

User Interface Design and User Experience Proto-Type Mobile-Based Interior Design Service Application (Case Study: Kirana Mebel Interior)

Wiwiek Nurkomala Dewi*, Kevin Surya Rahadian, Muhammad Afif Sulhan, Suwandi

Faculty of Information Technology - Catur Insan Cendekia University
Jl. Kesambi No.202, Kota Cirebon, Jawa Barat Tlp : (0231) 22050.

Corresponding author*

wiwiek.nurkomala.dewi@cic.ac.id

Abstract: Kirana Mebel Interior is a growing company engaged in furniture and furniture. Kirana Mebel Interior is a growing group of young companies with passion and creative ideas, working together to create great masterpieces. Kirana Mebel Interior wants to take advantage of technological advances to support and advance the Kirana Mebel Interior company itself. By creating an application that can support promotions and make it easier for Kirana Mebel Interior to reach buyers that cannot be done manually or door to door. As a media promotion and to enliven the buyers of Kirana Mebel Interior, the designer plans to make a User Interface Design And User Experience (UI/UX) Design Prototype Application that provides Services for Interior Design available in one application and display, which is hoped to be developed into an application in the future. The data analysis method that will be used by the designer is the use of User Persona, User Flow, Wire flow, and Design System. For the design using Wireframe from each page. While the software used is Figma. After being adjusted to the analysis at Kirana Mebel Interior, it is hoped that the Application Prototype can be useful as the basis for making the application.

Keywords: Design, Figma., Furniture, Interior , UI, UX, 201 words.

Introduction

Interior design is the process of arranging and creating interior elements to become a unity that is interrelated to achieve certain goals, both in terms of aesthetics, as well as the safety and comfort of the room. Interior design is the science or method of arranging a room, so that it meets the requirements to obtain comfort, satisfaction, physical and spiritual needs and security for its users without ignoring the aesthetic factor.

In this era that is currently developing, of course, technological breakthroughs are needed that can be useful for a person or a company. Kirana Mebel Interior wants to take advantage of this technological advancement to support and advance the Kirana Mebel Interior company itself. By creating an application that can support promotion and make it easier for Kirana Mebel

Interior to reach buyers who cannot be done manually or door to door.

As a promotional media and to enliven buyers from Kirana Mebel Interior, the designer plans to create a UI/UX Prototype Application Design that provides Interior Design Services available in one application and display. Which makes it easy for people to access and see interior designs for those who need interior design services. Also as a promotional media for the benefit of Kirana Mebel Interior. (Ariq Zeidan Mubarok, Carudin, Apriade Voutama, 2022)."

"UI or User Interface is an application display in the form of graphic visuals, a feature that is used by users to connect or interact with the software. while UX or User Experience is a person's perception and response to the use of a system, product, and service. User Experience is a science that studies what users feel when using a system so

that they are satisfied after using it (R. Arif Yudarmawan, 2020)".

Creating UI and UX is the first step in creating an application, therefore the author has the intention to create a "Designing a User Interface and User Experience Prototype for a Mobile-Based Interior Design Service Application." Which can later be developed into an application that will help facilitate the community or consumers who need interior design services, especially the people around Cirebon.

Materials and Methods

Study area

1. Application

In this digital era, the development of information technology is increasingly rapid, offering various innovations in it which aim to provide convenience for anyone who uses it.

The results are many of the extraordinary developments in technology, such as Smartphones on Android, which are currently no longer a special need but a general need for anyone who uses them (Prakoso & Hartomo, 2020).

2. Prototype

A prototype is a version of a potential system that provides ideas from developers and potential users, how the system will function in its finished form. The basic idea is to make a Prototype as quickly as possible, even overnight, then get feedback from users that will allow the Prototype to be improved very quickly. The Prototype Model is a system development method where the results of the analysis of the system parts are directly applied to a model without waiting for the entire system to be completed. The prototype that has been evaluated by the user can then be used as a reference in creating the System (Darmansah, Raswini, 2022).

3. Wireframe

After getting an overview of the application design plan that has been made based on the sitemap and user flow. The next step is to create a Wireframe to make it easier for the author to compile the

application design framework. Wireframing is an important stage in the process of designing a digital media (screen design process). (Ahmad Hasib Andika Pratama, Andhika Giri Persada, 2023).

4. User Interface

User Interface is a way for a program and user to interact with each other. User Interface is a part of a computer and software that can be felt, touched and understood by humans. User Interface is one of the creation of displays and designs in a computer device or software. User Interface indicators include: 1) Connectivity; 2) Simplicity; 3) Directional; 4) Informative; 5) User Friendliness; 6) Personalization; and 7) Continuity (A. & Ganggi, 2019). User Interface has been widely studied by previous researchers, including: (Budi Satria, Utama, 2020)".

