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APPLICATION OF THE DESIGN THINKING METHOD FOR THE UI/UX DESIGN OF THE MASBON APPETIT CAFE APPLICATION TO IMPROVE USER INVOLVEMENT

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This research focuses on designing an intuitive and engaging user interface (UI) for the food ordering app at Cafe Masbon Appetit. In the rapidly evolving digital technology landscape, the challenge of interface design often arises when it fails to match actual user needs. This directly impacts low levels of user satisfaction and engagement, a crucial issue that needs to be addressed to ensure the app's adoption and sustainability. To address this issue, we adopted a Design Thinking approach. This methodology was chosen for its ability to foster innovative, human-centered solutions, to improve user convenience, ease of use, and overall interaction with the app. The research process began with the collection of comprehensive user needs data through in-depth interviews and questionnaires distributed to the target audience. The collected information was then analyzed to identify pain points and user preferences. Based on the data obtained, the design solution was realized in the form of an interactive prototype. This prototype was then tested for effectiveness through a series of user tests to validate its functionality and usability. The research results consistently showed that the app successfully provided significant convenience in the food ordering process, increased time efficiency, and delivered a significantly better user experience. This was reflected in the high usability scores, which reflected a substantial level of user satisfaction.

Keywords: ***Design Thinking, Masbon Appetit, Figma, Mobile App, UI/UX***

Penelitian ini berfokus pada perancangan antarmuka pengguna (UI) yang intuitif dan menarik untuk aplikasi pemesanan makanan di Cafe Masbon Appetit. Dalam lanskap teknologi digital yang berkembang pesat, tantangan desain antarmuka sering muncul ketika gagal memenuhi kebutuhan pengguna yang sebenarnya. Hal ini berdampak langsung pada rendahnya tingkat kepuasan dan keterlibatan pengguna, sebuah isu krusial yang perlu ditangani untuk memastikan adopsi dan keberlanjutan aplikasi. Untuk mengatasi masalah ini, kami mengadopsi pendekatan Design Thinking. Metodologi ini dipilih karena kemampuannya untuk mendorong solusi inovatif yang berpusat pada manusia, untuk meningkatkan kenyamanan pengguna, kemudahan penggunaan, dan interaksi keseluruhan dengan aplikasi. Proses penelitian dimulai dengan pengumpulan data kebutuhan pengguna yang komprehensif melalui wawancara mendalam dan kuesioner yang dibagikan kepada target audiens. Informasi yang terkumpul kemudian dianalisis untuk mengidentifikasi permasalahan dan preferensi pengguna. Berdasarkan data yang diperoleh, solusi desain diwujudkan dalam bentuk prototipe interaktif. Prototipe ini kemudian diuji efektivitasnya melalui serangkaian uji pengguna untuk memvalidasi fungsionalitas dan kegunaannya. Hasil penelitian secara konsisten menunjukkan bahwa aplikasi berhasil memberikan kemudahan yang signifikan dalam proses pemesanan makanan, meningkatkan efisiensi waktu, dan memberikan pengalaman pengguna yang jauh lebih baik. Hal ini tercermin dari skor kegunaan yang tinggi, yang mencerminkan tingkat kepuasan pengguna yang substansial.
Kata Kunci: Design Thinking, Masbon Appetit, Figma, Aplikasi Seluler, UI/UX

1. INTRODUCTION

The development of digital technology has significantly altered the way consumers interact with various services, particularly in the food and beverage industry. The internet enables rapid access to information from a wide range of sources, offering numerous opportunities for high-quality services across various fields. In this context, mobile applications have significant potential to improve efficiency and user satisfaction.

However, many mobile apps face significant challenges in maintaining user engagement. Apps that lack intuitiveness or responsiveness to user needs are often abandoned, as users feel they are not getting the most out of their interactions. Although digital technology has rapidly advanced in facilitating user interaction, particularly in food sales, and has given rise to a variety of new features for mobile food sales apps, user retention remains a concern.

With the rapid development of digital technology and shifts in consumer behavior, Masbon Appetit sees a significant opportunity to improve service quality and operational efficiency. To address the needs of modern customers who desire speed and convenience, we took the initiative to develop a mobile ordering application. This application is designed to simplify the ordering process for consumers, offering them the benefits of browsing the menu, ordering their favorite dishes, and making payments conveniently and efficiently directly from their smartphones.

