in status column.

Welcome admin to Rydsika, Wednesday, June 11, 2008

# RYDESILIA SHIRT

EXPRESS OUR INNERSELF

- Home
- Contact Us
- Add Product
- Edit Product
- Catalog
- FAQ's
- Add Order
- My Profile
- Search
- Customer Order
- Admin Search
- Report
- Logout

Image Tshirt	<input type="text"/>	Browse...
Product	Designer Collection	
Type	Long Sleeve	
Name	Design	
Description	<input type="text"/>	
Price	<input type="text"/>	
Color	White	
Size	S	

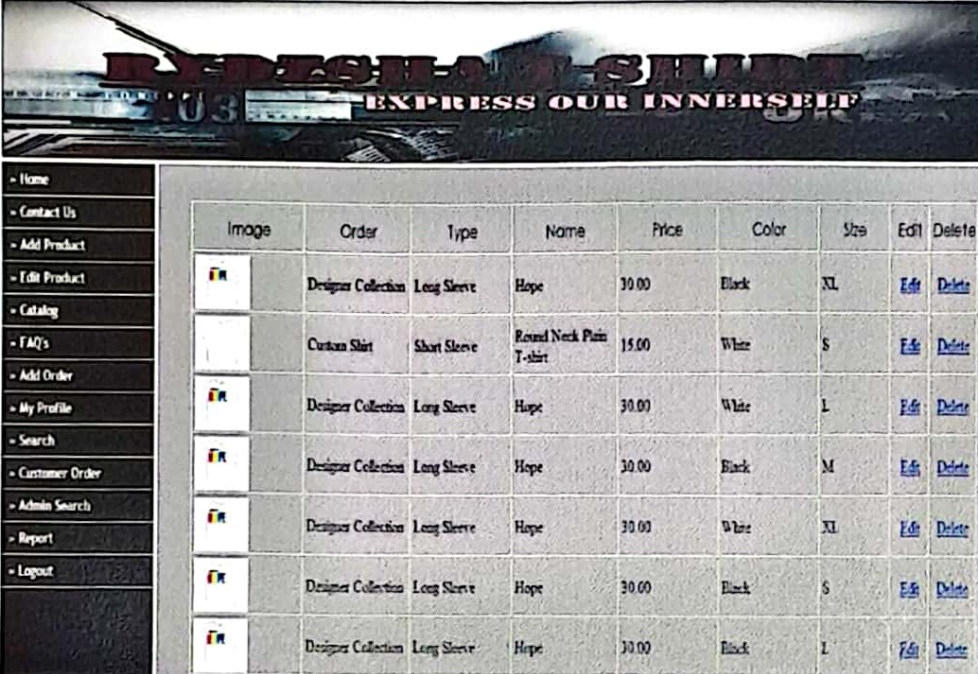
Submit

Figure 6.18: Add Product Page for Admin

Figure 6.18 shows the add product page where it is only for admin to add new product into the catalogue. Admin need to fill all the require form and click submit. Then the product will stored in database and can be view by user.



Welcome admin to Rydaba, Wednesday, June 11, 2008



**DESIGNER SHIRT**  
EXPRESS OUR INNERSELF


- Home
- Contact Us
- Add Product
- Edit Product
- Catalog
- FAQ's
- Add Order
- My Profile
- Search
- Customer Order
- Admin Search
- Report
- Logout

Image	Order	Type	Name	Price	Color	Size	Edit	Delete
	Designer Collection	Long Sleeve	Hope	30.00	Black	XL	<a href="#">Edit</a>	<a href="#">Delete</a>
	Custom Shirt	Short Sleeve	Round Neck Plain T-shirt	15.00	White	S	<a href="#">Edit</a>	<a href="#">Delete</a>
	Designer Collection	Long Sleeve	Hope	30.00	White	L	<a href="#">Edit</a>	<a href="#">Delete</a>
	Designer Collection	Long Sleeve	Hope	30.00	Black	M	<a href="#">Edit</a>	<a href="#">Delete</a>
	Designer Collection	Long Sleeve	Hope	30.00	White	XL	<a href="#">Edit</a>	<a href="#">Delete</a>
	Designer Collection	Long Sleeve	Hope	30.00	Black	S	<a href="#">Edit</a>	<a href="#">Delete</a>
	Designer Collection	Long Sleeve	Hope	30.00	Black	L	<a href="#">Edit</a>	<a href="#">Delete</a>

Figure 6.19: Edit Product Page for Admin

Figure 6.19 shows the edit product page where admin can edit the product information that had been stored in database. If admin want to delete the old product, he or she can simply delete the product by click the "Delete" and the product will be remove from database.

