



## AITCS

Homepage: <http://publisher.uthm.edu.my/periodicals/index.php/aitcs>  
e-ISSN :2773-5141

### UTHM E-Commerce Website

**Muhammad Munajatullah Mohd Adnan<sup>1</sup>, Noraini Ibrahim<sup>1\*</sup>**

<sup>1</sup>Faculty of Computer Science and Information Technology,  
Universiti Tun Hussein Onn Malaysia, Parit Raja, Batu Pahat, 86400, MALAYSIA

DOI: <https://doi.org/10.30880/aitcs.2022.03.02.064>

Received 19 June 2022; Accepted 28 October 2022; Available online 30 November 2022

**Abstract:** The students of UTHM currently face a significant gap in selling or buying items required at the university from another university student. It is common that university students are having challenges when finding educational materials that can be bought from students who already have them for a reasonable price. This study aims to provide a solution for eradicating the gap between the student seller and the student buyer of UTHM. Specifically, an online software solution is given where the students can use it to buy and sell its that they need. To identify the definite requirement of the university students, a survey has been carried out among the students. The respondents were randomly chosen and requirements were noted in two main sections named seller and buyer as those two are the two main components of the system. The results clearly showed the hardships that students had to face to find an essential educational supplement in a short amount of time for a reasonable price and the hardships that students had to face to sell an unwanted item that provide them financially. These results suggest that students are more likely to use a new system that is focused on a student audience in order to buy and sell educational items. On this basis, the solution is implemented as on online shopping system focused on students of UTHM.

**Keywords:** E-Commerce, Online Shopping, Buying and Selling, Security

#### 1. Introduction

E-commerce stands for electronic commerce and pertains to trading in goods and services through the electronic medium. B2B, B2C, C2C, and similar opportunities help consumer preferences and consumer markets developing electronic infrastructure for challenges of the future [1]. E-commerce has revolutionized business, changing the shape of competition with the internet (The NET), the computer communication network creating an e-commerce marketplace for consumers and business. With developments in the Internet and Web-based technologies, distinctions between traditional markets and the global electronic marketplace-such as business capital size, among others-are gradually being narrowed down. E-commerce may thus be defined as those commercial transactions carried out using electronic means, in which goods or services are delivered either electronically or in their intangible or tangible form. The web is a series of pages. Each webpage has a unique address which when entered into a web browser will take you directly to that page. Most web addresses begin with the letters 'www' which stands for World Wide Web. A group of related pages is referred to as a website and the address of all the pages within that website will generally start with the same name.

---

\*Corresponding author: [noraini@uthm.edu.my](mailto:noraini@uthm.edu.my)  
2020 UTHM Publisher. All rights reserved.  
[publisher.uthm.edu.my/periodicals/index.php/aitcs](http://publisher.uthm.edu.my/periodicals/index.php/aitcs)

Currently, the only available university e-commerce platform that is targeted at UTHM students is using Facebook Marketplace. Sellers will post a listing on the platform with the price and buyers will contact them through Facebook in order to make a deal. The problem with the current process is students of UTHM do not have a specific platform to market their products or services to other students. They must compete with experienced sellers, and they may zero to little experience in selling or purchasing items and services online [3]. There is also no sorting system of items sold in the current platform thus making it hard for students to search for a specific product or item that they are interested in.

Therefore, the project will propose an e-commerce website dedicated specifically to students of UTHM. Only students of UTHM can log in to the website to advertise and sell their products making the competition for business lowered. Students can create their own unique store on the website and offer products or services that they want [5]. The website will also have ease of navigation with the categorization of each product making it easier to browse through and find the product that a student wants. The website will be equipped with an administrator dashboard to track the total sales, net profit, and overall performance of their own store. Students can also leave ratings to other students' store and their experience purchasing a product or service. This project will encourage students in helping other students' businesses while also giving students an income source.

## **2. Related Work**

This section discusses all the related works collected to develop the developed system.

### **2.1 Facebook Marketplace**

Facebook is where people connect, and in recent years more people have been using Facebook to connect in another way: buying and selling with each other. This activity started in Facebook Groups and has grown substantially. More than 450 million people visit buy and sell groups each month from families in a local neighbourhood to collectors around the world [2]. Marketplace is a convenient destination to discover, buy and sell items with people in your community. Marketplace makes it easy to find new things people love, and find a new home for the things people ready to part with [7]. Facebook is a web-based platform with frontend built using React and backend is web APIs are built using Scala, Hack, Java and PHP. Facebook is built upon MYSQL database system and currently generates 4 petabytes of data per day.

The marketplace which is a feature of Facebook platform allows the users to add items to be sold with in a selected area. This will help the users to identify the sellers and do the buying with some trust. The main disadvantage of marketplace is that Facebook only take part in finding the seller for a buyer and vice versa[6]. After the initial contact, Facebook does not take any authority on handling the transactions. The seller and buyer need to handle that by their own. There is where some concerns have been raised with fraud. All the sellers in the area are not trust worthy to buy from and also all the buyers in the areas are the same. As a result of that, the authentication of the user who does the selling and buying needs to be there in the platform which is not introduced yet. Also, it will be hard to do so since Facebook does not take part in the transaction process.

Facebook marketplace has inspired the building of UTHM E-Commerce website to add this user authentication and authorization to increase the trust of users. Also, the reports that can be generated at the end of the month for the seller and the summary of items bought by the seller are features that have been added to the proposed website scheme.

### **2.2 Shopify**

Shopify is cloud-based software that operates on a subscription model. It gives small business owners access to an admin panel where they can enter and store data, add products, and process orders. The software is easy to use and comes with an easy learning curve, as a result, users can get the online store up and running quickly. Shopify subscription includes secure, reliable site hosting for the website. Users do not have to worry about the site crashing during peak traffic or hackers hijacking the transactions. With 99.98% uptime and a free SSL certificate, Shopify provides the security that users require.

Shopify supports many different types of eCommerce businesses. Shopify users can sell physical products, digital products, or drop-shipped products on Shopify. Shopify sellers use the software to market a wide variety of products.

