CHAPTER I INTRODUCTION

1.1 Background

Community service is an important aspect of social life. Institutions and communities can collaborate in handling existing service-related issues. With the rapid development of digital era, everything can be solved with the help of technology. The advancement of Information and Communication Technologies (ICT) has the potential to transform economies and societies in a variety of ways, including the reduction of information and transaction costs, the development of new collaborative models to increase worker efficiency, the promotion of innovation, and the improvement of education and access to basic services (Arellano & Cámara, 2017).

Go Siaga App, launched in March 29th 2021, is a public service application in handling security and public disturbance and reporting loss or damage in the Tangerang Sub-district area. From the point of view of its use, this application is one of the community services that can reduce information and transaction costs, develops new collaborative models to increase worker efficiency, promotes innovations, accesses to basic services.

Based on an online interview conducted on January 26th, 2022 with the initiator of the Go Siaga App via WhatsApp Video Call, Kompol Yulies Andri Pratiwi, S.I.K, Go Siaga is a mobile application for reporting disturbances in public order and security and for making online loss or damage reports. Its nature is to help the public community online, quickly, and anywhere. Anyone can use the Go Siaga App as long as the incident takes place in the Tangerang Sub-district area. The presence of this application is a solution in this pandemic era to reduce the spread of COVID-19 but not a bit to reduce the friction between police and public community because the essence of this is actually to facilitate them an online public access to the police wherever they are. Furthermore, Yulies

initiated the idea for this application based on the fact that there are still many people who do not pay much attention to the importance of reports of lost/damaged goods because of being lazy to visit the police station directly that can cause incomplete required documents as evidence of handling lost items at the agency that handles them.

Currently, the Go Siaga App is being passive or under maintenance due to a change in the place of work and the position of Yulies as the initiator of the app to the Central Jakarta Metro Police Office. Go Siaga passiveness occurs because there is no authority from the new sector police chief to continue the project. As a matter of fact, Yulies has proposed to the assessment team for the implementation of Go Siaga in a wider area but it is still on the list of review status. Despite the fact that Yulies is the initiator, she does not want to claim that this product belongs to her. She wants Go Siaga to be more community-oriented and theirs. Therefore, it is hoped that once Go Siaga is approved to operate in a wider area, the design provided in the app can satisfy the user when they access it so that the continuation of Go Siaga App would bring no vanity.

The phrase UI/UX may be one that we are more familiar with. The phrases user interface and user experience are combined to form the phrase UI/UX. User experience (UX) is how we feel when we engage with a product, whereas user interface (UI) is the presentation of all that we see in front of our eyes. We frequently design applications without considering the needs of the users. Because it essentially concerns how far we can draw users' attention to the program, UI/UX is crucial for the sustainability of utilizing the application in the future. Research conducted at a school with 29 people on "Understanding of UI and UX, and Understanding of Design According to User Interface Change" by (Joo, 2017) showed that 20% of students understand UI/UX excellently and 80% of students do not understand UI / UX well. Moreover, because the UI/UX field does not cover the implementation phase, many of us think that UI/UX is simply dragging and dropping the required components into the frame view. Though UI/UX is more than that. The main focus on the UI/UX field is in the research

which can use several methods of approaching the user. UI/UX provides interface design that comprises graphics, such as how the interface will appear, the layout of various parts, and their interconnectedness in terms of hierarchy and interaction design that can simulate the actual application that will be built later (Vatsal Sharma, 2021).

Because of its user-focused nature, the methods are also very usercentered. One of the existing methods is Design Thinking. This research uses Design Thinking Method by (Brown, 2008) which innovation is powered by a thorough understanding that requires a human-centered, creative, iterative, and practical approach to finding the best ideas and ultimate solutions. This method matches on the problems put forward by Yulies to create innovations that are community-oriented. According to (Plattner, 2018), one of the founders of the software company SAP SE, the five phases in design thinking include Empathize, Define, Ideate, Prototype, and Test. In the end, the percentage of usability will be derived through testing methods such as Task Completion, Think Aloud, Maximum Completion Time, and System Usability Scale. Assessment instruments such as effectiveness, efficiency, usefulness, satisfaction, and learnability are used in this research as a reinforcing determinant of the design result success (Rubin & Chisnell, 2008).