This research specifically involved creating a UI/UX (User Interface/User Experience) prototype for the app. We employed a Design Thinking approach to ensure that every design element centered on user needs and preferences. With this mobile app, we aim not only to satisfy tastes but also to provide optimal convenience and efficiency, thereby strengthening Masbon Appetit's position as a top choice for the community surrounding the cafe.

2. METHODOLOGY

This research aims to evaluate the usability of the Masbon Appetit ordering app prior to its development, ensuring that it effectively meets the needs and preferences of users. This is crucial to ensuring user adoption and satisfaction. To achieve this goal, the design process will adopt a Design Thinking approach. This is an iterative, user-centered methodology designed to generate innovative and relevant solutions. This approach guides the entire development process through five main stages: Empathize, Define, Ideate, and Test. These stages ensure that the app design is not only functional but also intuitive and enjoyable for users. This research process is outlined in more detail in Figure 1.

2.1. Design Thinking Method

Design Thinking is a synergistic method that combines diverse perspectives and ideas from various disciplines. Design thinking focuses on creating innovative solutions, with a primary emphasis on user experience. This requires a deep understanding of what users feel, need, and expect. By placing user needs at the heart of the process, Design Thinking can help teams explore and develop practical and relevant solutions, especially when facing complex and multifaceted challenges. The following is an explanation of the description in the image above:

A. Empathize

This first phase aims to gain in-depth insights into users and their needs. This phase aims to develop a deep understanding of the motivations, behaviors, and problems underlying the user experience. In the UI/UX context, this is the user-centered research phase, where designers must actively set aside their assumptions to understand the actual user.

B. Define

After gathering insights from the Empathize stage, the Define stage aims to formulate that information into a clear and focused problem statement. This involves defining user needs and problems. The problem statement should be framed in a human-centered manner, avoiding purely business assumptions. The goal is to provide clear direction without limiting the creativity of solutions in subsequent stages. This stage is crucial for accurately identifying and defining design gaps, ensuring that efforts and resources are directed at the right challenges.

C. Ideate

The Ideate phase is where the team tests assumptions and generates innovative ideas to address the defined problem statement. The goal is to generate as many solutions as possible in an open, creative thinking space free of judgment. In UI/UX, this is the phase where designers, having understood the user and defined the problem, are ready to generate ideas. This phase encourages observing new perspectives and thinking outside the box, leading to more innovative and experimental solutions.

D. Prototype

The prototype stage is an experimental phase that aims to create a concrete model or an early version of a product. The goal is to test concepts, verify functionality, and rethink design decisions to identify the best solution. Prototyping allows for rapid experimentation, learning from mistakes, and refining solutions based on real-world feedback. It is an integral part of the innovation process, reducing the risk of errors during the system design stage.

E. Test

The Test phase is the final stage of the five-stage model, where the developed ideas and prototypes are evaluated with end-users and stakeholders. The goal is to gather feedback on the solution's effectiveness and gain a deeper understanding of the product and its users. Early and frequent testing is crucial in Design Thinking, and the process does not end until the solution truly meets user needs. Failures in this phase should be viewed as learning opportunities, not obstacles.

3. RESULT AND DISCUSSION

3.1. Prototype Design

Based on the prototype provided, the mobile application design for Masbon Appetit focuses on ease of ordering food and drinks, featuring an intuitive design with clear functionality.

