Implementation of the UCD (User Centered Design) Method for monitoring the Implementation of Personnel Tasks at DITSAMAPTA Website Based Police of North Sumatra

Eka Rahayu[1*], Arie Rafika Dewi[1]
[1]Fakultas Teknik dan Komputer, Universitas Harapan Medan, Indonesia

ABSTRACT

DITSAMAPTA Polda Utara Sumatera is one of the Working Units of the North Sumatra Regional Police, based on Police Regulation Number 14 of 2018 DITSAMAPTA has a main role and task in terms of fostering and carrying out general police duties (regulation, guarding, escorting, patrolling, handling Tipiring, handling TPTK, security and rescue assistance), crowd control and demonstrations, animal assistance in carrying out tracking, deterrence, providing tactical assistance in carrying out investigative and investigative duties. From these various tasks, DITSAMAPTA has problems in collecting data and placing personnel to carry out their main daily tasks, so that things often occur such as multiple assignments to one personnel, several main tasks are not fulfilled due to errors in reporting the number of personnel in real terms, and other tasks related to the assignment or placement of personnel, this is because DITSAMAPTA in its personnel data collection is still manual, resulting in inaccurate information and confusion in deciding the policies of leaders in the field. Given these problems, a study was conducted to monitor the activities of DITSAMAPTA personnel which aims to provide convenience in finding information on any personnel on duty, standby, not entering the office such as: sick, permits, leave and so on. Monitoring of personnel activities is carried out using a website-based application. The website is a platform to make it easier to find information and facilitate communication. The application applies the UCD (User Centered Design) method where the system can provide more accurate and precise according to user needs.

Keyword : UCD; Monitoring; Website; Personnel.

Corresponding Author:	*Article history:*
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Universitas Harapan Medan	Accepted Sep 1, 2020
Jalan HM. Jhoni No. 70 C. Medan, Indonesia	
Email : eka.r0041@gmail.com	

1.   INTRODUCTION

Utilizing information technology as a medium for searching and processing data into information has a big impact on agencies, namely providing fast results when we need them for decision making. Such as monitoring employee work if done conventionally requires quite a long time, so we need a system for monitoring employee work that will provide employee performance reports quickly.

Monitoring employee performance, the Company can start from the start of work until completion of work. There are three main factors, namely motivation, satisfaction, and work discipline in terms of employee performance (Mahdy et al., 2022). The purpose of monitoring is to monitor the situation. Monitoring is important in the process to ensure activities are going according to plan, so that the goals are achieved or not (Hayati, 2019)(Budiman et al., 2021).

In building applications the need for concepts to fit the needs. The concept of UCD (User Centered Design) is a system development process, and objectives, the system environment is entirely based on user experience (Gelinas et al., 1990)(Budiman et al., 2021). UCD can also be interpreted as an interface design process that focuses on usability, user characteristics, environment, tasks, and workflow in its design (Kurniawan & Prananda Putra, 2022)(Sinaga et al., 2018)(Kaligis & Fatri, 2020).

Website is a collection of information that can be accessed via the internet (Romadhon et al., 2021). PHP (Phyertext Preprocessor) is a language in the form of scripts that are placed on the server sent to the client using the browser (Asmara, 2019).

DITSAMAPTA or Directorate of Samapta is an element implementing the main tasks in the field of DITSAMAPTA at the Polda level which is under the Kapolda (Aderibigbe, 2018). The obstacles faced by

DITSAMAPTA are collecting data and giving personal assignments in carrying out basic daily tasks, such as multiple assignments to one personnel, not fulfilling several main tasks due to errors in reporting the number of personnel in real terms, and other tasks related to personnel placement. This is because DITSAMAPTA in personnel data collection is done manually, so that the impact on inaccurate information results in errors in making leadership policies in the field.

In literature (Bhagwat, 2015) conducting research on Employee Monitoring Systems Using Android Smart Phones aims where Managers to navigate all company employees. In library (Adhitama et al., 2022) conducting research using the UCD method to monitor the development of children with special needs in special schools, UCD is used to make applications that seem more interactive, where users can easily monitor students in understanding student cognition, character and attitudes. Pustaka (Bùdker, 2000) conducts scenario research on the use of UCD in organizing reflections and actions to help user groups and designers become creative in designing

Based on the research that has been done and the problems, the researchers are interested in building an application for monitoring the implementation of the duties of Personnel at DITSAMAPTA POLDA SUMUT using the Website-Based UCD method. So the purpose of this study is to facilitate the DITSAMAPTA unit in processing personnel assignment data.

