# INCREASING EMPLOYEE COMPLAINT DATA COLLECTION WITH THE TICKETING SYSTEM HELPDESK APPLICATION AND TICKET PROGRESS MONITORING

***Muhammad Iqbal Viarsyah[1], Ienda Meiriska[2], Dewi Immawati Siregar[3], Devi Sartika***
*[1]Politeknik Negeri Sriwijaya; Palembang*
*Corresponding Email: *ienda_meiriska_mi@polsri.c.id*

## *ABSTRACT*

*The purpose of writing this Final Report is to create a Web-Based Helpdesk Application with a Ticketing System and Integration of Progress Monitoring Features to Improve Action Data Collection on Employee Complaints for the Population Control and Family Planning Office of Muara Enim Regency which includes ticket data input, edit and delete ticket data, manage news and users, as well as viewing user logs data by Admin. While Users (Customers / Employees) can make tickets, view news and can see the status of ticket work. The method used for preparing this report is the SDLC Waterfall system development method. The process used to design this system is the Unified Modeling Language (UML) and uses the PHP framework programming language, namely Laravel and the MySQL database. This system is divided into 3 parts, namely Admin, technicians and Users (Customers / Employees). By making this application, it is hoped that it will be able to improve data collection on actions against employee complaints for the Population Control and Family Planning Office of Muara Enim Regency.*

Keywords: *Helpdesk, Ticketing, Laravel*

## *ABSTRAK*

*Tujuan Penulisan Laporan Akhir ini adalah untuk membuat Aplikasi Helpdesk Berbasis Web Dengan Sistem Ticketing Dan Integrasi Fitur Pemantauan Progress Untuk Meningkatkan Pendataan Tindakan Terhadap Keluhan Karyawan Untuk Dinas Pengendalian Penduduk Dan Keluarga Berencana Kabupaten Muara Enim yang meliputi input data ticket, edit dan hapus data ticket, mengelola berita dan user, serta meliihat data user logs oleh Admin. Sedangkan User(Customer/Pegawai) dapat membuat tiket, melihat berita serta dapat melihat status pengerjaan ticket. Metode yang digunakan untuk pembuatan laporan ini adalah menggunakan metode pengembangan sistem SDLC Waterfall. Proses yang digunakan untuk mendesain sistem ini adalah Unified Modeling Language (UML) dan menggunakan Bahasa pemrograman framework PHP yaitu Laravel serta database MySQL. Sistem ini terbagi menjadi 3 bagian yaitu Admin, teknisi dan User (Customer/Pegawai). Dengan dibuatnya aplikasi ini diharapkan dapat Meningkatkan Pendataan Tindakan Terhadap Keluhan Karyawan Untuk Dinas Pengendalian Penduduk Dan Keluarga Berencana Kabupaten Muara enim.*

Kata kunci: Helpdesk, Ticketing, Laravel

## INTRODUCTION

The Helpdesk is the main place to report problems and to provide and record information that is managed and coordinated (Syofian & Winandar, 2017). From a broader perspective, it is also seen as an important part of service functionality that juxtaposes resources and solves problems. The use of the helpdesk is focused on the internal office of the Population Control and Family Planning Service, namely employees and other staff to help collect data on actions taken from complaints in the office work environment. The helpdesk is very important for the smoothness and quality of support provided to users.

the obstacle that occurs at the Population Control and Family Planning Office is that there are many reports that occur only from person to person without going through the usual procedures that use a delivery system either through an offline help desk or even through this helpdesk and are followed

up in the end in an uncertain period of time and its progress cannot be monitored and is not recorded. the data above can cause problems such as the number of complaint reports submitted directly to the party concerned with a problem so that the data collection on the actions taken is imperfect and there is absolutely no data collection that is chronological and actual in nature, causing problems that are at risk of being recorded repeatedly, using personal funds to deal with damage or problems with facilities and the emergence of problems where action data on complaints are not properly recorded, because the focus of data recording at the service is generally only focused on the incoming and outgoing of funds to deal with a problem, external services or procuring activities. To deal with the obstacles mentioned above, a web-based helpdesk application with a ticketing system was created and integrated with a progress monitoring feature that can make it easier for reporters to report details of the problems of the parties concerned with these problems at the Office of Population Control and Family Planning.

## METHOD

Application development in this case uses waterfall, with the following activities

1) Analysis

In the analysis stage, an analysis of the current system was carried out and there were several shortcomings, namely: 1) The problem did not have a complaint objective so it made employees confused about reporting complaints and complaints. 2) As a result of the previous thing, employees end up bypassing without going through reporting and data collection. 3) This bypass results in no data collection on complaints/complaints and no resolution of the problem being recorded

2) Design

In the design phase, use an object-oriented approach by creating usecase diagrams, activity and sequence diagrams.

