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Designing the User Interface for the Virtual Tour Selayar System using Figma

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ABSTRACT

This study aims to design the user interface for the Virtual Tour Selayar system using the Figma application. The system is expected to provide an interactive and informative virtual tour experience for users who wish to explore the beauty of Selayar Regency digitally. The design process employs the Design Thinking method, which consists of five main stages: understanding user needs (Empathy), defining the problem to be solved (Define), generating various ideas for potential solutions (Ideate), creating a simple version or initial model (Prototype), and testing the prototype (Tes). The Empathy stage involves observations and interviews to understand users' desires and needs concerning the virtual tour system. Next, the Define stage formulates the primary problem that the system needs to address. In the Ideate stage, various interface ideas and concepts are generated through brainstorming sessions. Subsequently, the Prototype stage produces the initial version of the interface, developed in both low fidelity and high fidelity forms using Figma. The final stage, Testing, is conducted by involving actual users to test the created prototypes. Feedback obtained from users is utilized to refine the interface, ensuring it aligns with their expectations and needs. The outcome of this research is a user interface prototype that has been tested and refined based on feedback, which is anticipated to enhance the user experience when using the Virtual Tour Selayar system effectively and satisfactorily.

INTRODUCTION

The development of digital platforms in recent years has seen remarkable advancements. Various tools and digital platforms have been introduced, enabling designers to create prototypes and design user interfaces more effectively and efficiently. One such platform is Figma, which not only facilitates team collaboration but also allows for real-time design testing and iteration (Calonaci 2021; Hassan and Shohag 2023; Iantorno and Pandeliev 2024). These advancements have revolutionized the way designers work, making the design process more dynamic and responsive to user feedback.

A well-designed interface can enhance user engagement and ensure a pleasant experience when using an application or system. In this digital era, User Interface (UI) and User Experience (UX) design are not merely seen as aesthetic components but also as strategic elements that can determine the success of a product (Andryanto et al. 2023; Sutcliffe 2022). Effective UI/UX design must consider user needs, usage characteristics, and the goals of the developed system (Praseptiawan et al. 2023; Vlasenko et al. 2022).

One of the methods widely adopted in UI/UX development is Design Thinking. This method places the user at the center of the design process, aiming to create solutions that truly align with the needs and expectations of the user. Design Thinking consists of five key stages: understanding user needs (Empathy), defining the problem (Define), generating various solution ideas (Ideate), creating an initial prototype (Prototype), and conducting testing (Test) (Lee and Park 2021). Numerous studies have shown that the application of Design Thinking in UI/UX design can result in products that are more user-friendly and aligned with user expectations (Koswara and Alifin 2024; Maringka and Lumingkewas 2024). However, a common challenge in applying Design Thinking is ensuring that the outcomes of each stage effectively address the problems faced by the users.

The natural beauty and cultural richness of the Selayar Islands Regency can serve as key attractions in tourism promotion. Local cultural festivals, handicraft exhibitions, and traditional cuisine can be integral parts of an appealing tourism package (Edison, Rahmaniar, and Saleh 2024). Therefore, a system is needed that is not only functional but also capable of providing an interactive virtual tour experience. This study aims to apply the Design Thinking method in designing the user interface of the Virtual Tour Selayar system using Figma, with a focus on developing a prototype that can be tested and refined based on user feedback. It is hoped that the resulting system will offer an optimal user experience and enhance the appeal of the Selayar Islands Regency as a tourist destination.

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LITERATURE REVIEW

Desain UI/UX

UI/UX Design, an abbreviation for User Interface/User Experience Design, is a discipline concerned with the design of user interfaces and the user experience in interacting with digital products. UI/UX Design focuses on how users interact with digital products, encompassing aspects such as interface navigation, visual appearance, and the features provided. According to (Garrett 2022), UI refers to the part of a software system or application that allows users to interact with the application or system, while UX encompasses the overall user experience when using the product, including the visual, functional, and emotional aspects perceived by the user.

Design Thinking

Design Thinking is a problem-solving approach that emphasizes empathy, creativity, and iterative testing. This approach centers on understanding user needs, defining the problem, ideating solutions, creating prototypes, and testing them. According to (Brown 2009), Design Thinking encourages designers to explore different perspectives, challenge assumptions, and involve users throughout the design process.

