Legal Institution Mapping Information System in DKI Jakarta

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Abstract. Legal institutions are very important institutions for the community. These legal institutions include the Legal Aid Institute, the Police Office and also the Court Office which have their respective roles in the field of Law. The distribution of Legal Institutions in this Region covers the administrative cities of West Jakarta, South Jakarta, East Jakarta, North Jakarta and Kepulauan Seribu. This Website Application Program was created using the Rapid Application Development (RAD) method. To store data using a MySql database which is operated through a server so that it can be accessed through the internet network. The programming language used is PHP and uses the GoogleMaps API to display map distribution data and locations on website applications. The purpose of this Legal Institution mapping website application system is made to unite various Legal Institutions in one application container so as to make it easier for people living in the DKI Jakarta area to find information and dissemination as well as the Location Map regarding the Legal Institutions they need.

1. Introduction

Indonesia has arranged for assistance to people who have difficulties in accessing law and justice. Every Indonesian citizen has the same right to get the convenience to get legal and justice assistance as stated in UU 1945 Pasal 28H paragraph (2) [1]. The community has the right to get legal assistance, in the form of recognition, guarantees, protection and legal certainty that is just and equal treatment before the law [2].

People who specifically live in Jakarta have the right to know all kinds of legal institutions, starting from the location and information related to legal institutions. At this time there is not yet a website application forum available to unite Legal Institutions in Jakarta.

Based on the above problems, we need a system that can display information about Legal Institutions in Jakarta.

2. Method

To develop a website-based mapping application program using the Rapid Application Development (RAD) method. The RAD method is used because it focuses on system development and combines the analysis, design, system construction and development cycle test phases in a short period of time. RAD also focuses on inspection, discussion, development cycles until user requirements are met [3].
3. Results and discussion

Context diagram of the geographical information system mapping program application for the Legal Institution illustrates the relationship between external entities and the running system. Outside entities that exist in this context diagram are the Legal Institutions in Jakarta that provide information about the Legal Institutions, municipal data, Sub-district data and category data from the relevant Legal Institutions. Can be seen in Figure 1 Context diagram.

![Figure 1. Context Diagram](image)

This website-based mapping application program uses a MySql database to store information about Legal Institutions in the DKI Jakarta area and uses PHP to develop websites and information stored in a database is recorded in relational tables or relationships between tables. The table has a name and consists of a number of table columns or attributes, where each row has a value for each attribute [4]. The relationship between tables can be seen in Figure 2.
3.1 Legal Institution Mapping Website Application

This Legal Institution mapping application program can enter data information about the Legal Institution as well as a map and coordinates of a place. This application program utilizes the Application Programming Interface (API) which is an application to communicate the inside of a computer with the application interface. API is a process by which clients and servers can communicate through websites, operating systems and database systems [5]. In this website the public will get various kinds of Legal Institution information, such as addresses, contacts, hours of operation, location distribution maps and services provided. available. The main page of the website can be seen in Figure 3.
3.2 Map of the Distribution of Legal Institutions

API can access Google's server through internet network so Website Application Program can use GoogleMaps service in it [6]. The coordinates stored in the database will be read by the Google Maps Javascript API. The coordinates that are read will be indicated by markers. The purpose of the marking by this marker is to provide information on Legal Institutions located in the nearest area. Where the marker shows the place in the nearest area. The public can write the Alamat or sub-district in the search column. You will see markers that indicate the location of a Legal Institution in Figure 4.
Figure 4. Map of the Distribution of Legal Institutions with Markers

To see more complete information the user can click on one of the markers, a pop up stack will be in the form of the address and longitude and latitude of a Legal Institution location. Can be seen in Figure 5.

Figure 5. Detail Information with marker
4. Conclusion

This website application program provides a variety of information about Legal Institutions in the Jakarta area which includes Legal Aid Institutions, Police Offices and Court Offices. And there is also a map to visualize the location of the Legal Institution. This website application will also make it easier for people who specifically live in DKI Jakarta who need information as well as services from Legal Institutions because it is a place to accommodate Legal Institution information in Jakarta.

5. References

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