WEB PORTAL LEMBAGA PEMBERDAYAAN MASYARAKAT KELURAHAN (LPMK) INFORMATION SYSTEM IN SEMARANG CITY GOVERNMENT

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Abstract— **Semarang City is the Capital of Central Java Province, its stands for 16 *Kecamatan* and 177 *Kelurahan*. for organizing the empowerment of each Kelurahan The Semarang City Government create The *Lembaga Pemberdayaan Masyarakat Kelurahan* (LPMK) is a forum formed on the initiative of the community as a partner of the Regional Government in accommodating and realizing the aspirations and needs of the community in the field of development.**

Keywords- Web-Based, Information System, *Lembaga Pemberdayaan Masyarakat*

I.   INTRODUCTION

The Village Community Empowerment Institution (LPMK) is a forum formed on the initiative of the community as a partner of the Regional Government in accommodating and realizing the aspirations and needs of the community in the field of development[1]. LPMK is domiciled in each *Kelurahan*. LPMK has the task of assisting the Village Government / Lurah in the implementation of government affairs, development, social and community empowerment. LPMK has several tasks and functions.

Currently, LPMK Semarang has a website that is used by the *kelurahan* to be a forum for disseminating information per *kelurahan*, the website is scattered in its respective domains in each region. where the website is intended so that every community who wants to know the latest information about their area related to Profiles, UMKM Data, and Programs can access the website. But in the implementation of the old information system, the LPMK website did not run properly. where many website admins do not update the latest information on their village website pages. so the website looks very quiet. Whereas if we can maximize the website, the Semarang city community can find out more detailed information such as Profiles, UMKM Data, and Programs and can help the surrounding community. therefore it is important for the city government of Semarang to create an integrated information system for this LPMK Driven by technological advances and to integrate all information from each *Kelurahan*, Semarang City Government created a website for LPMK for each *Kelurahan* to share their Program, UMKM List, and Report for each region. But the old website of LPMK stand-alone for every *Kelurahan*, lacks interest, and it is rare for every admin in each *Kelurahan* to update the information. It happens because the system is stand-alone for each *Kelurahan* website and makes the coordination from all *Kecamatan*, Kelurahan, and Semarang City Governments become rare and make the website abandoned. This Website, ***Web Portal LPMK (Lembaga Pemberdayaan Masyarakat Kelurahan)***

Information System in Semarang City Government, is a website to integrate all LPMK data from all *Kelurahan* in one door information system. it will help the admin and the visitor of the website become more effective.

II.   LIMITATIONS

This project is of interest to current technology development as it will make the user experience easier. Now that it has the ability to make things easier for its employees, this paper focuses on web portal applications, which tend to benefit from one member's website information systems and better coordinate all of Kerlahan's activities.

This project aims to answer the following questions:

A. For Admin (Admin of Each *Kelurahan*)
1. How to Update information easily and flexibly.
2. Update Profiles, UMKM Data, and Programs one-way information system
B. For Public (All The People of The Semarang City)
1. How to see information from each *kelurahan* one-way information system?
2. How do find out Profiles, UMKM Data, and Programs on one website?

This research benefits both the LPKM program and ordinary users or citizens of Semarang as the purpose of this application is to you can easily manage the received LPKM data in the process of saving data, searching for data, or editing data, Consolidate all the data and display it on one website for the general public., Facilitates the entry of profiles, UMKM data and programs.

III.   DESIGN AND IMPLEMENTATION SYSTEM

Develop this application with Rapid Application Development (RAD) technology to improve the quality of your system. Rapid Application Development (RAD) may be a prevalent agile project management strategy in computer program improvement. The most good thing about the RAD approach is the quick turnaround time, making it an alluring alternative for designers working in quickly changing situations such as program improvement. RAD focuses on minimizing the planning phase and maximizing prototype development, enabling rapid development. RAD consists of four stages [2] as shown in Image 1.1. This makes it clear that:
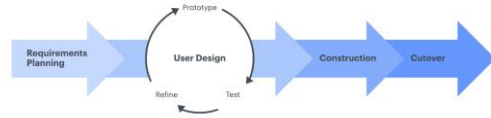

Figure 1. Rapid Application Development (RAD) Flow

1. Requirements Planning

What you are doing at this organize is to discover out what the extend needs, the issues with this project, and decide the objectives for this extend. In expansion, the extend will be analyzed based on already gotten given results.

2. Creator Design

a phase which means to show the stream within the program and the arrange utilized within the program.

3. Construction

This cycle is the consequence of checking the projects that have been made. This cycle plans to lessen mistakes and further develop methodology so they can be carried out accurately.

This Web application can be gotten to viably utilizing a web organize contained in an online browser. This application was made utilizing HTML, CSS, PHP, and SQL Phonetic structure. Producers of this application are the LPMK Online interface as chairman and Open. The components contained in this application.
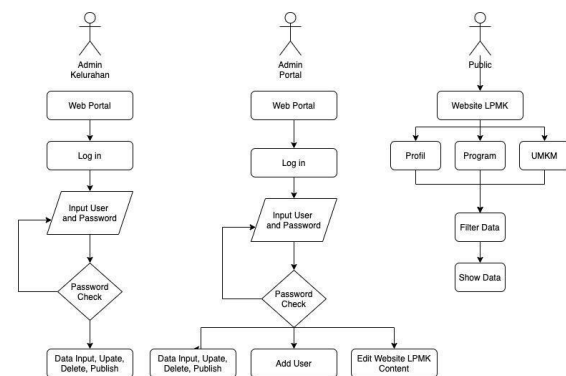
A. Use Case Diagram

Image 2 Application Utilization Case

The Diagram in Image 2 gives an outline of the capacity of the site for every client. Utilization

Case charts serve to momentarily portray who utilizes the framework and what they can do. Utilization Cases should give a few detectable outcomes.