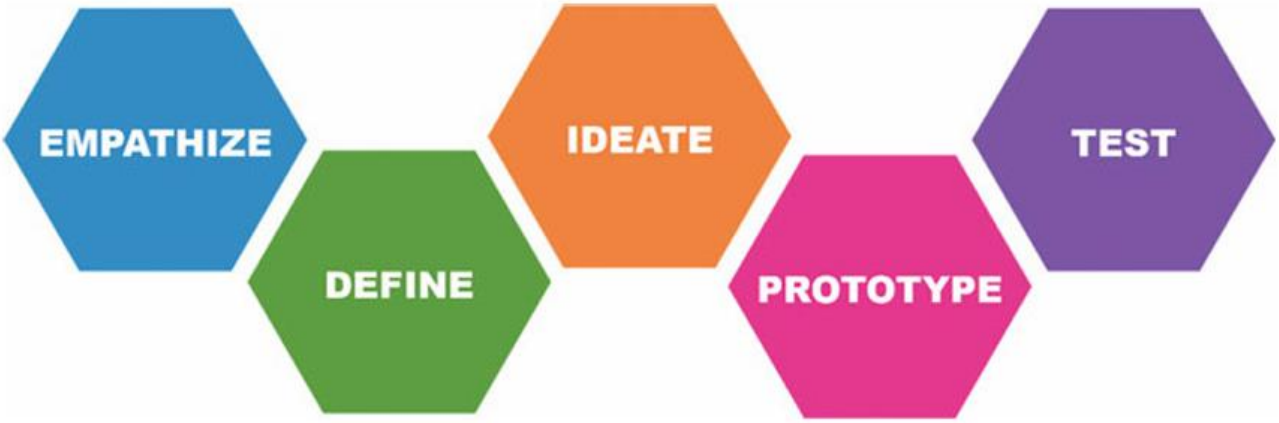

Figure 1. Design Thinking Process (Gallanis 2020)

Proses Desain Thinking dapat dipecah menjadi lima tahap utama:

1. **Empathy**, This involves gathering insights into the users' needs and challenges through interviews, observations, and surveys. In UI/UX design, empathy maps and user personas are often created to represent the target users and guide design decisions (Stickdorn and Schneider 2012).
2. **Define**, The problem is clearly defined based on the insights collected during the empathy stage. In UI/UX design, this may involve defining user flows, pain points, and key tasks that the interface needs to support (Kolko 2015).
3. **Ideation**, Designers brainstorm various potential solutions to the defined problem. Techniques such as sketching, wireframing, and brainstorming sessions are commonly used in UI/UX design, allowing designers to explore different layout options, visual styles, and interaction patterns (Lewrick, Link, and Leifer 2018).
4. **Prototype**, At this stage, designers create low-fidelity prototypes or mockups of the interface. These prototypes are used to test design concepts and gather initial feedback from users. Tools like Figma, Sketch, and Adobe XD are often used in this phase to create interactive prototypes (Lee and others 2020).
5. **Test**, The final stage involves testing the prototype with real users to gather feedback and identify usability issues. Based on this feedback, the design is refined and iterated until it meets the users' needs and expectations (Norman and Verganti 2014).

Figma

Figma is one of the most commonly used design tools for designing interfaces for mobile apps, desktops, websites, and more (Staiano 2022). This tool can be accessed through Windows, Linux, or Mac operating systems as long as they are connected to the internet. Figma's strength lies in its ability to support real-time team collaboration (Calonaci 2021; Staiano 2022). This makes Figma a favourite choice of many UI/UX designers to create website or application prototypes quickly and efficiently.

METHOD

This research applies the design thinking method in designing a virtual tour system for Selayar. The advantage of design thinking lies in an approach that functions as a method, way of thinking, or work tool that is able to connect organisations with the communities they serve, transform existing data into workable ideas, discover new opportunities, accelerate and increase effectiveness in creating innovative solutions, and prioritise people and behaviour as the centre

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of activity, while encouraging optimism and collaboration. This design thinking method focuses not only on visual aspects and sensations, but also on the overall user experience. The application of this method can be done iteratively, from the planning stage to the development stage to find optimal solutions and designs.

RESULT

This section presents the results of each stage of design thinking from empathy, define, idete, prototype, test.

Empathy

In the process of designing the system, researchers conduct research starting from data collection, user needs, interviews with users in this case the local government and tourist visitors in the Selayar Islands district so as to get feedback from the system design that has been made.

Define

Based on the results of discussions and interviews with system users, the system requirements that can be obtained are as follows:

1. Information media displays maps and coordinate points of tourist locations
2. The virtual tour page is presented with various audio, video and social media information.
3. Easy access to information and avoid system errors/bugs.

Ideate

The system requirements obtained, then the researcher designs the system according to user needs, in Figure 2 shows the system flow.