5. User Experience

According to Ariq Zeidan Mubarok, Carudin, Apriade Voutama, (2022) explains that User Experience is a factor that determines whether or not a service or product is accepted by users. User Experience is a factor that involves perception, user behavior, and user emotions when experiencing a service or using a product".

6. Figma

Figma is a digital design and prototyping tool. It is a UI and UX design application that can be used to create websites, applications, or smaller user interface components that can be integrated into other projects. With vector-based tools that live in the cloud, Figma allows its users to work anywhere from a browser. Figma also has several plugins and features that can support the design process, for example the Iconify plugin and Figma community" (R. Arif Yudarmawan, 2020).

Procedures

Research Methodology is the process of research stages that will be carried out, in the Research methodology there are 2 main parts, namely the data collection stage and the research stage.

1. Research Stages

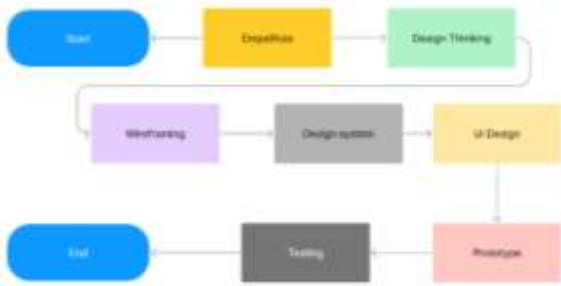


Figure 1. Research Stages Process found by the author in the design document

1. Design Thinking; Identifying problems, and determining solutions through five stages (empathize, define, ideate, prototype and testing)
2. Wireframe ; The stage where the author makes a rough outline of the application to be created based on Design Thinking
3. Design System; At this stage, namely creating a design system that will be used later in UI Design such as Color Style, Typography, Textstyle, Atoms, Molecules and Organisms
4. UI Design ; Creating a complete UI according to the wireframe and using the Design System that has been created
5. Prototype ; Connecting one frame to another so that all features can run properly
6. Testing ; Conducting user testing of the application that has been created and providing feedback and assessment of the application that has been created.

2. Analysis and Design

2.1 User Persona

User Persona is very useful for the effectiveness of user research by creating fictional user profiles. Data for creating User Persona is obtained from Interview summaries. Here are the details of some User Personas.



Figure 2. User Persona found by the author in the design document

2.2 User Flow & Wireflow

User Flow is the steps when using an application to complete a task according to its goals. The following is the User Flow of the Interior Design application which is the steps taken by the user when using the Interior Design app to complete a task.



Figure 3. UserFlow of Kirana Mebel Interior Designer found by the author in the design document

Results and Discussion

In this process, it is the initial stage of the editing process starting from opening the Figma editing website on google.com and the process of determining the document to be created, importing images, importing logos, inserting text, to placing the buttons that will be used in the initial display of this application.

1. Display Wireframe

The introduction page of this application will be blue as the background and main color of the application created. There is a logo with the name Kira-na Interior Design. For all types of fonts used is Poppins.



Figure 4. Landing page Login found by the author in the design document

This page will use a white background and the login button will use blue.

This page functions so that users can log in and if the user does not have an account, the user is required to register first

This page functions so that users can enter the verification code from their email after filling in the registration section.



Figure 5. Home Page Navbar found by the author in the design document

This page provides information about courses and other things so that users can navigate and choose courses according to their wishes.

This page will later contain an image that shows that the verification was successful.



Figure 6. Chat sub column found by the author in the design document.

This page is intended for users to contact designers or admins of Kirana Mebel Interior or users who want to consult about design.



Figure 7. Order History sub column - Order Details found by the author in the design document

This page is intended for users to view the history and status of purchases that have been completed during the transaction.



Figure 8. Page Order Design found by the author in the design document

This page will contain information about ordering services and service selection options available at Kirana Mebel Interior Interior Design Services.



Figure 9. Payment Details found by the author in the design document

This page will contain information about the payment that the buyer will make and will be forwarded to the payment.



Figure 10. Sample Design Page found by the author in the design document

This page is intended for users to see examples of design photos available at Kirana Mebel Interior.

2. Design Results

This section explains the implementation process of the system or design that has been built. Implementation also explains each design result that has been done. The following is the initial display or splash screen landing page when the

user enters the Kirana Mebel Interior Interior Design Services application.