Out of all the advantages that Shopify offers, there are some disadvantages that students cannot bear. Shopify comes preloaded with almost all the features small businesses need to build an online store. However, every business has some specialized requirements, and Shopify typically does not have the features to meet those specific needs. In that case users has to use add-ons. Many merchants end up needing to purchase a handful of add-ons to make this shopping cart work the way they need it to. While Shopify offers almost every basic feature, the software is lacking many advanced features. Users have to find these features in the form of add-ons, which are not free. The cost of adding just three add-ons can double the monthly fees. Although most shopping carts have dropped their transaction fees entirely, Shopify has retained its 0.5% to 2.0% fees. Users do have the option to have Shopify waive these fees when they accept payments through Shopify Payments.

Shopify is built on Ruby on Rails along with Go to do job processing. Its database is powered by MySQL and uses Docker container to power individual shops. With the Shopify analysis, the proposed system moved towards an online-shop model where sellers can have a profile and build up the image over the internet which is similar to having a brand. This model empowers the UTHM E-Commerce website

### 2.3 Amazon

Amazon Web Services (AWS) is a comprehensive, evolving cloud computing platform. The first AWS offerings were launched in 2006 to provide online services for websites and client-side applications. Amazon's Elastic Compute Cloud (EC2) and Simple Storage Service (S3) are the backbone of the company's large and growing collection of Web services.

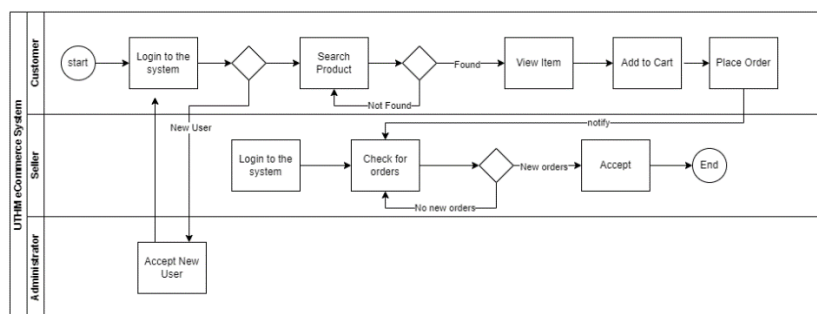
Amazon online store is a huge place that has large number of categories to choose from. The users basically can sell anything in amazon. The main disadvantage is that the user not targeted on university students. The system may or may not have items that a university student need. Mostly second-hand items which a low price. Because of this issue, amazon is down the priority list of the university students.

Amazon users a great technology stack to cater the services to their users [3]. They use react and angular for the front-end. Also use redux to power of the above-mentioned frontend frameworks. Then amazon use Java to power up the backend functionalities along with MySQL to handle the database functionalities

### 2.4 UTHM E-Commerce System

The current UTHM E-Commerce System consists of five modules, which are login and registration module, setup module, selling and buying module, profile module, administrator module. An e-commerce store for UTHM students to sell their products and for students to buy products they need will be developed at the end of this project. The system will replace the current method of Facebook marketplace-based selling and buying for the students of UTHM. This system is specifically built for

the students who are willing to sell their products and make an income out of them while studying at the university



**Figure 1: The To-Be Model of the UTHM E-Commerce System**

### 2.5 Study of Existing Related Systems

A study of the existing system has been conducted on three existing systems in the market. This study is conducted so that the system developer can analyse and identify the advantages and disadvantages of the existing systems to use them as a reference when developing the system. The three existing related systems that have been chosen are Facebook Marketplace, Shopify and Amazon. Table 1 shows the comparison between the existing related systems and the developed system based on the characteristics and features of the systems.

**Table 1: Comparison of the system**

	Facebook	Shopify	Amazon	UTHM-E-Commerce System
Development method	Agile Development			
Platform	Web-based. All support mobile apps.			Web-based.
Technologies used	React, Scala,C++,Java, MySQL	Ruby on Rails, Docker, MySQL	React, Angular, Java, MySQL	React, Java, MySQL
Payment method	Payments are not handled by Facebook. All the payments and the deliveries need to be handled by the seller and the buyer on their own.	Online payments are supported. But the delivery needs to be done by a third-party courier service.	Both online payments and the deliveries are supported by Amazon. Users can choose on different types of courier services to deliver their customers products.	Cash on delivery. Mainly focusing on building the flatform for students to connect with student buyers and student sellers.

**Table 1: (cont)**

	Facebook	Shopify	Amazon	UTHM-E-Commerce System
Student target	Cannot target students specifically. Targets the user search patterns.	No targeting mechanism. Mainly uses Facebook ad campaigns to draw crowd to the system.	No targeted customers. Customer needs to find the product they need. This will easily fail new sellers with the review system.	Targets the university student.
User Management	User is profile based.			
Advertising cost	Very high when compared to the expenses of a university student.	No advertising inside the system but again can be very expensive since external advertising services are used.	No advertising but external advertising services are expensive.	No expenses.
Initial costs	No initial cost to start a business. But the advertising will be highly expensive.	High initial costs to get started. Since most of the features are not available at the beginning of the setting up process of the shop, seller needs to add the required features in the mode of addons and those are not free	No initial costs. Shipping needs to be handled and the buyer is paying for it.	No Initial costs.

**Table 1: (cont)**

	Facebook	Shopify	Amazon	UTHM-E-Commerce System
Ease of use	All the new user interfaces are easy to use. The learning curve for the system is very small since user can read and understand the next steps to do.			All the user interfaces are easy to use. A very small learning curve will be there to identify the functionalities.
SEO	Because of the popularity of these three systems, google will find them easily.			Google SEO will come into play with increase in popularity among students.
Product presentation	High quality product presentation with zooming effects.			High quality product presentation.

Based on Table 1, it shows that every system has its advantages and disadvantages. It also shows some similarities in the other system. Hence, this developed system will consider adapting the same similarities in the existing system with an enhancement.

### 3. Methodology

The iterative and incremental development methodology is selected as the methodology to manage the developments in the project. This methodology focuses on small sections of the development and then gradually improves them towards the final deliverable software. Importantly, the iterative model will not consider the full requirement at the initial states of the developments but with the completion of initial developments, next-level requirements will be considered and developments will be done accordingly. The product owners will be able to clearly identify which feature is being developed and will be able to test it at the end of each phase. The iterative and incremental model consists of five main phases named requirement phase, design phase, implementation phase, testing phase, and review or evaluation phase.