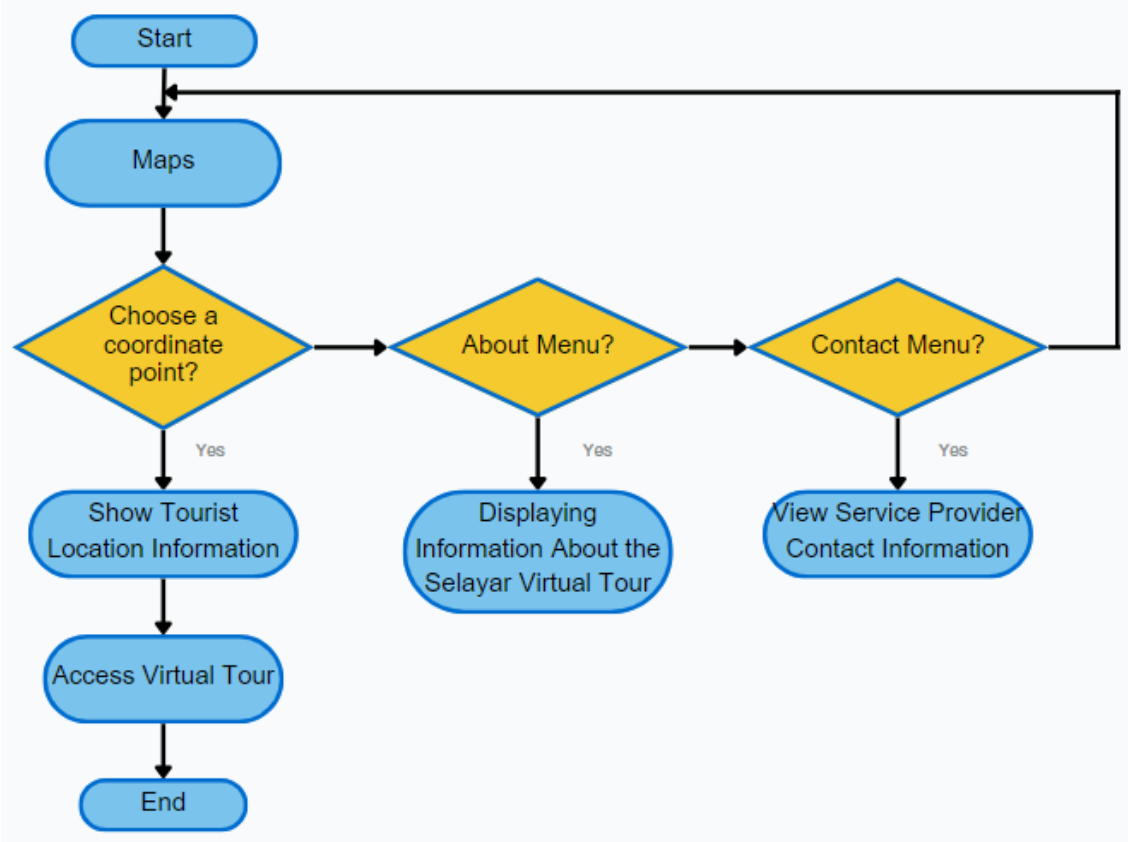

Figure 2. System Flowchart

The system flow shown in Figure 2 starts from maps, which is a map display located in the Selayar Islands district, on the map there are coordinate points where users can see detailed tourist location information. Users can access the virtual tour page of each tourist location interactively with the help of audio, video, and can disseminate information through social media.

Prototype

This section describes how the low fidelity and high fidelity designs were designed.