2.   RESEARCH METHOD

In this research, in solving problems using the User Centered Design method, the UCD method is used to make the design of the application interface display that the user can desire optimally realized (V.A.R.Barao et al., 2022).
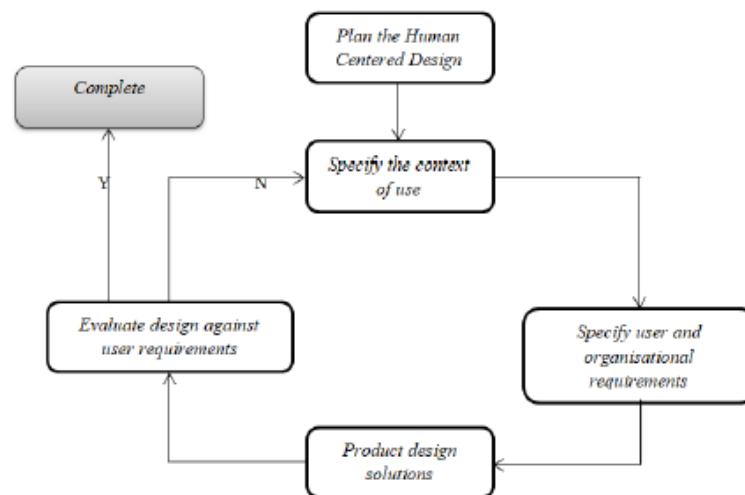

Figure 1. UCD Method Stages

Fig 1. is the stages of the UCD method based on:
1. Specify the context of use functions to identify users who will use the application, this process describes what conditions they want to use the application, so at this stage to obtain information using observation and interview methods with prospective users.
2. Specify user and organizational requirements function to collect user needs in the form of data/information and create a design in the form of a Wireframe based on the purpose of making the item useful.
3. Product design solutions function to design research solutions as a solution plan for the system being analyzed.
4. Evaluate design against user requirements functions to evaluate the system, whether the user's goals have been achieved

A. User Personals

Personal users are prospective application users, in this case conducting interviews about system requirements related to personnel information in the form of personnel assignments, anyone in

an alert position, permission and illness. As well as how to design the application interface according to the wishes of prospective users. There are two potential application users, namely Kasubbagrenmin and Kabagbi opsnal

B. User Flow

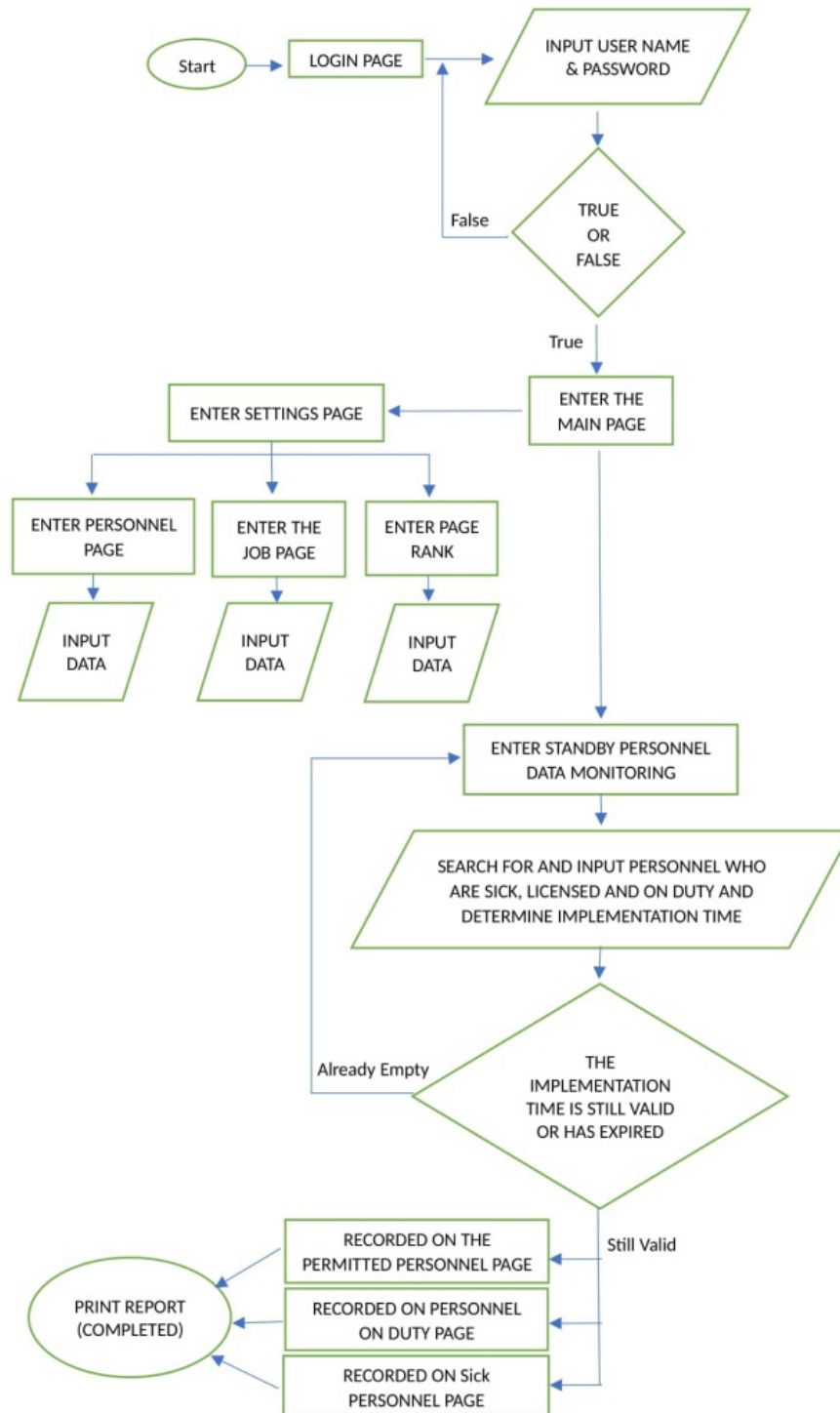User Flow is a flowchart that illustrates how users use the application to solve problems.

