International Journal of Application on Sciences, Technology and Engineering
(IJASTE)
Volume 1, Issue 4, 2023. ISSN:2987-2499

DESIGNING A WEBSITE-BASED APPLICATION FOR SELLING WOODEN FURNITURE AT UD. KURNIA ILLAHI

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Submitted: 26-09-2023, Revised: 27-10-2023, Accepted: 08-12-2023

ABSTRACT

UD. Kurnia Illahi is a business engaged in the production of furniture such as tables, chairs, cupboards, and wooden frames. The firm is located in Jakarta and founded in 1997. This business carries out using a conventional sales process by contacting the owner via WhatsApp or visiting the location directly. This approach limits consumer reach and hinders technological progress. The business also face problems in generating reports due to inconsistent and inaccurate data recording, resulting in risk of financial losses due to a lack of financial documentation. Therefore, a wooden furniture sales application design was designed for UD. Kurnia Illahi. Website-based system is proposed with the aim of promoting and expanding the business, assisting owners in processing orders, facilitating consumers in ordering, and customizing products, as well as assisting in the financial reporting process. The design of this application follows the System Development Life Cycle (SDLC) method with stages including Planning, Analysis, Design, Implementation, Testing, and Maintenance. The programming language used in this design is PHP, the database is MySQL, and the local server is used with XAMPP.

Keywords: *Customized Application, Furniture, Sales, SDLC, Website*

1. PREFACE

Introduction

The development of information technology, especially in Indonesia, is currently advancing rapidly. This is further accelerated by technology that focuses on simplifying various aspects of human life, such as processing, managing, analyzing, and finding relevant, clear, and accurate data [1]. This development has a significant impact on business entities utilizing e-commerce as an electronic trading platform, which arises due to technological advancements influencing success in the business sector [2]. Common and user-friendly forms of e-commerce or online media include social media and websites [3]. In a business context, the use of websites is expected to aid in sales and promotion processes, which were previously reliant on word-of-mouth and brochures [4]. One of the businesses planning to implement a website-based approach is the wooden furniture sales

business. This is anticipated to facilitate financial reporting, order data management, expand market reach, and simplify the transaction process.

There is research that has been carried out regarding designing sales applications with website. Previous research by Trisakti [5] designed a website-based sales application to introduce products, customize orders, and provide product status information to customers. While their research focused on a different field, it shares similarities in the processes of customizing orders and providing product status information. Their research centered on customizing print products through online ordering via a website. In contrast, this study concentrates on the furniture sector with the goal of enabling online orders for both ready-made and customized products via a website. Additionally, customers can track the status of their ordered products. Research by Maimunah [6] designed a website-based sales application in the furniture industry to convey product information, enhance customer satisfaction, and expand market reach. Their research shares the same field but differs in terms of the material used for product manufacturing. It also has similarities in the application's purpose, which is to convey product information and expand market reach. In contrast, this study focuses on selling wooden furniture, facilitating sales through the online process of ordering ready-made and customized products via a website.

2. RESEARCH METHOD

Data Collection Method

This method involves a combination of observation, interviews, and a thorough examination of pertinent literature. Data from observations is acquired by personally visiting the location. Essential information is obtained through interviews with the business owner via WhatsApp. Additionally, the literature review entails researching relevant information in journals and books related to the topic.

Software Development Methodology

The software development in designing this sales application employs the Systems Life Development Cycle (SDLC). SDLC is a methodology, model, and pattern for a process in system development [7]. SDLC can also be interpreted as a depiction of a system design that continually moves and cycles. In this design, the SDLC method used is the Waterfall approach. The Waterfall model is the most well-known and oldest SDLC [8]. It consists of several stages, including planning, analysis, design, implementation, testing, and maintenance. These stages are executed sequentially, which means Waterfall model begins and ends with one step before beginning the next [9]. This model is renowned for improving the software maintenance cycle when properly executed [10].

3. RESULT AND DISCUSSION

This website-based sales application is built on a database using MYSQL to store the data that will be created and used. It is developed using programming languages such as PHP, HTML, and CSS. The relationships between tables in this application can be seen in Figure 1.