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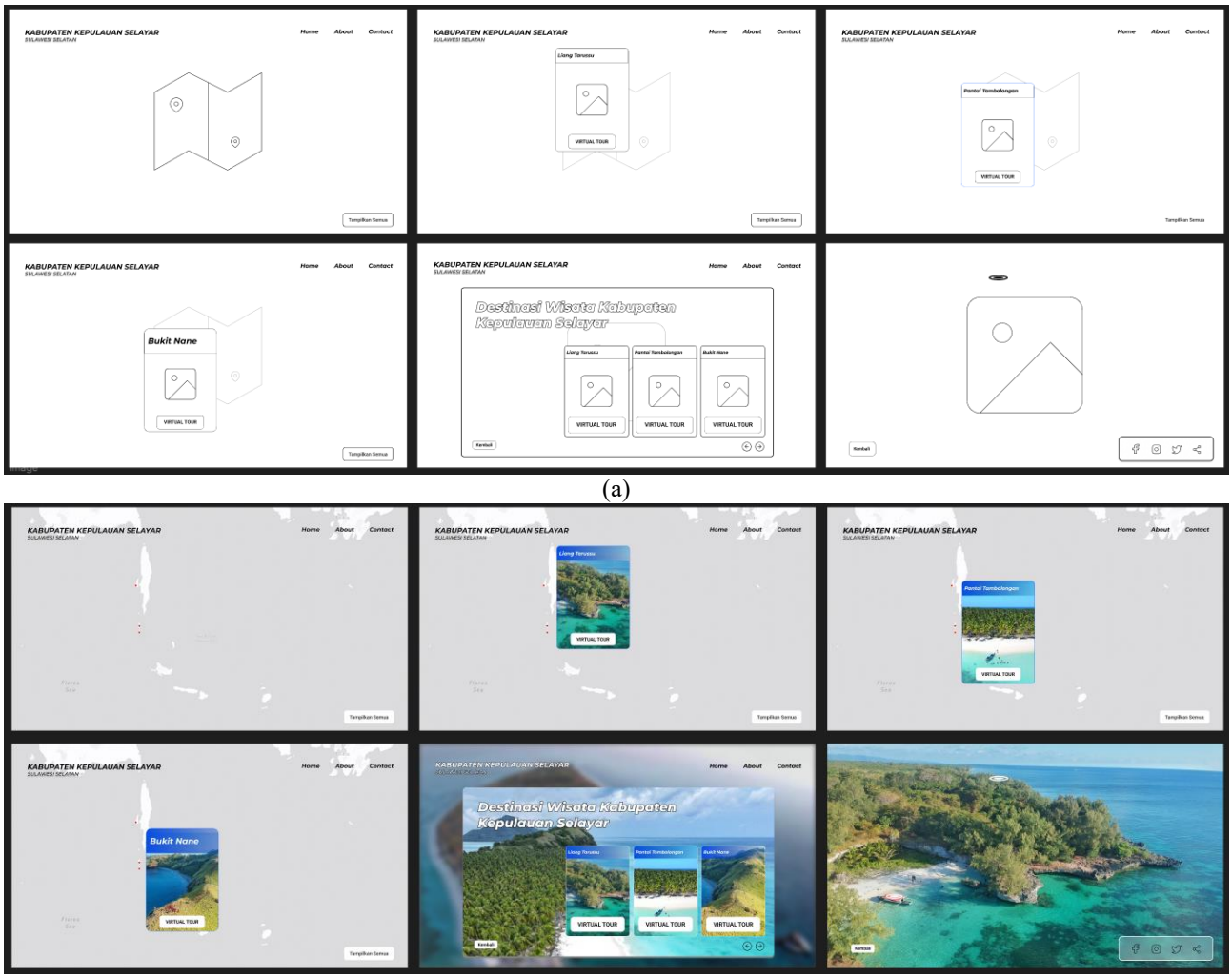

(a)

(b)

Figure 3. Low-Fidelity and High-Fidelity Prototyping

In Figure 3 part (a) is a Low-Fidelity system design for layout options and interaction patterns, then in part (b) a High-Fidelity Prototyping system design for testing design concepts and collecting initial feedback from users.

Test

The test section is the final stage that involves testing the prototype to identify functional issues with the system.

Table 1. Functional Testing on the System

Test Scenarios	Expected results	Status
Click Coordinate Point	The system displays a pop-up of tourist information and a button that leads to a virtual tour page detailing the tourist location	Valid
Click Button Virtual Tour	The system leads to the Virtual Tour page of the tour location details	Valid
Click the Social Media button	Information can be shared on social media	Valid

In table 1, testing of the prototype that has been made which is validated by 2 experts in the field of UI / UX design shows that the system designed is in accordance with the function and has no bugs / functional errors. The results of this prototype design will then be tested on users before the system is implemented in the actual environment.

DISCUSSION

The design of the user interface on the Selayar virtual tour system is made using Figma, the use of the Figma platform helps researchers design the system, this is also in line with the research conducted by (Alao et al. 2022) the use of the Figma platform helps users design the system, besides that this platform also helps researchers complete from one person simultaneously.

In the design process, researchers used the Design Thinking method. This method helps researchers in

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understanding user needs more deeply through the empathy stage, so that the resulting design can be more in line with user expectations. Design Thinking also guides researchers in identifying the main problems that need to be solved and ideating innovative solutions.

CONCLUSION

This research successfully designed a user interface for Selayar Virtual Tour system using Figma application, by applying Design Thinking method as the main framework. Through the five main stages of Empathy, Define, Ideate, Prototype, and Test, this research was able to produce an interactive and informative interface prototype. The prototype has been tested by 2 experts in the field of UI/UX design who assess that the system design is functionally appropriate. This system design is expected to be implemented in the real environment so as to provide high satisfaction to users and can increase the attractiveness of Selayar tourism.

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