Figure 2. User Flow

B. App Mockups

Mock up is an overview of the concept design that will be applied, aiming to make the arrangement of design items more effective
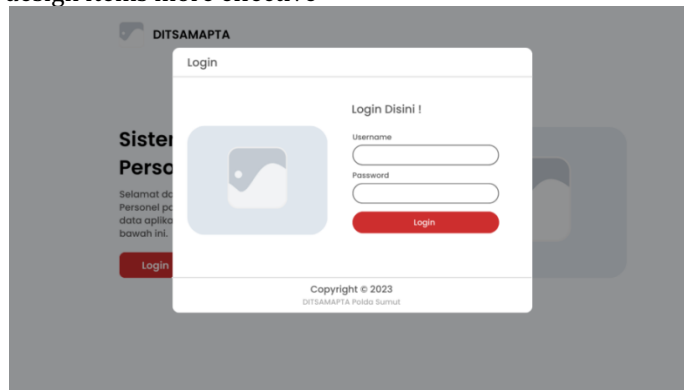
Figure 3. Login Page Interface Design
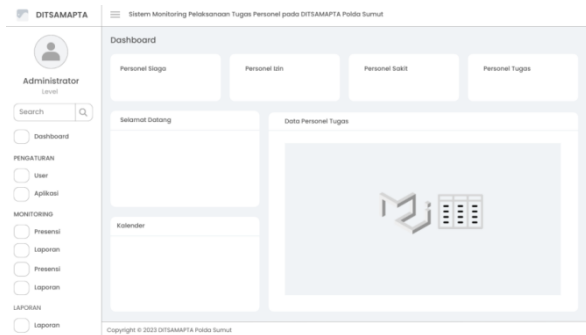
Figure 4. Dashboard Page Interface Design
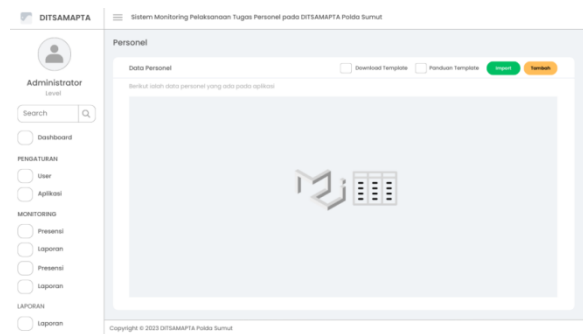
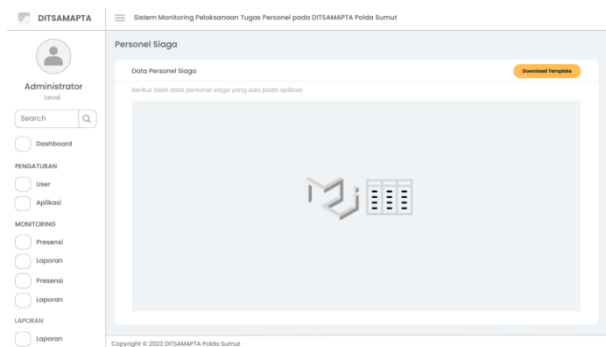Figure 5. Interface Design Of The All Personnel Data Page