A. User Interface (UI) Design

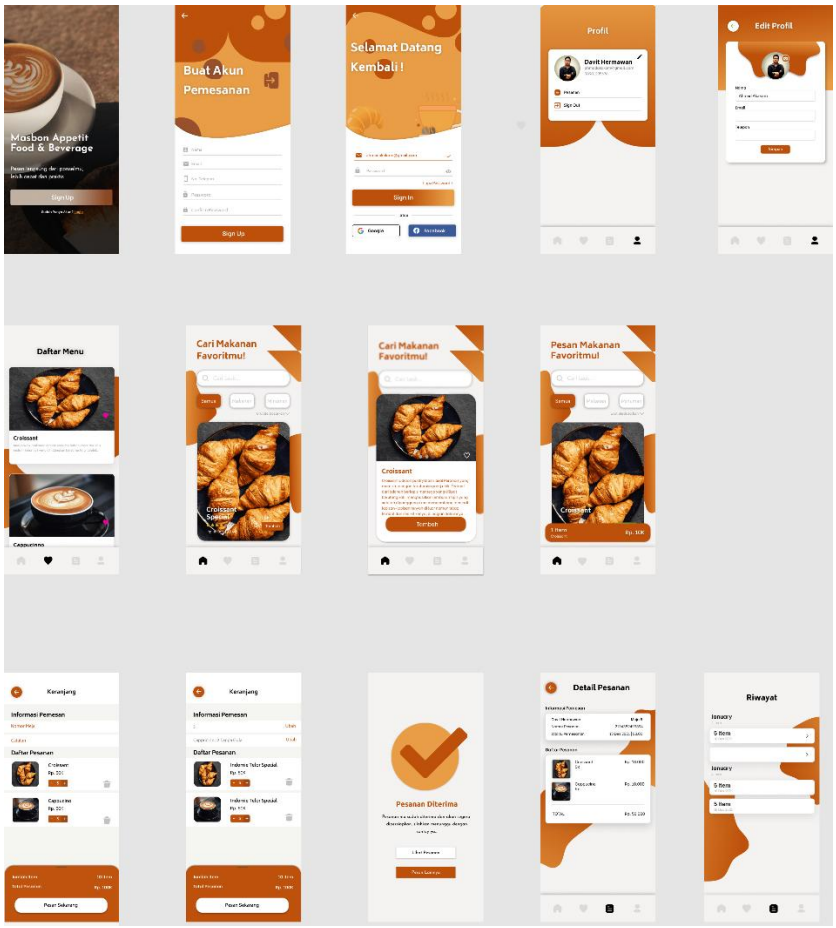
a. Color Scheme: This app utilizes a combination of orange/light brown, along with white/dark gray. Orange/brown give a warm and cheerful impression, are often associated with food and drinks like coffee and pastries, and are used for important elements like the main buttons, header, and splash screen. Meanwhile, white and gray are used for the content background, providing good contrast and maintaining text readability.
b. Layout: The app's layout is clean and structured, utilizing a card-like design to display menu items, making it easy for users to browse through the available options.
c. Typography: The use of typefaces (fonts) that are clear and easy to read, with sizes adjusted for information hierarchy, ensuring users can quickly understand the content.
d. Iconography: The icons used are simple and universal, such as the check mark icon for confirmation and the heart icon for favorites, which contribute to intuitive navigation.

B. User Experience (UX) Design

a. Registration and Login Process: Users are greeted with a landing page offering the option to "Sign Up" or "Login." The registration process requires basic information, including name, email address, phone number, and password. The login option also offers integration with Google and Facebook for easy access.
b. Profile Management: Users can view and update their profile details, including name, email address, and phone number.
c. Efficient Menu Browsing :
    - The "Menu List" page displays a variety of dishes with attractive images.
    - The search functionality ("Search Food...") allows users to find specific items.
    - Category filters, such as "All," "Food," and "Drinks," are available, along with sorting options to facilitate navigation.
    - Each menu item displays the price, estimated serving time, and an "Add to cart" button.
    - When an item is selected, further details, such as a product description, are displayed.
d. Streamlined Ordering Process:
    - The "Cart" page displays an order summary, including "Order Information" such as table number and special notes.
    - Users can adjust the quantity of items and view the order total in real time.
    - The "Order Now" button initiates the checkout process.
e. Order Confirmation and History:
    - Once an order is confirmed, the app displays the "Order Received" page.
    - Users can view "Order Details," which includes the order number, order time, and a list of items ordered.
    - There is also an "Order History" section that allows users to view previous orders.

- Overall, this prototype is designed to provide a fast, easy, and enjoyable ordering experience for Masbon Appetit customers.

3.2. Mobile Interface Design



The image above presents the Hi-Fi UI (High-Fidelity User Interface) design of the Masbon Appetit ordering app. This design details the layout, interactive elements, color palette, and typography implemented in the app, aiming to provide an optimal user experience and a realistic depiction of its functionality when implemented. The Masbon Appetit mobile app prototype is designed to simplify the ordering process of food and drinks.