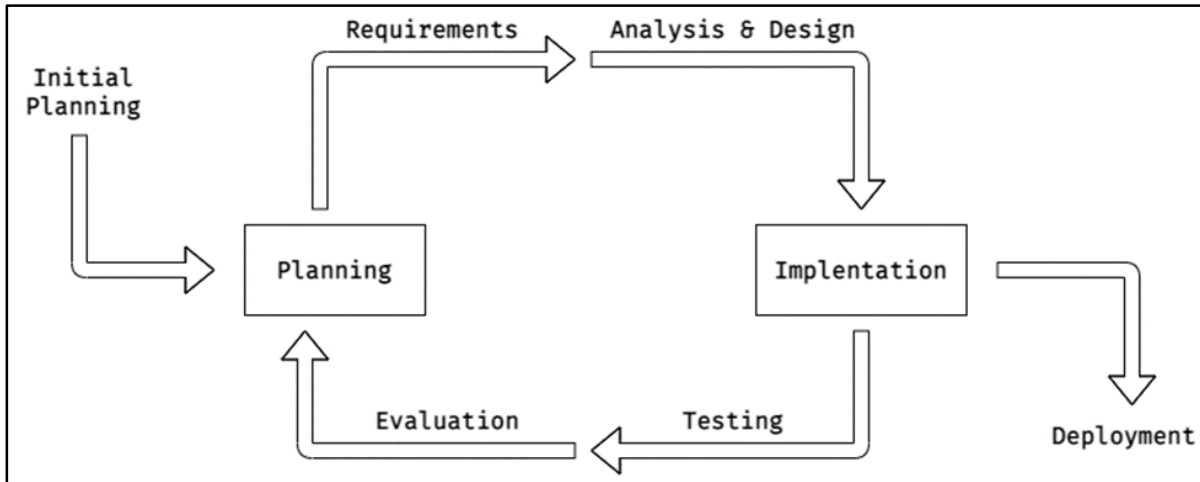


Figure 2: The iterative and incremental model (citation-source of this model)

### 3.1. Requirement phase

This is one of the most important phases of an iterative model. The whole specification is divided into small sections of requirements and in each iteration, a single section of requirement is considered and developed. In this project, there will be.

Activities to be conducted:

- Following the initial planning, planning of login and registration module, setup module, selling and buying module, profile module, and administrator module will be carried out.
- In the process, new features could be added since the system will be continuously monitored by the stakeholders.

The analysis of requirements for this system is specified in the forms of swimlane diagram, use case diagram, sequence diagram, class diagram and Requirement Definition.

#### 3.1.1 Swimlane Diagram (To-Be Model)

The UTHM e-commerce system has three main users. They are the buyer, seller and the administrator. Buyer focuses on products that can be bought from the system, seller focuses on adding new items to the system and getting sales on them and administrator focuses on the behaviour and content of the system. The new business process is shown in Figure 3.

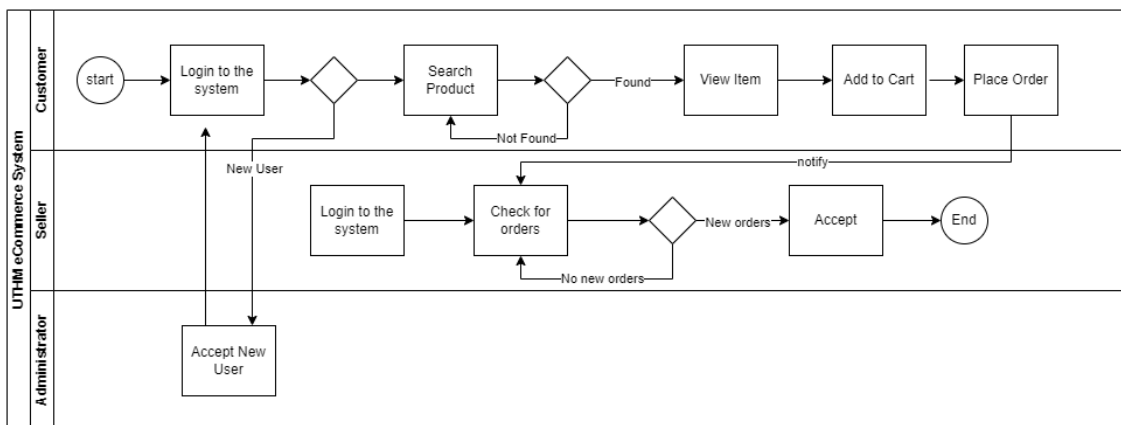
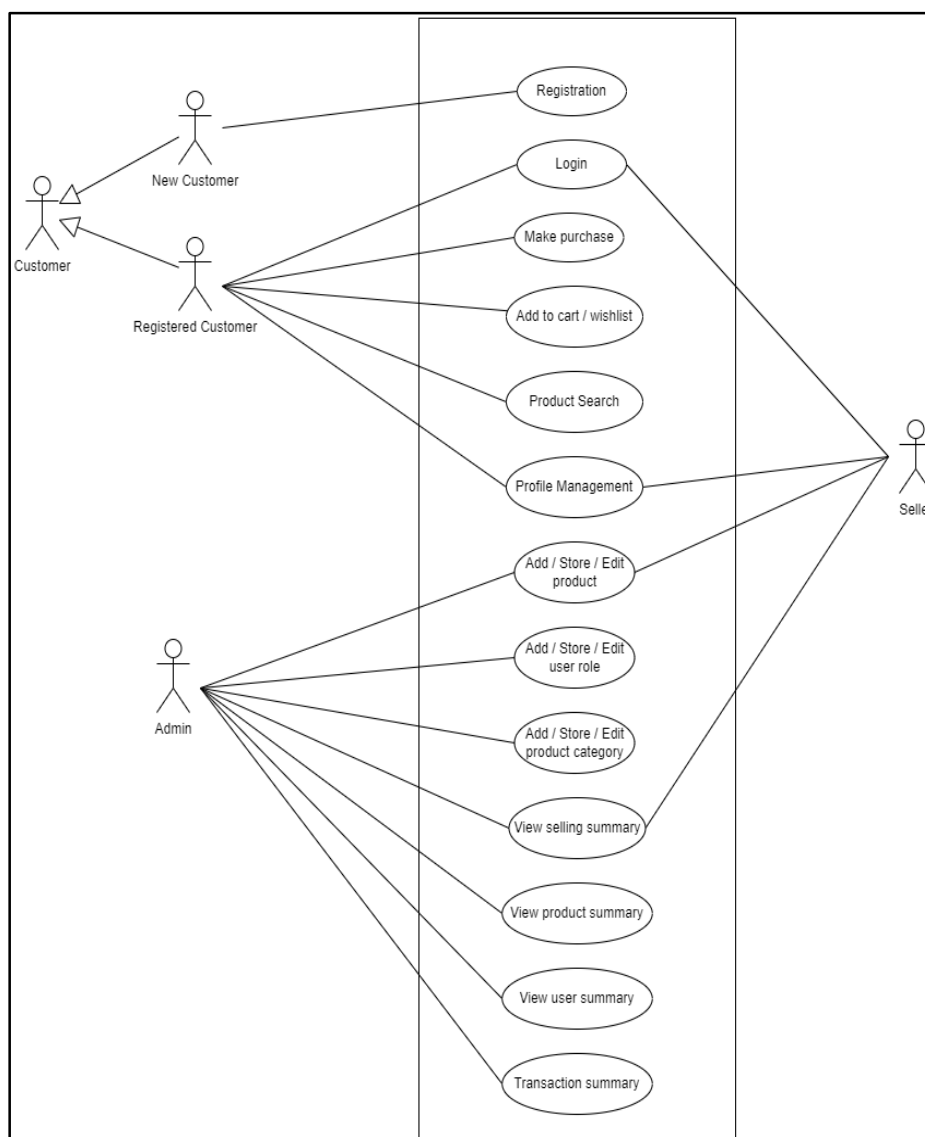