(Adiyasa & Yogasara, 2020) conducted earlier research on this field which was measuring job descriptions based on the ISCO-08 and calculating employee requirements using the Interaction Design Method in the form of a high-fidelity prototype web application using Adobe XD. The success of the prototype was influenced by its effectiveness, efficiency, usefulness, satisfaction, and learnability. In that discussion, only the researcher which was one person who participated in determining the maximum completion time as the benchmark for the maximum task completion time for other respondents. In this opportunity, however, the novelty focused on also one respondent who participated in testing but with the duration of time for three days in a row to establish the maximum

3

completion time that would result a more natural and user-oriented maximum completion time.

The results of this research are a high-fidelity prototype interactively based in a mobile phone view and the usability calculation comparison between the current design and the redesigned version specifically in the aspects of effectiveness, efficiency, usefulness, satisfaction, and learnability. Design iterations will also be carried out by considering feedback from related parties on the solutions that have been innovated. Therefore, it is hoped that research entitled "**Implementation of Design Thinking Method in UI/UX Redesign of Public Complaint Application (Case Study: Go Siaga App)**" can be beneficial for the readers.

1.2 Problem Identification

Identification of the problems found in the form of research results shows that:

- 1. 20% of students understand UI/UX excellently and 80% of students do not understand UI / UX well
- 2. Based on the online interview with the Go Siaga's initiator, Kompol Yulies Andri Pratiwi, S.I.K, the app is still under maintenance so that she wants Go Siaga to be more community-oriented when it comes to being approved to operate in a wider area later

On top of those, the problem formulation appears as follows:

- 1. How to implement the design thinking method in redesigning the UI/UX of the Go Siaga App?
- 2. How to calculate values for each usability aspect of the Go Siaga App to make the app more community-oriented?

1.3 Purpose of the Study

- To implement the design thinking method in redesigning the UI/UX of the Go Siaga App
- 2. To calculate values for each usability aspect of the Go Siaga App to make the app more community-oriented

1.4 Limitation of the Problem

- 1. Redesign the UI/UX of the Go Siaga App in a mobile version
- 2. Serve the high-fidelity prototype as the simulation of the app to be developed
- 3. Provide the comparison results of the user satisfaction calculation in usability testing in aspects of effectiveness, efficiency, satisfaction, usefulness, and learnability between the current and the redesigned version

1.5 Benefits of the Study

- Create a more pleasant experience for users in using the Go Siaga App with new more user-oriented user interfaces tested by the usability testing's aspects
- 2. Assist the Tangerang Sub-district Sector Police in researching user needs for the Go Siaga App
- 3. Increase the community traffic in using Go Siaga App so that manual operations are less due to the pandemic of COVID-19
- 4. Provide knowledge about the design process of a community service application using the Design Thinking Method

1.6 Framework of Thinking

The framework of thinking for completing this research is described visually and can be seen in the Figure 1.1.



Figure 1.1 Framework of Thinking

1.7 Writing Structure

The systematic writing is made to facilitate the writing of the thesis report. Thus, the systematic writing of this thesis is divided into five chapters, with the explanation for each chapter, as follows:

CHAPTER I INTRODUCTION

This chapter discusses about the background, problem identification, purpose of the study, limitation of the problem, benefits of the study, framework of thinking, and the writing structure.

CHAPTER II THEORETICAL BASIS

This chapter discusses about the related research studies and theoretical basis that support this study.

CHAPTER III METHODOLOGY

This chapter discusses about the methodology including its phases from Empathize to Testing and the current system analysis.

CHAPTER IV RESULT AND DISCUSSION

This chapter discusses about the research data result, and research discussion.

CHAPTER V CONCLUSION AND SUGGESTIONS

This chapter elaborates the conclusion and suggestions.

Esa Unggu