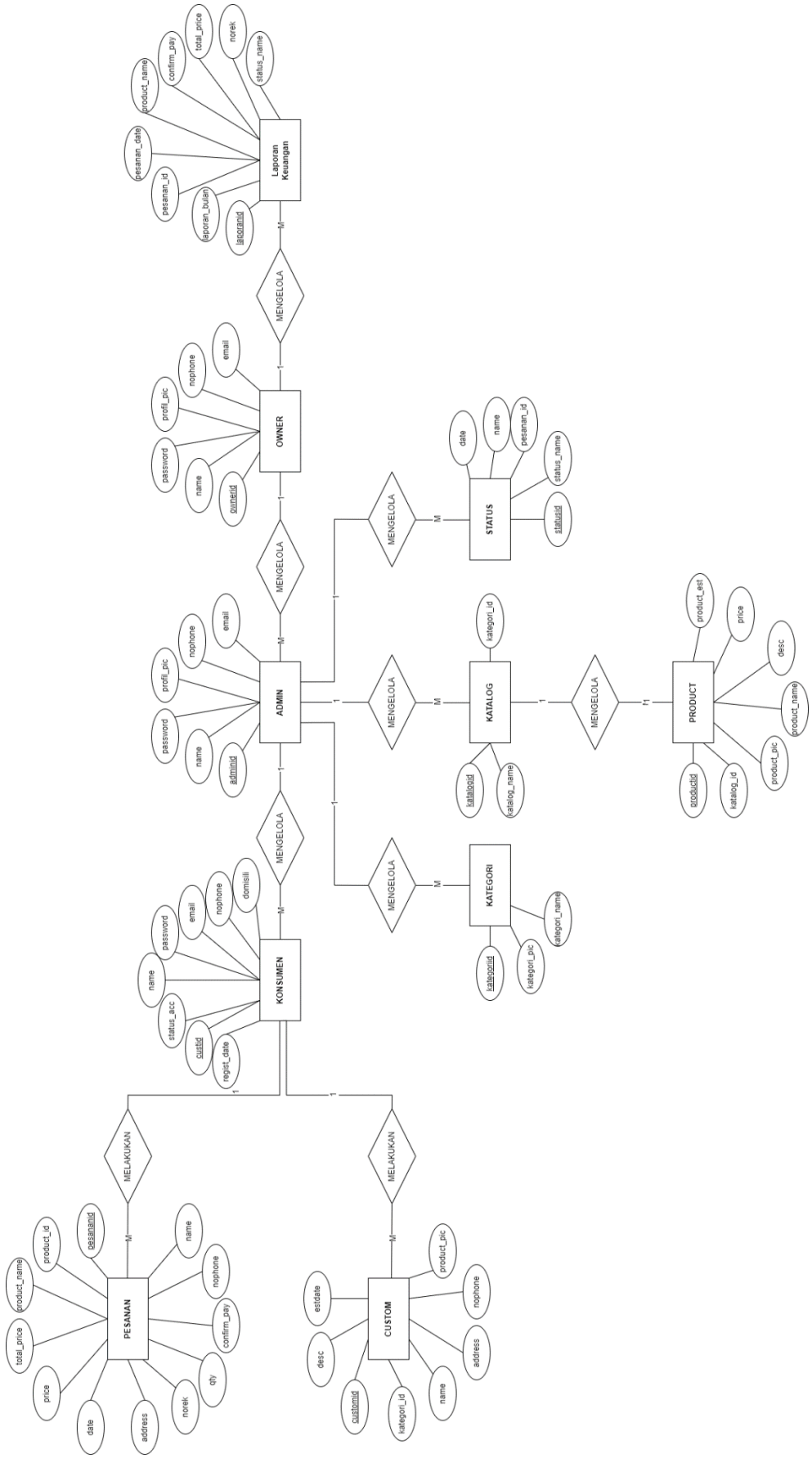

Figure 1 Entity Relationship Diagram

Application Website-Based

This application makes it easy for customers to place orders for ready-made and customized products and allows them to monitor the order status. Customers can browse the product categories available on the Home Page, as shown in Figure 2.