Figure 3: The To-Be Model of the developed system

### 3.1.2 Use Case Diagram

There are three actors that are involved in the UTHM e-commerce system. They are the customer (buyer), seller and administrator. The main use cases are shown in Figure 4.



**Figure 4: The Use Case Diagram of the developed system**

The detail description and the associated sequence diagram for each use cases are described in **Appendix A**.

### 3.1.3 Class Diagram

There are three main endpoints that handles the system. They are user endpoint, product endpoint and the category end point. They are depicted in this class diagram shown in Figure 5.



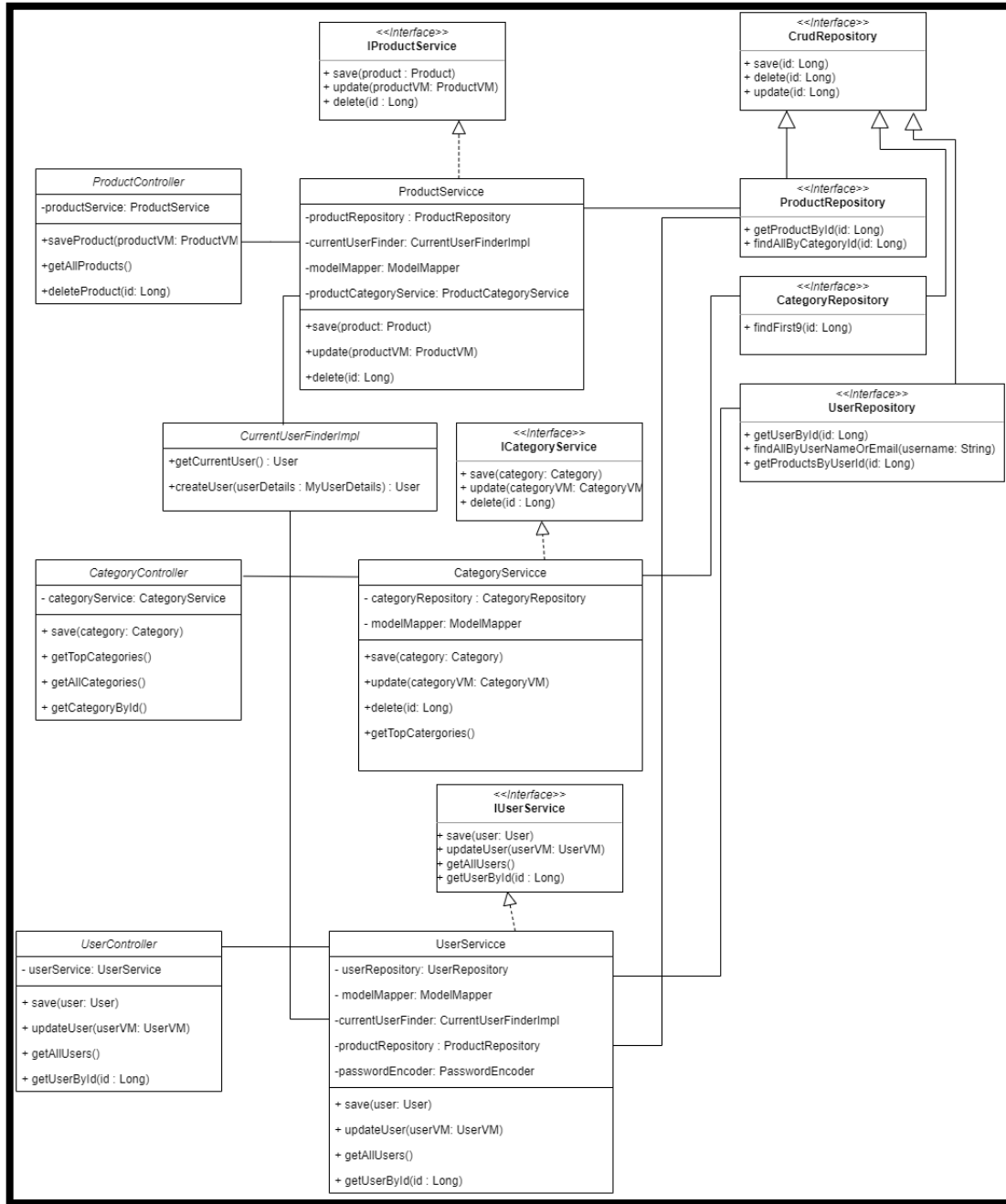


Figure 5: The Class Diagram of the developed system

### 3.1.4 Requirement Definition

The list of requirements is listed in **Appendix A**

### 3.2. Design phase

The design is depicted in two sub-sections. They are the result of system database design and interface design.