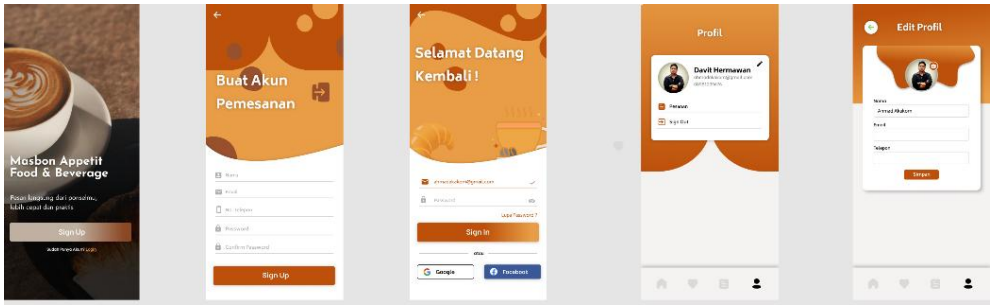
The color scheme is predominantly orange/light brown and white/dark gray, creating a warm and clean feel. The app's functionality begins with a registration and login page, allowing users to create a new account or log in using existing credentials, including Google or Facebook. Once logged in, users can manage their profiles. Key features include menu browsing, which displays a visually appealing list of food and drinks, including names and prices. Users can search for specific items or filter and sort by category. Product details, such as a description of the croissant, are available when an item is selected. The ordering process is facilitated through a shopping cart. Here, users can view an order summary, enter a table number, and add notes. After placing an order, an "Order Received" confirmation appears, followed by an order details page and order history. Overall, the prototype emphasizes ease of use and efficiency.

3.2.1. Prototype Design Visualization

This prototype is a mobile application designed to facilitate food and beverage ordering through the Masbon Appetit platform for users. The application was developed with a focus on a straightforward and intuitive interface, aiming to provide users with optimal ease and convenience in every interaction.

Key features implemented in this prototype include an efficient navigation flow, integrated registration and login options, and a responsive menu search function. Users can easily browse the menu, view detailed descriptions of each item, add products to their shopping cart, and complete the ordering process with clear information about their order status. Furthermore, the app provides access to order history and user profile management, ensuring a comprehensive experience. With a user-centered design approach, this application aims to simplify the culinary ordering process, provide easy access to a variety of menu options, and enhance transaction efficiency, thereby making the user experience more enjoyable and productive.

3.2.2. Login and Registration Page

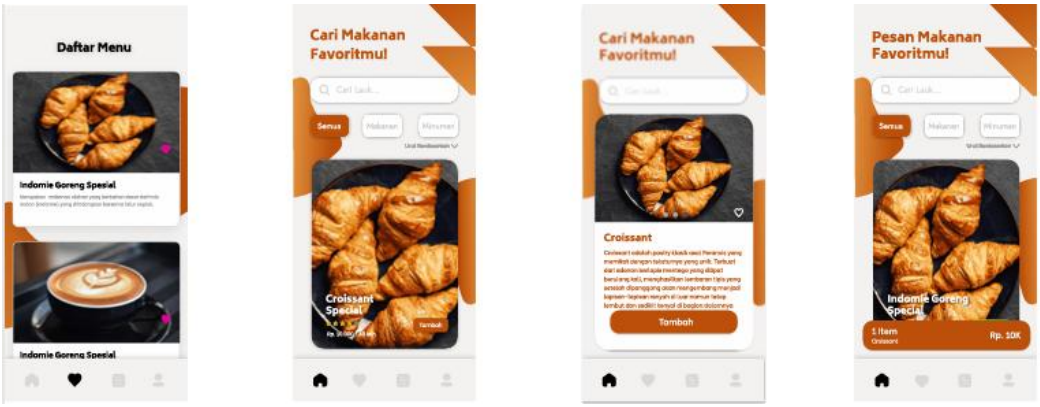


In the Masbon Appetit app prototype, the login and registration pages are designed to provide easy access for users.

- Create Account displays input fields for Name, Email, Phone Number, Password, and Confirm Password, ending with a "Sign Up" button. The design is clean with an orange background and attractive abstract graphic elements.
- Welcome Back! is intended for users who already have an account. Users can log in by entering their Email Address and Password, with a "Forgot Password?" option available. To simplify the process, the app also offers login options