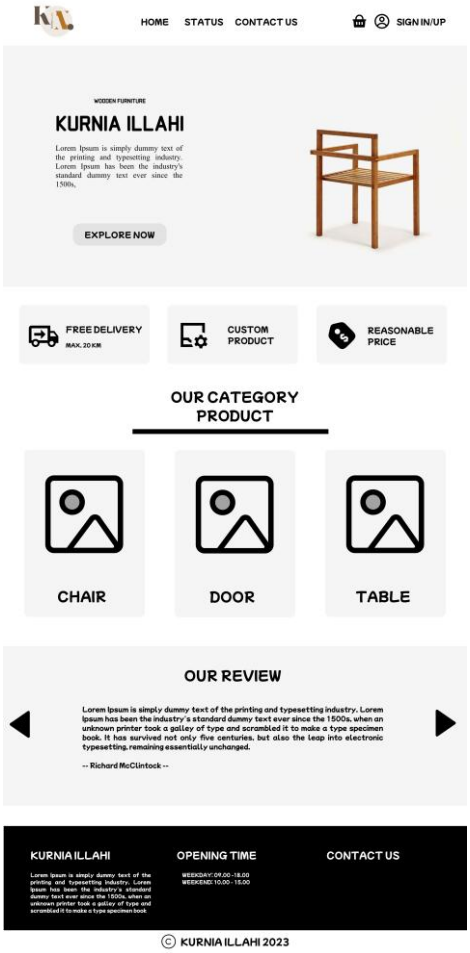

Figure 2 Home Page

Customers can select product catalogs from the chosen category on the Home Page and view the details of the selected product. This display can be seen in Figure 3 and Figure 4.

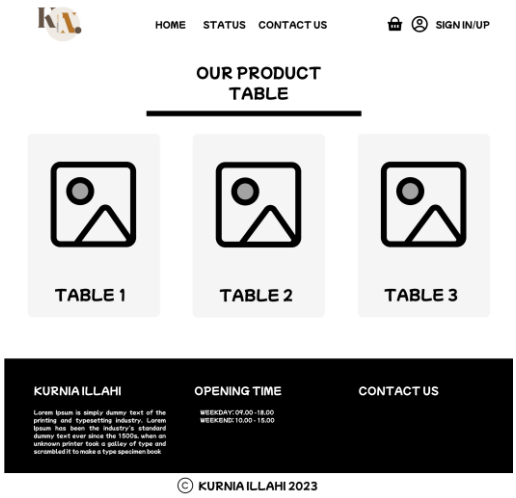

Figure 3 Menu Catalog

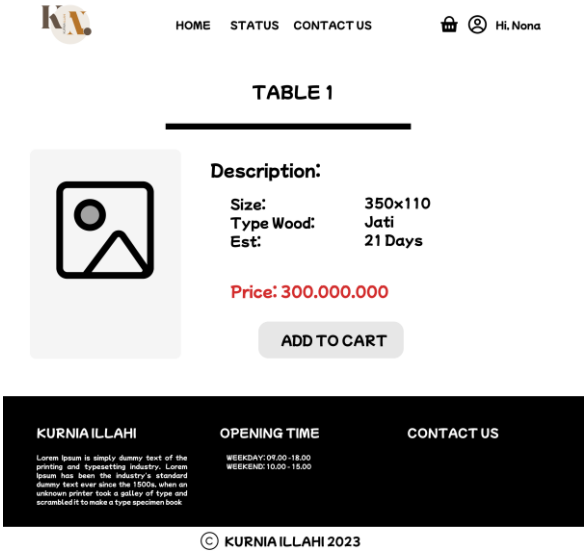

Figure 4 Menu Product

Customers can place orders by clicking the 'Cart' icon. If the displayed products do not meet their preferences, customers can customize the products by selecting 'Customized Product' on the order page. This display can be seen in Figure 5 and Figure 6.