### 3.2.1 Database design

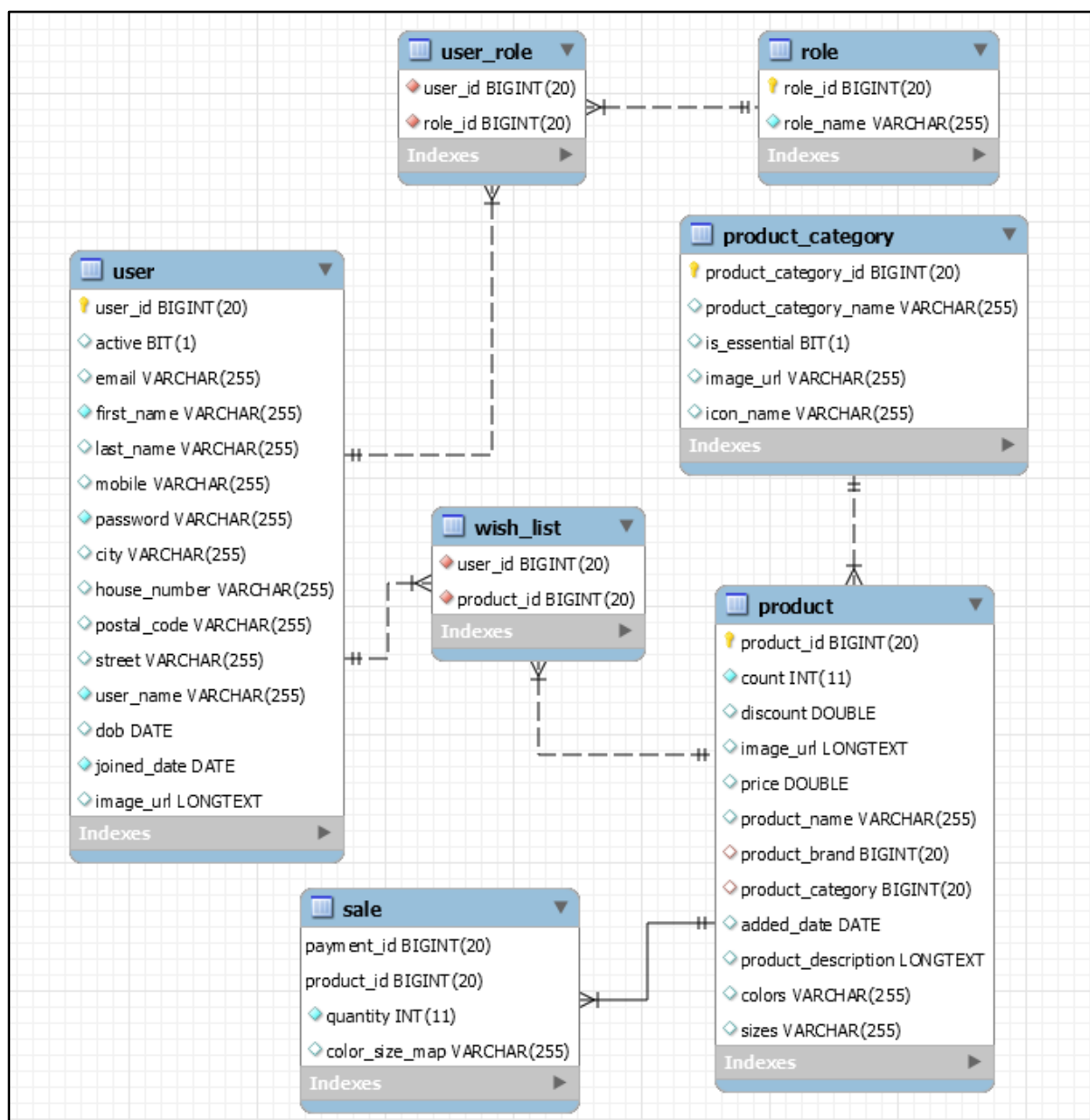


Figure 6: The Database Design of the developed system

### 3.2.2 Interface design

A good user interface's ultimate purpose is to make the user's interaction as simple, straightforward, and efficient as feasible. In eCommerce, user-friendly interfaces and appealing design are critical components of the user experience, and they can have a significant impact on a website's performance and, as a result, sales.

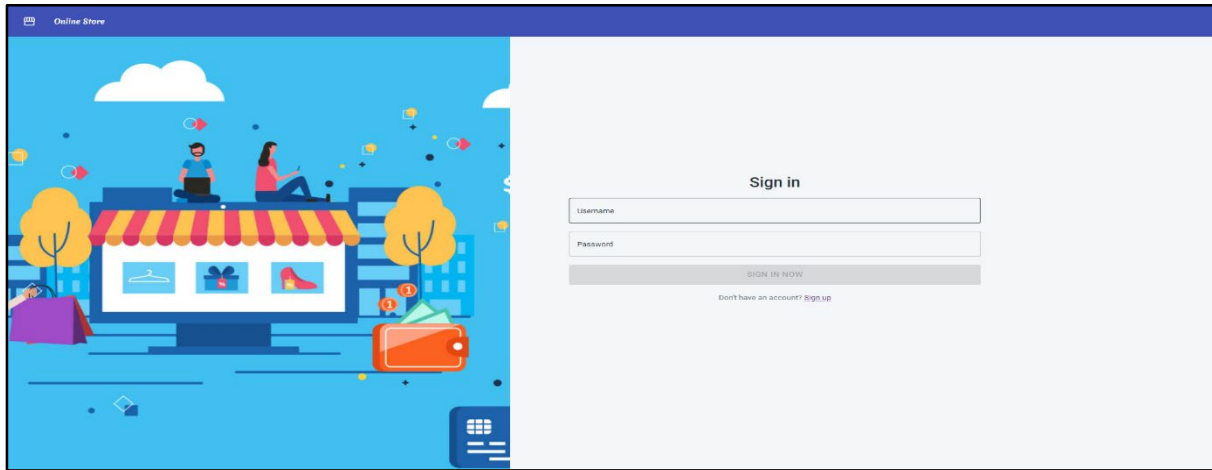


Figure 3.1: Login Page for Users (Seller, Customer)

