**AN ONLINE WEB-BASED INFORMATION FOR**

**ONIICHAN COLLECTION**

Submitted to the Faculty of the

STI COLLEGE OF BACOOR

In partial fulfillment of the requirements in

Practical Research 1

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**Chapter 1**

1. **Introduction**

A web-based information system is an application or software that is accessible through a web browser and used to manage, store, and process data. It allows users to access information from anywhere with an internet connection, making it convenient and efficient for businesses and their customers.

For Oniichan Collections, a web-based information system can be beneficial in several ways. Firstly, it can help them manage their sales, and customer data more efficiently. By having a centralized system, they can keep track of their products, sales, and customer information in one place, making it easier to make informed decisions and provide better customer service.

Additionally, a web-based information system can help Oniichan Collections streamline their business processes, reducing errors and delays. For example, they can use the system to automate their order processing and tracking, making it easier to fulfill orders and track shipments.

From a customer perspective, a web-based information system can also be beneficial. Customers can use the system to browse products, place orders, and track their shipments, making it convenient for them to shop online. They can also use the system to communicate with Oniichan Collections, such as submitting inquiries or feedback.

* 1. **Background of the Study**

Oniichan Collections is a business that was founded on November 7, 2021, by Nico Sapalo, a collector of action figures who decided to turn his passion into a business. The business is co-owned by Reina Mae Santos, his wife, who shares the same passion for collecting action figures. They started the business after the lockdown became less strict, and they wanted to turn their hobby into a profitable venture.

The great lockdown that happened in 2020 has caused many people to lose their jobs and businesses, and Nico and Reina Mae were among those who were affected. Instead of wallowing in despair, they decided to use their passion to start a business that would help them get back on their feet. They saw an opportunity in the market for selling action figures, and they decided to take the leap.

The name of their business, Oniichan Collections, is derived from the Japanese word "Oniichan," which means "older brother" or "Kuya" in Tagalog. The name reflects their love for Japanese pop culture, which is evident in the action figures they sell. Oniichan Collections started as a small business, selling only action figures, but as they grew, they decided to expand their product line to include customized anime UV printed tumblers.

After starting their business, Oniichan Collections initially posted their products on Facebook and in other buy-and-sell groups. However, it wasn't until they started going live on Facebook that their business began to take off. After a few days, Nico Sapalo decided to learn how to run Facebook ads to further increase their sales. Since then, their business has grown significantly

* 1. **Overview of the current state of technology**

The current state of technology is constantly evolving and advancing at a rapid pace. In the context of Oniichan Collections, they are utilizing various platforms and technologies to promote and sell their products.

One of the social media platforms they are using is TikTok, which is a video-sharing app that has become popular among younger audiences. TikTok allows them to create short videos that showcase their products and reach a wider audience through hashtags and viral trends.

They are also using Facebook, which is a social media platform that has been around for over a decade. On their Facebook page, they can do live selling, post updates about new products, and communicate with their customers through messaging. They are also running Facebook ads, which is a form of digital marketing that targets specific audiences based on their interests and demographics.

Another platform they are using is Shopee, which is an e-commerce platform that allows them to list their products and reach customers who prefer to shop online. Shopee also offers a checkout system that allows customers to purchase products directly from their account.

Overall, Oniichan Collections is utilizing various technologies and platforms to reach a wider audience and increase sales. They are leveraging social media platforms like TikTok and Facebook, as well as e-commerce platforms like Shopee, to promote and sell their products. As technology continues to evolve, it will be interesting to see how they adapt and utilize new technologies to grow their business.

* 1. **Significance of the Study**

The people who will benefit from this research are the business companies involved, the consumers, students and learners, and future researchers.

**For the business companies** – This study might give them insight into how they can build, make, and manage an online information system if they plan to do so in the future. They can use this study to further give them an idea on how information technology works and how it may help with their products and/or services.

**For the Consumers** – This study may help pave the way for the Business involved to build and open their own online information system using this study as reference. When they do, the Users will be able to freely browse the company’s products and services with ease, owed to by the user-friendly interface and easy to use features.