Welcome admin to Rydasta, Wednesday, June 11, 2008



Report

Total Order  
11

Total Registered User  
9

Total Design  
51

Generate Report  
Please Choose Category

Date of Order	IC Number	Quantity	Price	Total
2009-06-03	234	2	25.00	50.00
2009-06-03	1234567	2	25.00	50.00
2009-06-03	1234567	2	25.00	50.00
2009-06-02	234	1	30.00	30.00
2009-06-03	12333333	1	25.00	25.00

Figure 6.20: Report Page for Admin

Figure 6.20 shows the report to admin. It will show the total order made by customer, total registered user and total design in this system. To generate the report, admin should choose the category and insert the keyword just like the search function and then click on "Generate" button. The report will be generated on this page.

## **CHAPTER 7**

### **TESTING AND VERIFICATION**

#### **7.1 User comments and feedback**

The author had made a testing on this 85% completed system. The author had presented the system to the client from Rydzsha T-shirt Enterprise. The client had testing the new system and some enhancement has to be done by author to make the system more perfect and follow the requirement and specification needed by the client.

## CHAPTER 8

### CONCLUSIONS

#### 8.1 Results

The system is completed and ready to be used. This system is a user-friendly system that will help both parties, admin and user on how to use it. Admin and user also will easily understand the system. For user, they will be able to make order through the system and they are able to upload their desired design as well. For admin, they will be able to check the transaction and maintain the system.

#### 8.2 Problems faced

While doing development, implementation and documenting process on this project, the author had encountered several problems. The lists of problems are as stated below:

- The author faced the difficulty at the early stage because this is the first system to be built. Basically, the author doesn't have any knowledge yet about the system and what functions to be put into the system, but after doing a research and studying on similar systems, opinions given by people and also the surveys that the author has

made, the author manage to get the explanation and understanding about the printing and embroidery ordering system.

- Functionality of the system is not clear enough therefore the author need to do more research on the system.

### **8.3 Limitations**

There are several minor limitations encountered when author developing the system.

Below are the limitations that occur in the system.

- Some functions cannot be done due to problem development.
- Checking order only can be viewed through online.
- Payment only can be done via online banking.

### **8.4 Future Work**

The system is ready to be used, some enhancement need to be made if possible to follow the specification and requirement needed time by time. Future planning for the system is

- Enhance it to make it more user friendly, marketable and more global to be used for all people inside and outside Malaysia.
- Make more similar system about the other business to make the user and people familiar with e-commerce system.

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# APPENDIX A

## Example of Survey Questions



1) Do you have your own computer?

Yes  No

2) Do you always use a computer?

Yes  No

3) Where is the place(s) that you always use the computer?

- Home
- Office
- Cyber Café
- Campus

If any else, please identify: \_\_\_\_\_

4) What is your purpose by using the computer?

- For assignments
- Browsing the internet for information/data
- Playing game

If any else, please identify: \_\_\_\_\_

6) What kind of website you visited the most?

Online newspapers

Blogs

Friendster/MySpace/Facebook

If any else, please identify: \_\_\_\_\_

7) Have you ever heard about online computer system?

Yes       No

If no, proceed to question no 10

8) Do you ever make transactions online?

Yes       No

If no, proceed to question no 10

9) What type of online transaction application do you use?

Maybank2u.com

Cimbclicks.com

Ebay.com

If any else, please identify: \_\_\_\_\_

10) Are you satisfied with the system?

Yes  No

If no, please explain why: \_\_\_\_\_

11) What type of online transaction do you think people always make?

- Bill payment
- Money transfer
- Buying items

If else, please identify: \_\_\_\_\_

12) From your opinion, what do you think about e-commerce business or business through the internet?

\_\_\_\_\_

13) Have you ever made a t-shirt embroidery or printing order?

Yes  No

If no, proceed to question no 16

14) If yes, do you have to go to the business premise to make an order even though the premise is far from your area?

Yes  No

15) Does it cost you a lot of hassle and waste in terms of time/money?

Yes  No

Explain why: \_\_\_\_\_

16) As a customer, which ordering method do you prefer the most?

Manual method  Through online system

Explain why: \_\_\_\_\_

17) Do you think the online ordering system is easy for customer to use?

Yes  No

If no, explain why: \_\_\_\_\_

18) Do you think online ordering system is suitable to use these days?

Yes  No

Explain why: \_\_\_\_\_

19) If you are the customer, what features would you like to be in the t-shirt embroidery and printing ordering system?

- News and information about the business
- Help section
- Product information
- Section to upload designs

If any else, please identify: \_\_\_\_\_

20) Do you think the website must contain the instruction on how to make an online ordering?

- Yes     No

21) Do you think the ordering online system give benefits to both parties?

- Yes     No

Explain why: \_\_\_\_\_