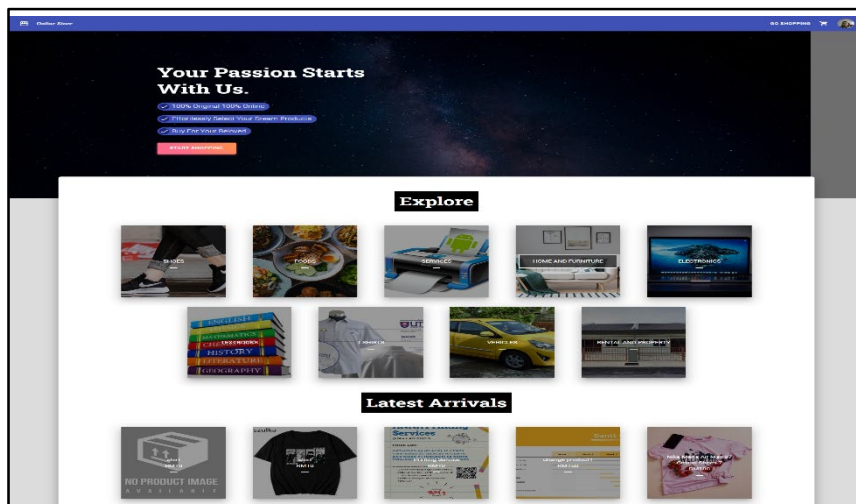


Figure 3.2: Login Page for Users (Seller, Customer)

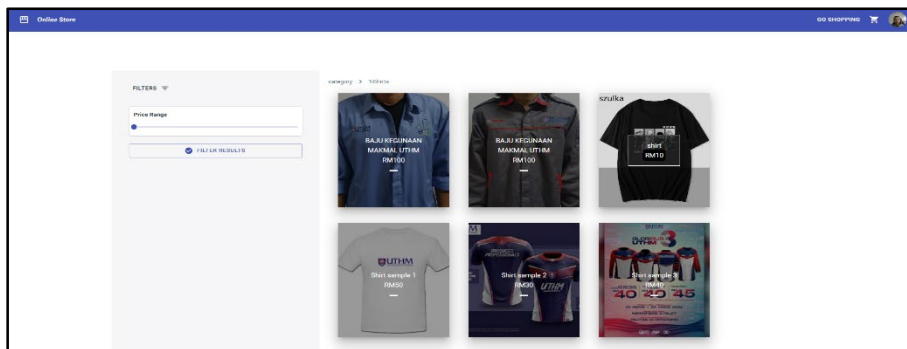
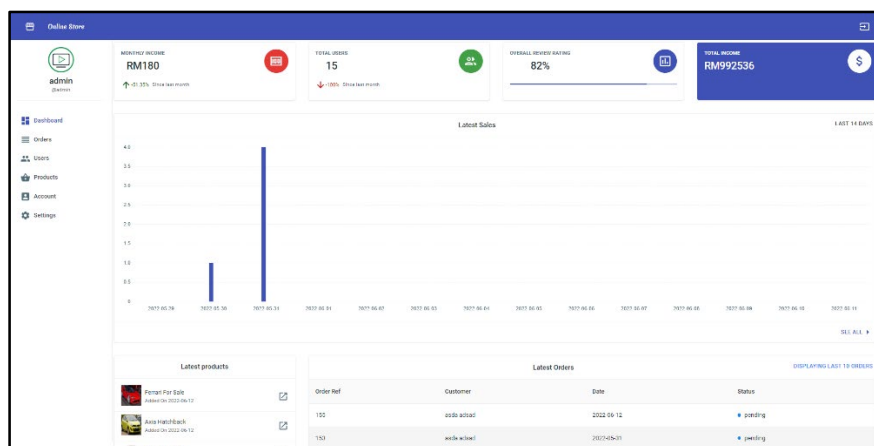


Figure 3.3: Products Display



**Figure 3.4: Seller Dashboard**

Figure 3.1 shows the interface for every user to be used for login into the system. The username and password are validated against the database and given the permission to get into the system. The multiple categories present in the system contains multiple items in each. Once a category is selected, the items are listed to choose and navigate to product page. The monthly income of the user, total users in the system, overall feedback on the selling items and the total income are shown in the summery. A summary of the latest sales will also be shown to the seller.

### 3.2.3 Code segment

This code segment proposed approach provides a web application with a spring boot back-end rest API. The back-end being a REST API, this will can be used to support multiple front-end application including mobile applications.

```
const Login = props => {
  const classes = useStyles();
  const dispatch = useDispatch();

  const [auth, setAuth] = useState({
    username: '',
    password: ''
  });

  const { message } = useSelector(state => state.errors);

  const handleChange = (event) => {
    setAuth({
      ...auth,
      [event.target.name]: event.target.value
    })
  };

  const handleLogin = () => {
    if (auth.username === "" || auth.password === "") {
      return;
    }
    dispatch(loginUser(auth, props.history));
  };
};
```

**Figure 7: Code segment from login page**

```

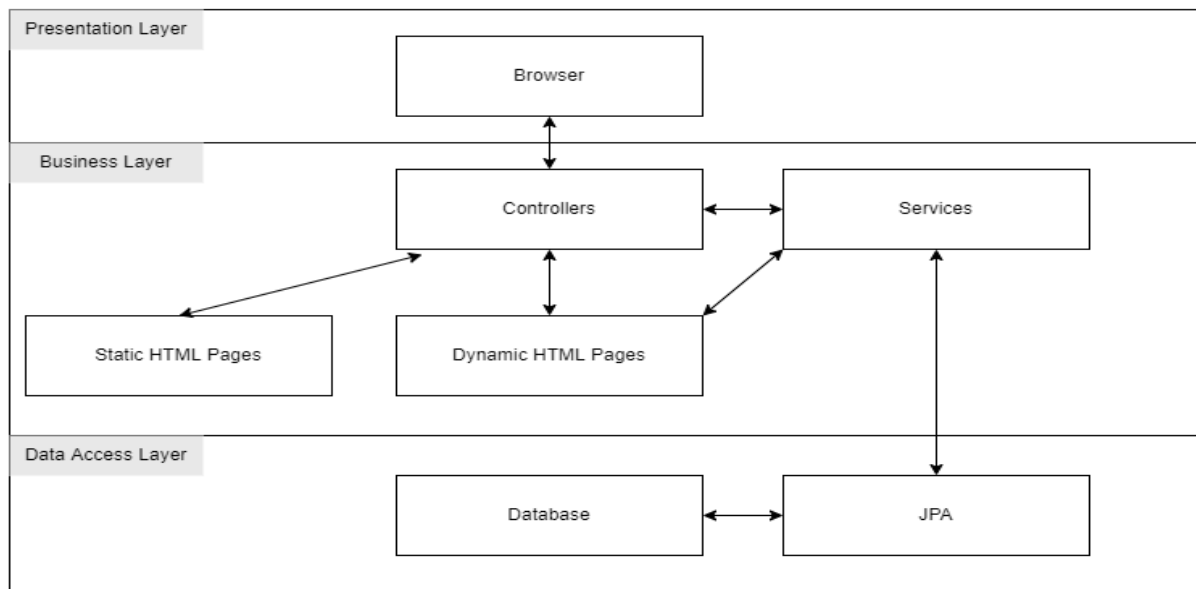
class ShoppingView extends Component {
  componentDidMount() {
    this.props.getAllCategories();
  }
  render() {
    const {classes} = this.props;
    const {allCategories} = this.props.allCategories;
    return (