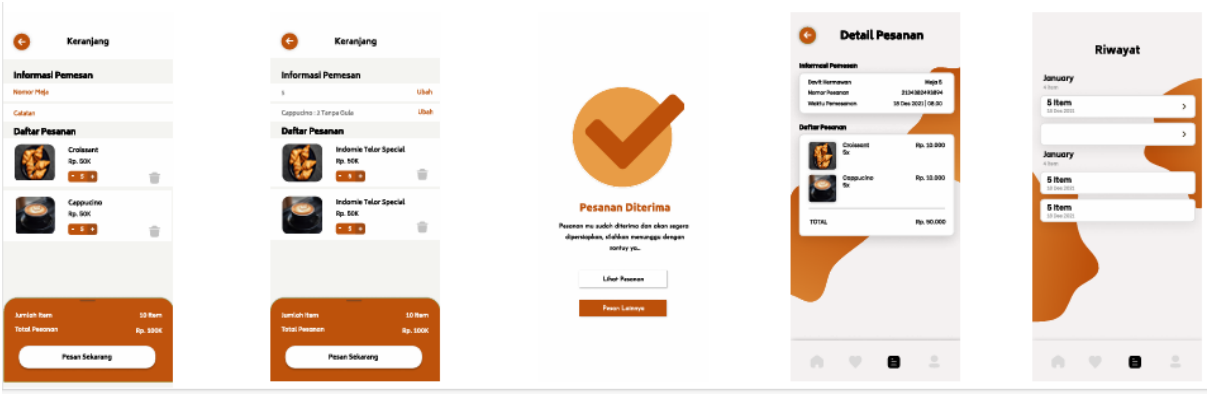
  via Google or Facebook. All pages maintain a consistent orange and white/grey color scheme, creating a harmonious visual experience from the start of the app.
- Profile allows users to view information based on the data they have entered into the app's database.
- Edit Profile allows users to update their account details. On this page, you will find editable input fields for "Name," "Email," and "Phone."

3.2.3. Menu and Ordering Page



On the Menu List page, users are presented with a visual display of various food and beverage items. Each item is displayed in a card format, featuring an attractive image, the dish name, and a brief description. This page also features a search function for the menu item you wish to order.

3.2.4. Checkout Page



The Masbon Appetit app prototype's checkout page was systematically designed to ensure an efficient and transparent user experience when completing an order. This page is divided into several crucial sections.

- The Order Information section enables users to enter essential details, such as the "Table Number" and any special "Notes" regarding their order. This indicates that the app is designed for use in a physical cafe location, facilitating communication between customers and staff.
- The Order List displays a summary of the items the user has selected. Each item is displayed with an image, product name, and individual price, along with an adjustable quantity. The total number of items and the order total are displayed at the bottom, providing the user with a transparent cost summary. The "Order Now" button serves as a call to action to proceed with payment.
- Order Confirmation, which displays a large checkmark in an orange circle and the message "Order Received." This message informs the user that their order has been successfully received and is being prepared, with instructions to wait for further updates. The options "View Order" and "More Messages" are also available.

- The Order Details page presents a more detailed summary, including the Orderer Information, table number, order number, and order time. The "Order List" is again displayed, showing the total quantity and price for each item, culminating in a total.
- The History page displays a list of previous orders, categorized by month, with the number of items and order date, allowing users to review their past transactions.

Overall, this checkout page design prioritizes clarity, ease of use, and instant confirmation, thus enhancing the user experience in the ordering process.

3.3. Testing Process

The prototype testing method uses Maze, a testing technique that focuses on tracking how users navigate through the prototype. This is used to test the system and ensure that each feature in Figma functions as intended.

Platform	Functional Features & Navigation	Test Results
Mobile	Cover Login / Registrasi	Success
	Beranda / Daftar Menu	Success
	Pencarian Menu	Success
	Detail & Tambah Keranjang	Success
	Keranjang & Info Pesanan	Success
	Proses Pembayaran	Success
	Konfirmasi Pesanan	Success
	Riwayat Pesanan	Success
	Profile & Pengaturan	Success

Based on the results of testing conducted using the Maze tool on the Masbon Appetit application prototype, the system demonstrated successful performance across all functionality and navigation. All tested features ran smoothly, ensuring an optimal and seamless user experience.

CONCLUSIONS AND SUGGESTIONS

From the discussion of the Masbon Appetit ordering application, it can be concluded that this application has effectively fulfilled its primary objective, which is to provide convenience for users in ordering menus with a simple, practical, and user-friendly interface design. By implementing a design thinking approach that focuses on user needs, this application can provide and integrate all functions that can provide convenience and increase user engagement, such as easy ordering, practical profile management, and order history. All of these functions are designed to provide a more comfortable and practical user experience. The design of this application incorporates attractive visual elements and features an intuitive interface. It incorporates colors that match the Masbon Appetit brand, making it useful for marketing needs such as brand awareness.

Based on the results of testing using the Maze tool, the system demonstrated successful performance without any errors or navigation issues. All features ran smoothly, ensuring an optimal and hassle-free user experience. Further testing yielded a task success rate of 95%, accompanied by a user satisfaction score of 4.8 out of 5, indicating excellent acceptance of the app. Masbon Appetit shows great growth potential and becomes the preferred choice for users seeking a fast and easy way to order food through a mobile app. By continuously developing the app based on user feedback and improving existing features, Masbon Appetit can continue to adapt to market needs and strengthen its position in the food ordering app industry.

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