3) Implementation

After designing the application, then develop the application using the Laravel framework and MySQL database.

4) Testing

Testing this application uses the black-box testing method. Testing is carried out to find out whether the program of this application still has errors or not. This testing includes testing the input and output processes of the Web-Based Helpdesk Application with a Ticketing System

## RESULTS AND DISCUSSION

1) Analysis

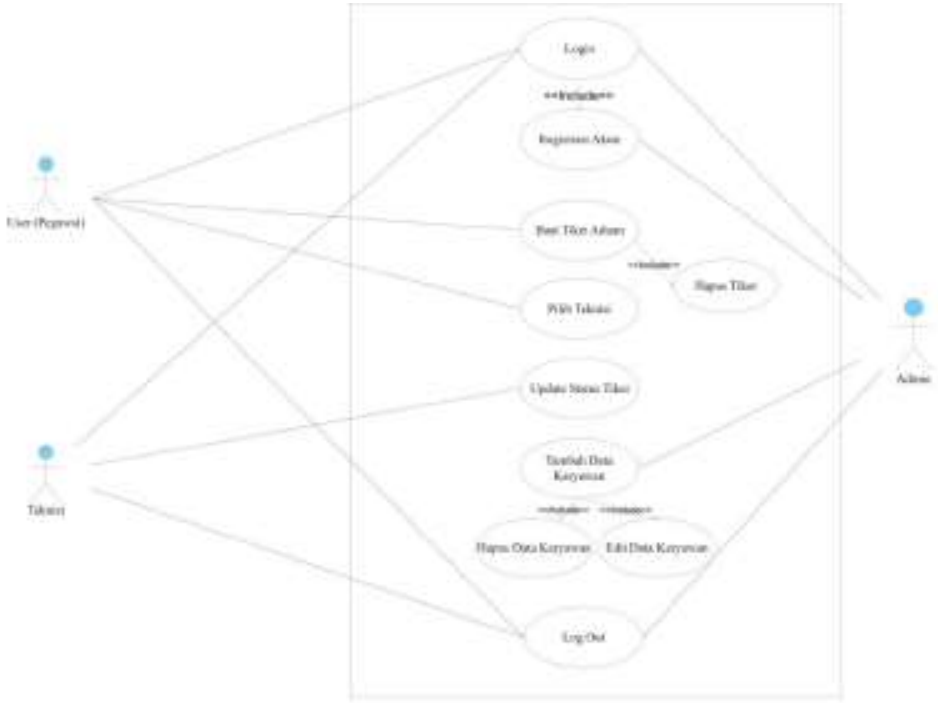
The application has a login page for admins, related technicians, and users, which in this case is specifically for DPPKB employees outside of admins and technicians as a limitation of access rights to this application. Those who have the right to access this system are admins and technicians, users who are office employees outside of admins and technicians who can only access and enter and edit reported tickets and add news.

The Helpdesk application has an input form that is used to enter data related to this application. This application makes it easier for DPPKB office employees to carry out reports related to damage to facilities and things that become obstacles in the implementation of office operations in the form of practical matters outside of the financial and funding context. The application can present data in the form of ticket reports.

This application must also make it easier for users to report complaints or complaints and also make it easier to collect data regarding operational activities as well as small factors that cause the accumulation of unrecorded expenses and complaints that are not resolved due to factors such as ignoring small problems such as damage to facilities which eventually accumulate. and more and more and transportation constraints that hamper the implementation of work activities.

2) Design

- *Use-Case Diagram*

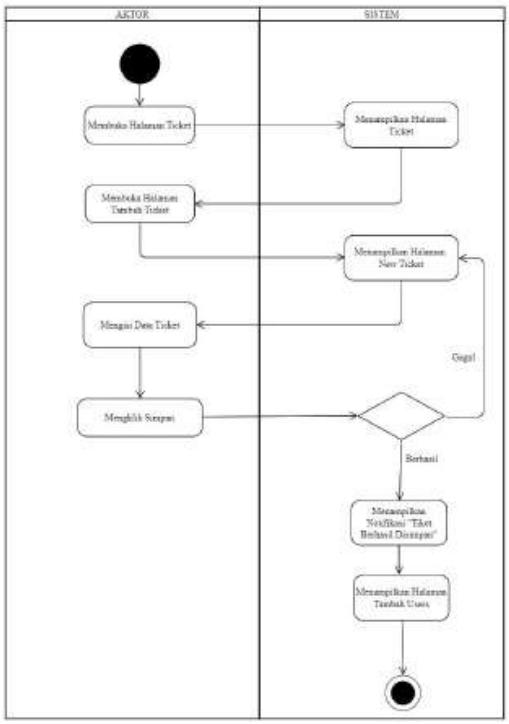



Admin is a person who acts as an admin in this system, an employee who will be appointed specifically to operate the helpdesk website. Admin manages the majority of the helpdesk application running. Among them are managing ticket data, employee data, etc.