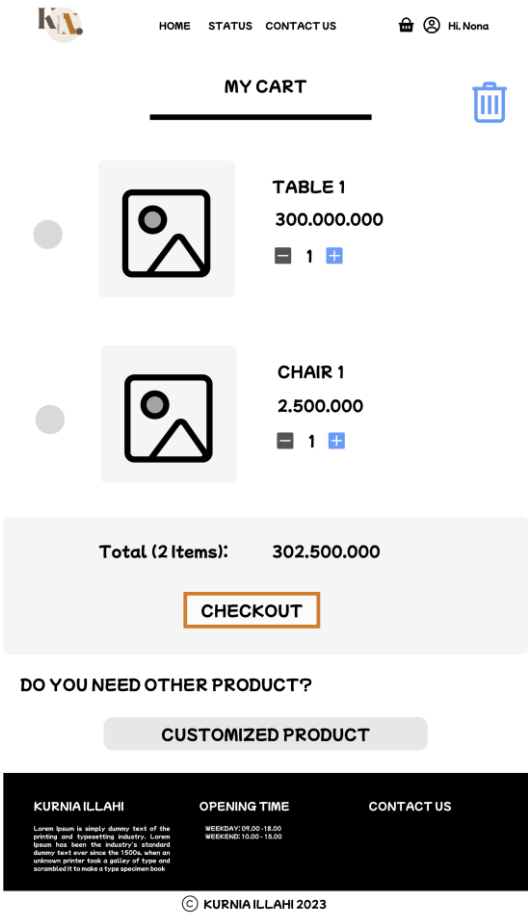

Figure 5 Menu Order

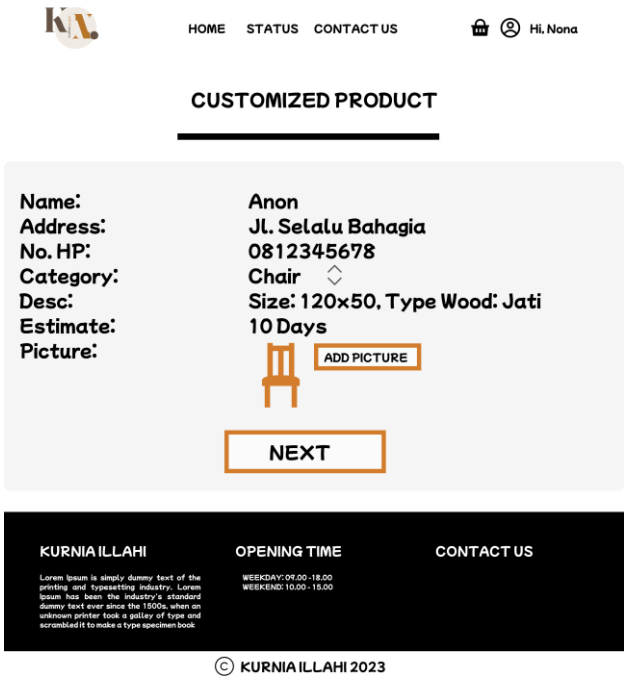

Figure 6 Custom Form

Regular customers will receive comprehensive order information, including an invoice that requires payment, along with the accompanying payment receipt. You can view this presentation in Figure 7 and Figure 8.