**For the students and learners** – Students may use this study as a reference or a guide if they are conducting similar research or study particularly in the field of information and communications technology. For future researchers – Future researchers may use this study as reference for any similar research papers in the same field.

* 1. **Statement of the problem**
     1. **General Problem**

How to develop an e-commerce website that provides an enhanced customer experience by allowing them to easily view and purchase products, while also enabling the owner to manage and post products easily.

* + 1. **Specific Problem**
* **Product Information**
* Every product should display its own information to provide customers with more details about the products.
* **Purchasing Products**
* This web-based information system should provide e-commerce functionality, making it easier for customers to purchase products.
* **Managing Products**
* An easier way to upload and edit information for each product can simplify the management process.
* **Categorize**
* How can products be categorized in order to make them visible to more people
  1. **Objective of the study**
     1. **General Objective**

The study aims to create an online e-commerce system that will provide Oniichan Collection with its own platform to sell, promote, categorize, and organize their products. This platform will enable customers to view only Oniichan Collection's products and avoid being distracted by other items.

* + 1. **Specific Objectives**
* **A platform for Oniichan Collections will only show their contents to customers**  - One of the objectives for the Oniichan Collections web-based information system is to address the issue of customers getting distracted and leaving Oniichan's posts when they see other content while the company is trying to promote their products on Facebook and shopee.
* **Create a section for each important category or limited offers.**  - The web based information system aims to create dedicated sections for important .
* categories and limited offers, making it easier for customers to find and purchase products, increase sales, and improve satisfaction.
  1. **Scope and Limitations**
     1. **Scope of the Study**

The scope of Oniichan Collection’s Online Information system includes the following: The Homepage, shop, About Us, Contact us, Cart, Checkout and Admin Dashboard. These are the pages will be in Oniichan Collection eCommerce system

* **Home page** - The homepage will be the main screen of the website, displaying the hero block at the top and featuring some products and categories below.
* **Shop page** - On the shop page, all the products will be displayed, and users can search and easily filter them by category, as well as access detailed information about each product.
* **Contact us** - The Contact Us page is where customers can find all the necessary contact information for the shop, including the various platforms through which they can reach out.
* **Cart** - After customers add products to their carts, they can view all the items that have been added on the cart page.
* **Checkout** - The checkout page is where customers can finalize their orders and view the total cost of their purchase.
* **Admin Dashboard** - The Admin Dashboard is where the staff of Oniichan Collections can post, manage, and edit products.
* **Login –** The Login page verifies the user’s identity to access their account, facilitating checkout saving the payment/shipping details.
* **Sign up –** The Sign up page is where users can register and make their account to be able to start browsing the products and have access to all of the site’s features including ordering, adding to cart, and checkout.
* **Header –** The Header contains the company logo, company name, the Home button, Shop button, Cart button, Wish list button, and Profile button.
* **Footer –** The Footer contains the Categories, Links, and Contact information.
  + 1. **Limitation of the study**
* **Content Management System** - The website is simple, making a CMS unnecessary for content updates.
* **Customer Support/Feedback –** The owner stated that customer support is not necessary for the website, but customer can find support on their Facebook page.
* **Stock –** The site does not have a feature which shows if certain items are out of stock. However, if items are out of stock, they won’t show up in the website.
  1. **Methodology of the Study**

The Software Development Life Cycle (SDLC) is a systematic approach used to develop and maintain software applications. It is a process that involves a series of phases, starting with planning and requirements gathering, followed by design, development, testing, deployment, and maintenance. The SDLC methodology is used to ensure that software is developed in a structured and organized way, with each phase building upon the work completed in the previous phase. The goal of the SDLC is to produce high-quality software that meets the needs of end-users while ensuring that the development process is efficient and cost-effective. By following the SDLC methodology, developers can create software that is reliable, efficient, and effective, and meets the needs of their users.