B.   Entity Relationship Diagram

Entity Relationship Diagram (ERD) is a model for incorporating a data set so it can depict data related to the database being designed. The specific ERD concept for the system to be made can be seen in Image 4.14.
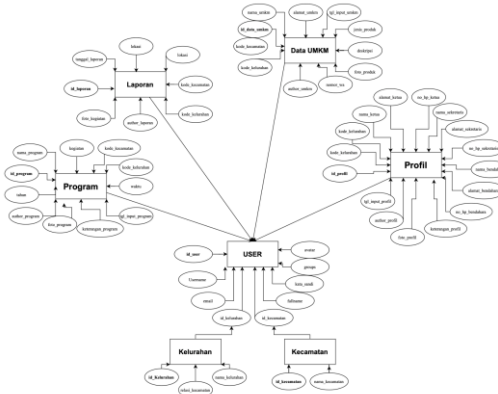

Figure 3. Entity Relationship Diagram

This section describes the administrator and public display on this website.

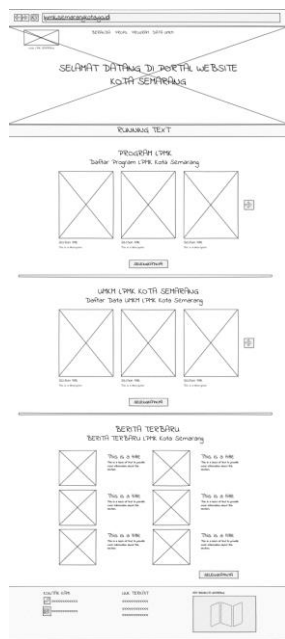IV.   RESULT AND DISCUSSION

A.   Web Portal Main Page

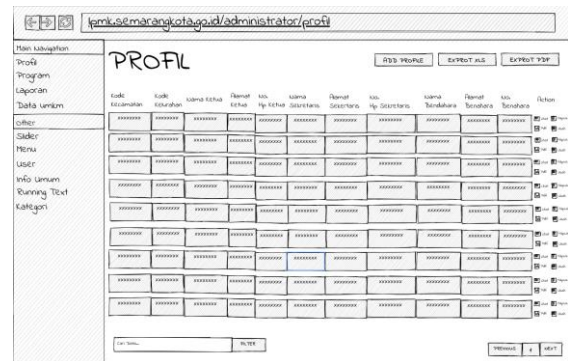Figure 4. Web Portal Main Page

B.   Admin Dashboard Page

Figure 5. Admin Dashboard Page

Test scenario is a strategy utilized to try Programming applications into experiments. The reason for situation testing is to try start to finish situations for explicit complex Programming issues. Below are four tables depicting test situations for applications.

Table 1 Public General Feature

Test ID	Scenario	Expected Result
TC101	Open Website	Public websites can open on the index page
TC102	Open Profile Page	LPMK Profile page can be opened and display data as filtered
TC103	Open DATA UMKM Page	LPMK DATA UMKM page can be opened and display data as filtered
TC103	Open Program Page	LPMK Program page can be opened and display data as filtered

Table 2 Admin Feature

Test ID	Scenario	Expected Result
TC201	Login	Admin can login to the administrator page according to the USER and PASSWORD data
TC202	Show Profile Tab	Display the Profile data table according to the latest update
TC203	Add Profile Data	Add new Profile data according to the data from the form that has been inputted
TC204	Edit Profile Data	Profile data is changed according to the updated form
TC205	Delete Profile Data	The selected Profile data is deleted
TC206	Export Profile PDF	Export all existing Profile data in PDF format
TC207	Export Profile XLS	Export all existing Profile data in XLS format
TC208	Show Program Tab	Display the Program data table according to the latest update
TC209	Add ProgramData	Add new Program data according to the data from the form that has been inputted
TC2010	Edit Program Data	Program data is changed according to the updated form
TC2011	Delete Program Data	The selected Program data is deleted
TC2012	Export Program PDF	Export all existing Program data in PDF format
TC2013	Export Program XLS	Export all existing Program data in XLS format
TC2014	Show Data UMKM Tab	Display the DATA UMKM table according to the latest update
TC2015	Add DATA UMKM	Add new DATA UMKM according to the data from the form that has been inputted
TC2016	Edit DATA UMKM	DATA UMKM is changed according to the updated form
TC2017	Delete DATA UMKM	The selected DATA UMKM is deleted
TC2018	Export DATA UMKM PDF	Export all existing DATA UMKM in PDF format
TC2019	Export DATA UMKM XLS	Export all existing DATA UMKM in XLS format

V.   CONCLUSION

Building a Website Portal for Semarang City LPMK that can be used is the objective of this final project, which can be used easily by admins and the general public.

In this case, the problem of the previous system has been resolved, which only provides one domain for the LPMK domain of the entire city. So that the public who wants to visit the website has no trouble finding regional domains, just at one address and admins can always update the latest data and concurrently in one format to report to related parties.

There are several suggestions for future development of this system:

1. Add buttons to share to social media, so the website will be more integrated with other applications and increase engagement.

2. Add the "forgot password" feature, so Admin don't need to contact the Admin Portal for that problem, it can be automatically reset via email.

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