Figure 11. Landing Page Login Results found by the author in the design document

Splash Screen Implementation is an explanation of the implementation process of the application display that can be used by respondents. This page is the login section when the user has passed the splash screen section. If the user does not have an account, the user is required to register first. However, if the user already has an account, the user can continue the login process

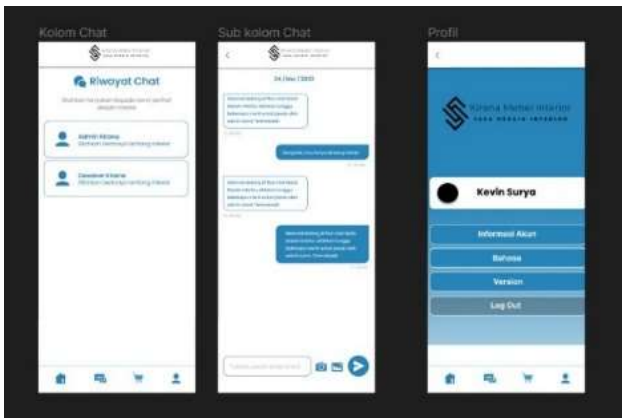


Figure 12. Home Page Navbar Results found by the author in the design document

Home Page Implementation is an explanation of the implementation process of the initial display after the login page on the application that can be used by respondents



Figure 13. Results of the Chat Sub Column – Profile found by the author in the design document

On this page is a display of the Sub menu of the chat history feature on the bottom navbar or footer of the home. Here contains features that can contact the Admin and Designer of Kirana Mebel Interior.



Figure 14. Order History Results - Order Details found by the author in the design document

On this page is a display of the Sub menu of the Order history feature in the Footer of the home. Here contains the details and status of the designs that have been ordered by the user.

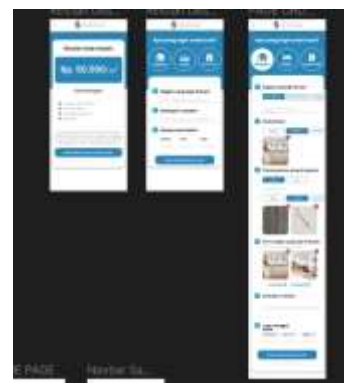


Figure 15. Page Order Design Results found by the author in the design document

On this page is the display when the user presses the Create interior design button on the home page. Here are the details when Ordering Interior Design .



Figure 16. Payment Details Results found by the author in the design document

Payment Page Implementation is an explanation of the implementation process of the transaction display from the Order Design page on the application that can be used by respondents.



Figure 17. Example Design Results found by the author in the design document

On this page is the display when the user presses the design model button on the design order page. Here are examples of design models.

Conclusions

Based on the results of observations in obtaining information at Kirana Mebel Interior, as well as the design and implementation of the user interface design and user experience prototype of the Interior Design Services application, the designer can provide the following conclusions:

1. The Figma editing website can be used to design the appearance of the Interior Design Services website or application with an

attractive, modern and minimalist user interface.

2. In this study, the designer produced a prototype of the Interior Design Services application that is compatible with mobile devices.
3. In this increasingly developing digital world, creating and developing an application is not a difficult thing to do today, because information related to technology is developing very rapidly and is easy to learn by anyone. So that currently many kinds of applications have emerged that focus on the economic, social, government, and educational fields.

Acknowledgements: Thank you to the kirana mebel interior design company, Mr. Kevin, Mr Afif who helped with the design and to Mr Suwandi who helped with the writing.

Conflict of Interest: The authors declare that there are no conflicts of interest concerning the publication of this article.

References

- Ariq Zeidan Mubarak, Carudin, Apriade Voutama, 2022. Designing User Interface/User Experience in Mobile-Based Baby Spa Applications for User Customers and Therapists Using the User Centered Design Method, *Journal of Education and Counseling, Faculty of Computer Science, Singaperbangsa University, Karawang*, Vol. 4, No. 2, pp 63686380, EISSN: 2685936X and PISSN: 2685 9351.
- Darmansah, Raswini, 2022. Designing a Trader Data Management Information System Using the Prototype Method at the Wage Market, *Journal of Computer Science & Informatics (JSAKTI), Information Systems Study Program, Telkom Institute of Technology Purwokerto*, Vol. 6, No. 1, pp 340350, ISSN: 25489771/EISSN: 25497200.
- Ahmad Hasib Andika Pratama, Andhika Giri Persada, 2023. UI/UX design of mobile-based UMKM crowdfunding application using HCD (Human Centered Design) approach (Case Study: UII Student UMKM), *JURNAL NUANSA INFORMATIKA: Faculty of Industrial Technology, Islamic University of Indonesia* Vol. 17, No. 1, pp 109110, pISSN: 18583911, eISSN: 26145405
- R. Arif Yudarmawan, 2020. Design of User Interface and User Experience of SIMRS in the Service Section *Scientific Journal of Technology and Computer* Vol. 1, No. December 2, 2020.
- Donny Ridwan Setiawan, Patricia Evericho Mountaines, 2022. Designing the Interface Display of the Tupai Tech UMKM Website Using Figma, *Journal of Computer Engineering, Computer Engineering Study Program, Faculty of Engineering, Diponegoro University*, Vol. 1, No. 3, pp 132140.

Budi Satria Utama, 2020. Redesigning the User Interface and User Experience on the Cosmic Clothes Website
<https://elibrary.unikom.ac.id>

THIS PAGE INTENTIONALLY LEFT BLANK