```

**Figure 8: Code segment from home page**

### 3.2.4 System Architecture

The architecture of the system is layered into three main layers named, presentation layer, business layer and the data access layer. Presentation layer is where the user interacts with the system. Mainly the browser is used to interact with the user. The business layer is where all the logic remains. Controllers and services will handle the requests and provide the required output. Data access layer hold the data and will respond to the calls from service classes in business layer.



**Figure 9: System Architecture**

### 3.2.5 User Requirements

They are specifications established by the end user. These specifications describe how a facility, piece of equipment, or process should perform in terms of the product to be manufactured, needed throughput, and manufacturing conditions. User requirements give data that can be used to refine a manufacturing system's specification, design, and verification.

**Table 2: User Requirement Analysis.**

No.	Users Requirement
1.	All users that are registered are allowed to sign into the website.
2.	All users can register with valid details.
3.	Users can choose a product, product category, and view a product description
4.	Users can add products into cart.
5.	Users can edit quantity of products added to cart.
6.	Users can choose payment method on checkout page.
7.	Users can view the total price of products before submitting orders.
8.	Sellers able to receive the payment from the customer.
9.	Sellers can change the view latest order by customers.
10.	Sellers can change status of products from pending to delivered.
11.	Users can ask for refund using refund option.
12.	Sellers can add products from add products tab.

### 3.3. Implementation phase

The design that has been finalized will be implemented at the code level in this phase. This system will be using Java as the back-end programming language and react as the front-end scripting language. Furthermore, MySQL will be used as the database. The unit tests will be implemented in each state of development to verify the requirements. JUnit is used as the unit testing framework for the back-end while selenium is used as the front-end testing framework.

### 3.4. Testing phase

After the code is implemented, the testing phase is used to identify any defects that are present in the code or also to identify any developments that have not met the requirements or mismatches with the requirements. If such defects are identified, the needed developments will be carried out to resolve the reported bugs.

### 3.5. Evaluation phase

In this phase, the developed feature will be reviewed in front of the stakeholders and identify any implementation that needs to be changed. In this review, the stakeholders will be able to see a working prototype of the system that can be delivered at any time. Also, a draft of the next iteration's requirements will be created in this phase.

## 4. Result and Discussions

As discussed in this chapter, the implementation is done using react from the front end and java spring boot from the backend. There are multiple interfaces where the customer and the seller can interact with the system. The user is given the change to select items from a given list of categories and make the order. The seller is given the chance to deliver the item to given user address and mark the order as delivered in the system. Testing is done to verify that the required and intended behavior of the system is correctly implemented

#### 4.1 Test Plan

The list of test cases is included in **Appendix A**. The test cases involve 5 main modules in the system and counts for a total of 31 test cases. All of the test cases are in passed state. Therefore, the overall test result is at 100%. The table 3 shows the overall result of the test cases.

**Table 3: Overall Result Test Cases**

Test Case Module	Number of Test Cases	Total Passed Test Cases	Total Failed Test Cases
LOGIN MODULE	4	4 (100%)	0
REGISTRATION MODULE	4	4 (100%)	0
BUYING AND SELLING MODULE	15	15 (100%)	0
SETUP MODULE	4	4 (100%)	0
ADMIN MODULE	4	4 (100%)	0

#### 5. Conclusion

In conclusion, the UTHM E-Commerce System has several advantages such as it can target the students for buying and selling items while leaving out the competition around the world. With the help of this system, students can easily get hands on to required items with improved trust as the seller has used it for a while for studies. However, there are some limitations of this system such as it needs high technology understanding from the stakeholder to use this system because they are required to understand how online shopping works and get adhere to it. The delivery might be tricky to new users as the cost and the price determination has to be worked on before posing the product into the system. Hence, some recommendation of improvement in the future can be made such as improve the user interfaces design and expand its use through the development of mobile phone website technology that can be applied to this system. Inclusion of a calculator to determine the price of an item inclusive of the delivery charges would be more helpful for the seller when posting an item. This system hopefully can help the UTHM students to get their items sold and bought in unique targeted environment.

#### Acknowledgement

The authors also would like to thank Software Engineering Research Group (SERG) and Faculty of Computer Science and Information Technology, Universiti Tun Hussein Onn Malaysia for their support and encouragement throughout the process of conducting this study.

#### References

- [1] Gupta, A. (2014). E-Commerce: Role of E-Commerce in today's business. *International Journal of Computing and Corporate Research*, 4(1), 1-8.
- [2] Cronin, M. J. (1998). *Banking and Finance on the Internet*. John Wiley & Sons
- [3] Patrick, Z. B., Rizal, A. M., Hee, O. C., Mahadi, M., & Kamarudin, S. (2019). Factors hindering undergraduate students from starting a business while studying. *International Journal of Academic Research in Business and Social Sciences*, 9(1), 455-468.
- [4] Karat, C. M., Blom, J. O., & Karat, J. (Eds.). (2004). *Designing personalized user experiences in eCommerce (Vol. 5)*. Springer Science & Business Media.