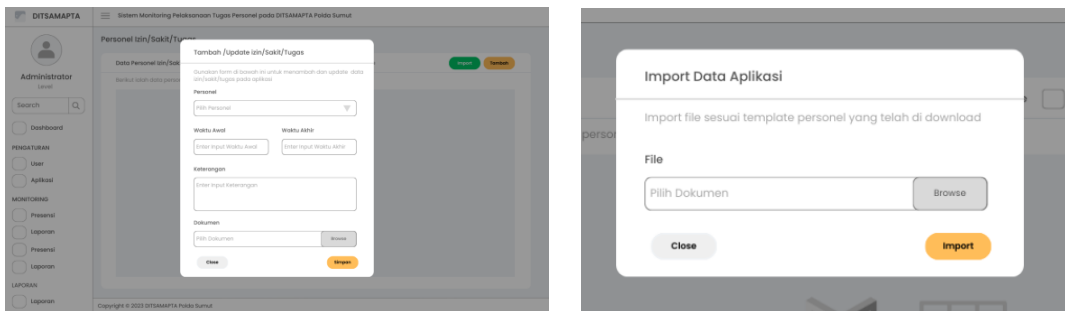Figure 6. Standby Personnel Data Page Interface Design

Figure 7. Personnel Data Input page interface design

3. RESULTS AND DISCUSSION

The application of the UCD method in making applications is based on the wishes and needs of the user. Implementation of a website-based personnel monitoring application, where this application can be accessed by the Kasubbagrenmin admin and the head of opsnal.

A. Display login page

The login page is the first page that appears when accessing the ditsamaptapoldasumut website. This page asks the user to login by entering the username and password first.
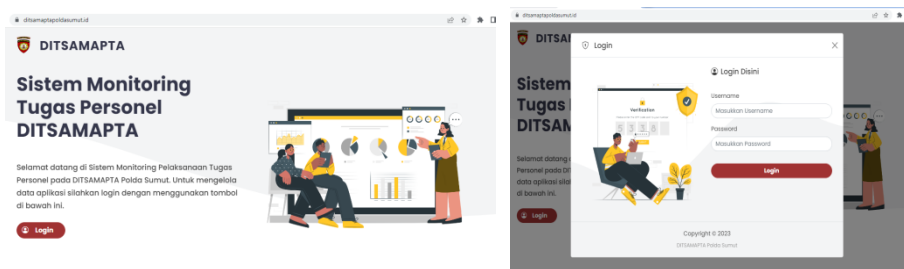

Figure 8. Display login page

B. Dashboard Page Display

The dashboard page is a page that displays the core contents of the personnel monitoring application.
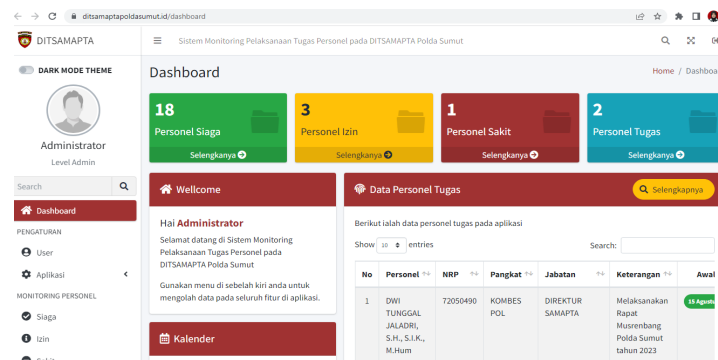

Figure 9. Dashboard Page Display

Figure 9. displays the amount of data on standby, sick, licensed and on-duty personnel. This page also displays the names of the personnel on duty, as well as the calendar

C. Display of Personnel Data Page

Personnel data page is a page that contains data on all personnel.

Figure 10. Display of Personnel Data Page

Figure 10 displays personnel data, where on this page there are buttons that function to download templates, view template guides, import data, add personnel data.

D. Display of Standby Personnel Data Page

The standby personnel data page is a page that contains the overall data of personnel who are not on duty, on leave and sick.

Figure 11. Display of Standby Personnel Data Page

Figure 11. shows a page that has a function button that can download templates containing personnel data.

4. CONCLUSION

1. The monitoring application for the DITSAMAPTA POLDA SUMUT unit can be used according to user needs.
2. Using the UCD method makes it easier to design application interface designs according to user needs.
3. This application really helps the admin in finding personnel on duty in the field.
4. This application can provide information on personnel who are on standby and not in the office such as: sick, permission, leave.

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