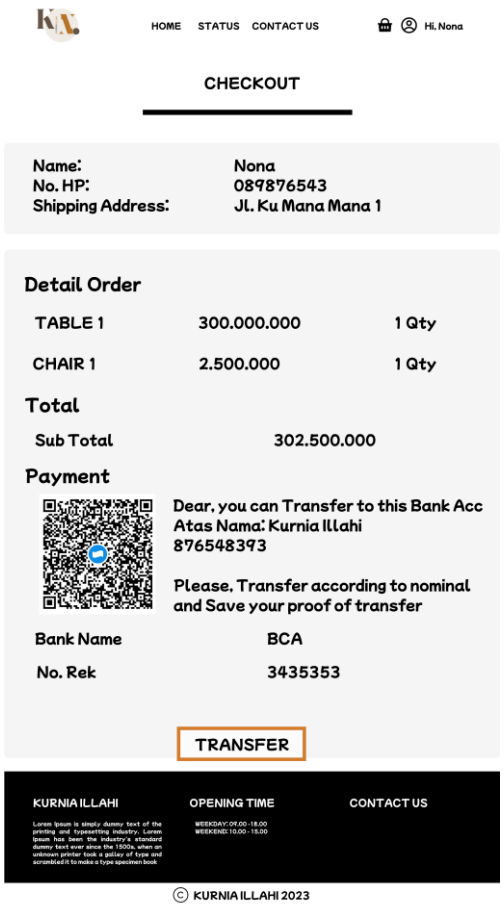

Figure 7 Page Detail Order

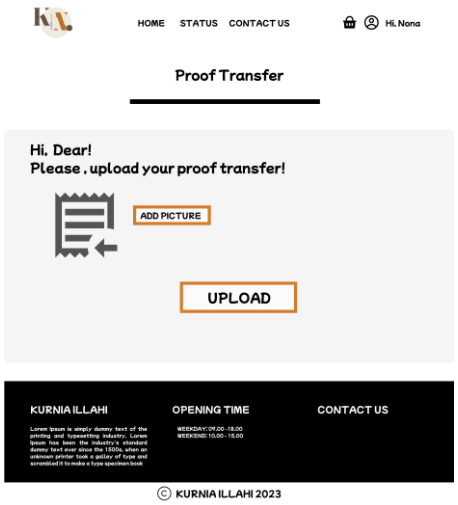

Figure 8 Page Proof Transfer

Customers who have placed orders will be shown information indicating that the order is being processed, as seen in Figure 9 and Figure 10.

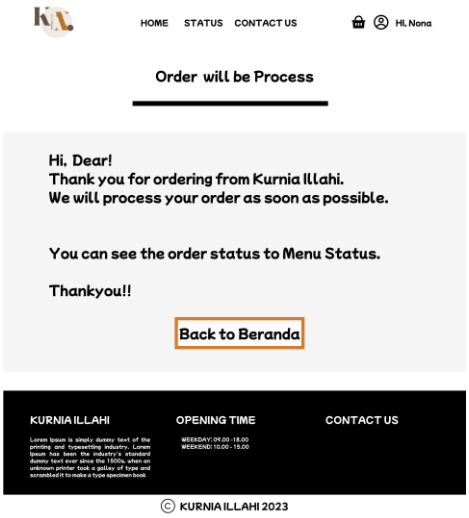

Figure 9 Page Order Process

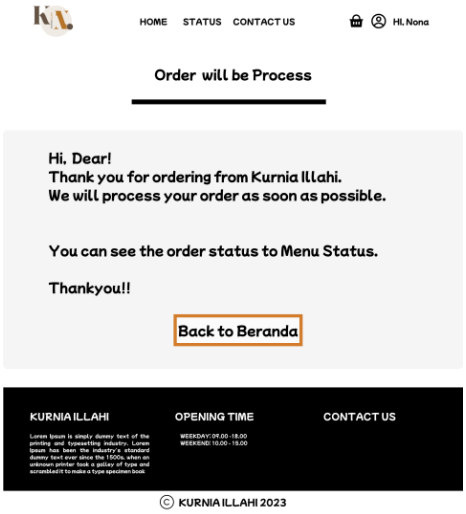

Figure 10 Page Custom Order Process

4. CONCLUSIONS AND RECOMMENDATIONS

This application is highly beneficial for UD. Kurnia Illahi, especially for its customers. It simplifies the process of ordering for customers without the need to visit the location in person. Additionally, it streamlines financial reporting for the business owner. It is strongly anticipated that this application can be utilized and further developed for this business.

Acknowledgements

Thank you to the Directorate of Research and Community Engagement at Universitas Tarumanagara for the support of funding for this research. Thank you Geraldi William for assisting in improving the writing of this research manuscript in English.

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