- [5] Bieńkowska-Gołasa, W. (2017). How university students perceive running a business—selected aspects. *Acta Scientiarum Polonorum. Oeconomia*, 16(4), 5-12.
- [6] Prashar, S., Sai Vijay, T., & Parsad, C. (2017). Effects of Online Shopping Values and Website Cues on Purchase Behaviour: A Study Using S–O–R Framework. *Sage Journal*, 42(1), 1–18. <https://journals.sagepub.com/doi/10.1177/0256090916686681>
- [7] Online shopping: Factors that affect consumer purchasing behaviour. (2018). Taylor & Francis. <https://www.tandfonline.com/doi/full/10.1080/23311975.2018.1535751>.
- [8] Hofacker, C.R., (2001), *Internet Marketing*, 3rd ed., Wiley, New York.
- [9] Comegys, C., Hannula, M. and Váisänen, J., (2009), “Effects of consumer trust and risk on online purchase decision-making: A comparison of Finnish and United States students”, *International Journal of Management*, vol. 26, no. 2, pp. 295-308.

## Appendix

### APPENDIX A

Requirement	Software Requirement Specification	Description
Registration and Login SRS_REQ_100	SRS_REQ_101	System login page view
	SRS_REQ_102	Users sign into the system with valid information
	SRS_REQ_103	System displays error message if login is invalid
	SRS_REQ_104	Customers register with input personal data
	SRS_REQ_105	System displays error message if the registration is not successful.
	SRS_REQ_106	System store user information in database once registration successful
Search Product SRS_REQ_200	SRS_REQ_201	Search product page view
	SRS_REQ_202	Products getting searched for valid search text
	SRS_REQ_203	Display information message for invalid search text.
	SRS_REQ_204	Valid search results.
Add to Cart SRS_REQ_300	SRS_REQ_301	Cart page view
	SRS_REQ_302	Items getting added to cart once add to cart is performed
	SRS_REQ_303	Correct item details are reflected in the cart
	SRS_REQ_304	Allow multiple items to be present in the cart



Requirement	Software Requirement Specification	Description
Add Products SRS_REQ_400	SRS_REQ_400	Add product page view
	SRS_REQ_401	Validate product details on product addition
	SRS_REQ_402	Display error message on validation failures
	SRS_REQ_403	Display success message on successful addition of a product
	SRS_REQ_404	The new product present in database
Order Placement and Manage Orders SRS_REQ_500	SRS_REQ_500	Place order from shopping cart
	SRS_REQ_501	Placed orders are notified to sellers.
	SRS_REQ_502	Sellers are able to accept or cancel orders.
	SRS_REQ_503	Buyer is notified with the seller response on the order.
	SRS_REQ_504	Display messages to users on notifications.
Edit User Profiles SRS_REQ_600	SRS_REQ_600	User profile page view
	SRS_REQ_601	Display current information in profile
	SRS_REQ_602	Add new information to the profile
	SRS_REQ_603	Validate information and display error messages on validated information.
	SRS_REQ_604	Display success message on successful saving of profile.
	SRS_REQ_605	Data getting saved in database.
Summery view for administrator SRS_REQ_700	SRS_REQ_700	Product summary view
	SRS_REQ_701	User summary view
	SRS_REQ_702	Transaction summary view
	SRS_REQ_703	Display info message on no valid data present for each view
	SRS_REQ_704	Able to view more details on each list item.

**APPENDIX B**

<b>NO.</b>	<b>TEST CASES</b>	<b>DESCRIPTION</b>
<b>TEST_100 (LOGIN MODULE)</b>		
1.	TEST_100_001	Verify that an error message is shown when launching the login page and enter nothing and click on sign in button.
2.	TEST_100_002	Verify that an error message is shown when launching the login page and enter invalid username and password and click on the sign in button.
3.	TEST_100_003	Verify that the user is navigated to new page when launching the login page and enter valid username and password and click on sign in button.
4.	TEST_100_004	Verify that user is navigated to registration page when launching the login page and click on sign-up link.
<b>TEST_200 (REGISTER MODULE)</b>		
1.	TEST_200_001	Verify that an error message is shown when launching the register page and enter nothing and click on sign up button.
2.	TEST_200_002	Verify that an error message is shown when launching the register page and enter existing details and click on the sign-up button.
3.	TEST_200_003	Verify that the user is navigated to new page launching the register page and enter valid details along with an invalid email and click on the sign-up button.
4.	TEST_200_004	Verify that user is navigated to login page when launching the register page and enter valid details and click on the sign-up button.
<b>TEST_300 (BUYING AND SELLING MODULE)</b>		
1.	TEST_300_001	Verify successful login when launching the login page, enter valid username and password and click on sign in button.
2.	TEST_300_002	Verify that items are shown when selecting on a category to view the products.
3.	TEST_300_003	Verify the items that only in the selected price range are shown when clicking on price range slider and change the price range from 0-5000RM.
4.	TEST_300_004	Verify navigating into the product page when clicking on a single product from the results of the filtering process.
5.	TEST_300_005	Verify the item is added to the cart after setting the quantity of the product as one, select the size and the color and then click on add to cart button.

NO.	TEST CASES	DESCRIPTION
<b>TEST_400 (BUYING AND SELLING MODULE)</b>		
1.	TEST_400_001	Verify navigation to profile page when clicking on profile page
2.	TEST_400_002	Verify changes made to user profile such as first name, last name and phone number
3.	TEST_400_003	Verify updates made to user saved address
4.	TEST_400_004	Verify changes made to user profile picture
5.	TEST_400_005	
<b>TEST_500 (BUYING AND SELLING MODULE)</b>		
1.	TEST_500_001	Verify navigating to shopping cart interface when clicking on shopping cart button on the top right corner of the page.
2.	TEST_500_002	On the shopping cart, click on the checkout button verify navigating to checkout.
3.	TEST_500_003	Verify navigation to checkout page
4.	TEST_500_004	Verify payment methods and delivery address options on checkout page
5.	TEST_500_005	Verify navigating to shopping page when clicking on pay on delivery check-box and deliver to my address check box and click on place order.
<b>TEST_600 (SETUP MODULE)</b>		
1.	TEST_600_001	Verify navigating to admin interface when logging as an administrator using an administrator username and a password.
2.	TEST_600_002	Validate for the order place by the previous customer
3.	TEST_600_003	Validate that the status as pending before marking as delivered.
4.	TEST_600_004	Click on mark as delivered button and validate the change in status to delivered.
<b>TEST_700 (ADMIN MODULE)</b>		
1.	TEST_700_001	Verify whether the current products are displayed.
2.	TEST_700_002	Validate the view of add product form.
3.	TEST_700_003	Validate for the addition of new product after filling the details of the new product and click on add button to add the product into the system.
4.	TEST_700_004	Validate the page is navigated back to products view and presence of the new item.