Designing e-complaint tenant mobile application to XYZ mall

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Abstract. Nowadays, services based on technology is the fastest solution to know and get the information or to decide in the serving activities. XYZ mall has a good complaint management as the best services for the tenant property. Previously, the complaint management already existed based on the website. Nowadays, website is not effective anymore. According to the survey result, users are rarely use website to know the information, that’s why developing the mobile application is needed as an information media. Mobile application is the great solution because of the smart phone is used in a various party in the world. So, on of the solution for XYZ mall for this problem is designing mobile e-complaint tenant for XYZ mall. This application is designed with Grounded Research method and UML. This application can have accessed with android smart phone so can be handled faster.

1. Introduction
The company’s competition is tight at the moment. Companies are competing to provide the best services for their customers [1]. The XYZ mall is one of the modern market in corporate with the local government to tenant the properties. XYZ mall is already growing up to be the big mall with the new branded tenant there.

The serviced based on the technologies is the fastest solution to get the information or decide in the servicing quality. XYZ mall has the best complaint management for the tenant. In the complaint management before, there are planning based the website. But, according to Chumairoh, and others [2]. At the moment, Website isn’t effective anymore, the fact from the survey result that users rarely using website to get the information that’s why mobile application is need developing as the information media. Mobile application is the best solution because of the smart phone is used in a various party. It is happened because the provider’s support to preparing the faster internet access and a friendly android smart phone with the online access. It can be defined how to design the e-complaint tenant mobile application for XYZ mall.

The aim of the research is designing a new media as a faster solution in the complaint management implementation for XYZ mall. It facilitated communication media for tenant and the handling complaint management with the smart phone and make the complained can be handled faster.

1.1. Complaint Management
Complaint management is one of the important customer service aspects. The customer’s complaint is an important issue that should be solved to avoid other problems related to the company’s point. According to Subekti [3], Complaint Management is growing because the problems are made public service that produced by the government or private company.

The mechanism from the Complaint Management is the technique implementation to increase the customer’s satisfaction in the effort to anticipate and avoid the problems will grow up from the complain with the great and best complaining treatment [4]. According to Hariani [5], in practical term, the user service complaint can be classified into specific ways, for example the servicing process is too late, wrong or unclear information, even the irregularity that occur in a standard handling service.

1.2. E-Complaint

The phenomenon of online complaint (e-complaint) is already used in tourism [6]. E-complaint / online handling complaint is one of the implementation attempts in Customer Relationship Management (CRM) by increasing customer satisfaction [7].

E-complaint is an online complaint submission as a media between customers and owner when there is a deviation or inconvenience to solved soon by using internet access. An online complaint submission has better accuracy and faster than manual complain submission.

1.3. Mobile Application

Mobile application is one of many applications product/ software with mobile computerize system that is a computational system that can be easily transferred and computing capabilities can be used even if it moved [8]. Nowadays, mobile application is widely used in the android smartphone.

The existence of android smart phone is the newest product of mobile technology to access the information effectively and efficiently also can monitor the information in the real time [2].

2. Research Method

Grounded Research is used as a method of this research. Unified Modeling language (UML) is used as system design analysis.

3. Result and Discussion

3.1. Result

3.1.1. System Scenario Analysis

An e-complaint tenant scenario system for XYZ mall is explained on the table below.

| No | Scenario System |
|----|-----------------|
| 1. | Tenant login to the application by using username and password have given by XYZ mall management as an e-complain tenant account of XYZ mall. |
| 2. | Submit the submission data correctly and click “Kirim” if it done. System will send the complaint number as a particular id or seems like queue number of e-complaint. |
| 3. | The complaint number is saved automatically in the complaint history. |
| 4. | The complaint status can be checked in the “Status Komplain” menu. |
| 5. | Input the complaint number and click “check” and the information of the complaint can be found. |
| 6. | To see the complaint number, can be search in “Histori Komplain” menu. |
| 7. | In the complaint history menu was sent. In addition, complain can be cancelled or change the |
submission data before 30 minutes from the complaint data submission was send.
If the tenant’s complain activities well done, tenant can be logout from the application.

3.1.2. Use Case Diagram Analysis

![Use Case Diagram](image1)

**Figure 1.** XYZ Mall e-Complaint Tenant Use Case Diagram

3.1.3. State Diagram Analysis

![State Diagram](image2)

**Figure 2.** State Diagram the Complaint Submission and Complaint Status.
3.1.4. The Screen Implementation

![Figure 3. Login and Mall XYZ e-Complaint Wall](image)

![Figure 4. Submission Complain Menu (Pengajuan Komplain Menu) and the Respond System of XYZ Mall e-Complaint Tenant](image)

![Figure 5. View of Complaint Status Menu (Status Komplain Menu) and Respond Check of Complaint Status XYZ mall e-complain tenant](image)
3.2. Discussion

Mall XYZ e-complaint tenant is the mobile application can be used to submit an online complaint without come to XYZ mall management directly. The design is made based on analysis result has illustrated by Unified Modelling language diagram. The implementation of e-complaint mobile application for XYZ mall has the limitation access permission as the security system. The limitation access permission system, controlled by didn’t give the access permission to another tenant except the official tenant of XYZ mall. That’s why admin has prepared account and tenant must be come to management office of XYZ mall to get the account. Some of menu already shown on the application are complaint submission, complain status, history complain and telephone button or message sending directly to management complain or Customer Relationship Complain Submission is menu for sending data complain will be submitted, after data is sent so the system will send the
complaining number for the tenant that can be used as an id to check the complaint status/complaint progress. The complaint status are on the progress (if still on handling progress), done (if it had handled) and pending (if progress is not handled yet).

Complaint status is the menu to check the information of status complaint has been submitted before. Complaint history is the menu to save the complaint number had been sent and waiting for the problem solving. In first 30 minutes the data complain can be changed or cancelled before system and the XYZ mall management respond the complaint.

4. Conclusion
XYZ mall E-complaint tenant is the mobile application specifically used to make tenant easily to submit complain for XYZ mall. The tenant complaint usually in damage property, security, service, administration and so on related to property has leased to tenant. E-complaint mobile application of XYZ mall is designing to execute in the smart phone based on android. Through this application, the XYZ mall management able to be faster in handled the tenant complain so it can increase the customer’s satisfaction of XYZ mall. It because the android smart phone technology gave the faster access whether by tenant or XYZ mall management [2].

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