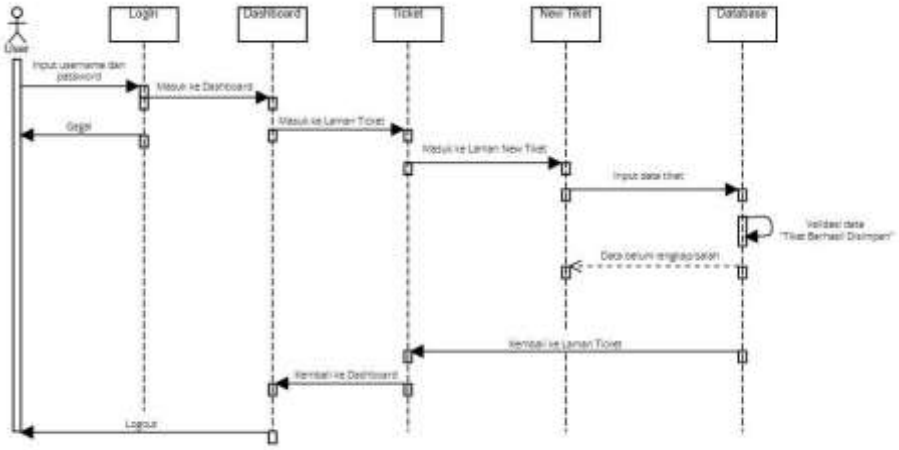
Technicians, who act as technicians in this system are secretariat employees and the fields below them. The technician is in charge of executing incoming reports and updating ticket progress.

Users (employees), who act as users here are employees of DPPKB outside of admins and technicians. Users can only view information about tickets, create and delete tickets, and update news about the office.

- *Activity Diagram Creating Tickets*




- *Sequence creates a complaint ticket*




On this page, users can add complaint tickets. The following is the add ticket page in Figure below

3) Testing

Testing this application uses the black-box testing method. Testing is carried out to find out whether the program of this application still has errors or not. This testing includes testing in the input and output processes of the Application. Black Box testing: is testing that focuses on the functional specifications of the software, the tester can define a set of input conditions and perform tests on the program's functional specifications. In other words, Black Box testing is done by simply observing the results of execution through test data and functional checking of the software. The function that is tested in this case is the function of making tickets for the user. The test results are as in the narrative below:

*Access the Ticket Page->Can display the page for the ticket page->Successfully access the ticket page*

*Ticket Data->Can display successfully saved data->Successfully display successfully saved data*

## CONCLUSIONS AND SUGGESTIONS

Based on the results of the discussion in the chapters related to the Design of a Web-Based Helpdesk Application with a Ticketing System and Integration of Progress Monitoring Features to Improve Data Collection on Actions for Employee Complaints for the Muara Enim Regency Population Control and Family Planning Service, in general it can be concluded, Designing a Helpdesk Application This provides benefits in the form of controlled recording of complaint reports more quickly and accurately, it is hoped that this can help technicians and secretariats in the process of correcting problems and collecting data on recording existing complaint reports..

## REFERENCES


Syofian, S. & Winandar, A. Aplikasi Helpdesk Mendukung Sistem Ticketing. J. Teknol. Inf. 4, (2017).

Cassandra, C. Pengembangan Model Sistem Informasi Aplikasi Helpdesk Online PT. Mustika Memadata. ComTech Comput. Math. Eng. Appl. 6, (2015).

Likhar, W. & Purwanto, H. Analisa Dan Perancangan Sistem Informasi Ticketing Helpdesk Online Berbasis Web: Studi Kasus PT XYZ Weli Likhar 1 , Hari Purwanto 2 1. Https://Journal.Universitassuryadarma.Ac.Id/Index.Php/Jsi/Article/View/719 8, 103–116 (2021).

Fauzi, M., Masrizal & Sihombing, V. Sistem Informasi IT-Helpdesk Universitas Labuhan Batu Berbasis Web. JURTEKSI (Jurnal Teknol. dan Sist. Informasi) 7, (2021).

Suhendra, M. & Sadiah, halimatuh tus. Aplikasi Helpdesk Teknologi Informasi Berbasis Website Website-Based Information Technology Helpdesk Application. J. Apl. Bisnis Dan Komput. 1, (2021)