**The Waterfall Model**

The Waterfall model is a traditional software development methodology in which the software development life cycle is divided into a series of sequential phases, each of which must be completed before moving on to the next phase. This methodology follows a linear approach and is based on the concept of a cascading waterfall, where the output of one phase becomes the input for the next phase. The five phases of the Waterfall model include requirements gathering, design, implementation, testing, and Operation and Maintenance. While this approach can be rigid and inflexible, it provides a structured framework for developing software, making it useful for projects where the requirements are well understood and changes are unlikely.

**Figure 1: The Waterfall Model**



* + 1. **Requirement Gathering**

Requirement Gathering is the first step in the Waterfall model, and the most important one. A single piece of incorrect information or problem could cause the whole system to fail. This is where the requirements for the System is identified and gathered. The functionality and objectives of the system will be realized in this phase.

**1.7.1.1 Requirement Gathering**

The researchers put together seven (7) modules, namely the Cart, Checkout, Home, Login, Product details, Shop, and Sign up pages. Hyperlinks have been set up to connect each module to each other. Each module is crucial to make sure the System works properly as expected.

**1.7.1.2 Home**

This is the face of the website, and is the first thing that appears upon opening it. It contains the header, navigation bar, body, and footer. It has the latest information like new arrivals, featured items, contact information, and other important information. Limited offers for certain items that are on sale also appear here, including how much time is left until the offer ends.

**1.7.1.3 Cart**

The Cart tab is where the users will be able to view the items they have added to their cart in order to checkout. Here, users will see a list of the items they want to purchase, as well as the subtotal of all the items in said list. Users can review their items before choosing to checkout one or all of them via the checkout button.

**1.7.1.4 Checkout**

The Checkout tab is where the users will be able to view all the items that they are actively purchasing. Here, users will see how much they will have to pay and also various available payment methods and delivery details. This is where users pay for the items they currently want or are buying.

**1.7.1.5 Login**

The Login page is where users will be prompted to log in their credentials and account information. This is where users will input their username, email, password, verify their identity, etc. Users will encounter this page when they close the tab without saving their information, use a new device, access the site again after logging out, after they just made their account, among other reasons.

**1.7.1.6 Product Details**

The Product details tab is the page the appears whenever users click on an item that they are interested in to look at further details regarding the said product. Here, they will see the product itself, the price, images of the product, ratings, comments, availability, etc. It contains surface details and information about the item.

**1.7.1.7 Shop**

This page is where the users will be able to browse the items that the company is selling. Here, users will see preview images and prices of the products, as well as a whole library of items that are being sold, users can also search for specific .

**1.7.1.8 Sign up**

The Sign up page is where users make their profiles or accounts. This is where users first register to be able to use the features and services of the website. Without accounts, users will not be able to do much aside from browse, they won’t be able to add items to their wish list or cart, and they won’t be able to check out and pay for items they want to buy.

* + 1. **Design**

The developers will use the information gathered from the previous phase to build the framework in this phase. The design helps with the specification of the software and hardware requirements for the system’s development such as programming language and hardware specifications. The researchers kept the client and customers in mind when developing the system; the website can easily be accessed without needing high-end devices by keeping the system simple.

* + 1. **Implementation**

The knowledge obtained from the previous phases will be used as basis to build the device in this phase. This is where the developers begin coding the system, applying the previous phase’s design. The researchers decided on making a user-friendly design that makes it easy for users to use and understand.

* + 1. **Testing**

This phase is where the researchers test the capabilities and functionalities of the system. This phase helps to identify any errors or problems in the system. If any problems were found and not solved, the client and their potential customers would be affected. The researchers will test all the features and check them thoroughly for any mistakes, errors, or problems which will then be promptly fixed and tested again to make sure there are no errors in the system.

* + 1. **Operation and Maintenance**

This is the final phase where the system will be checked regularly to ensure that it works as intended and maintain functionality. If problems were to appear, the developers will find and fix the problem/s. The system is still being developed, and maintenance will still be done even after the system has been deployed.