



## **DEVELOPMENT OF THE PUBLIC SERVICE MANAGEMENT INFORMATION SYSTEM THROUGH EXTREME PROGRAMMING IN SUKARAME DISTRICT, BANDAR LAMPUNG**

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### **Abstract**

There are still obstacles to providing public services such as administrative services and population data in Sukarame District. To store data, they still use Microsoft Office so that people cannot access it. Therefore, a system is needed to improve public services. This research aims to identify and discuss general management information systems by applying extreme programming at the Sukarame District office, Bandar Lampung. The research method is qualitative. The study results are that to improve performance. An information system is needed by applying extreme programming that aims to make it easier to make electricity application permits, business licenses, public complaint systems, and online sub-district profiles.  
**Keywords:** Information Systems, Public Services, Extreme Programming

### **INTRODUCTION**

The development of technology can facilitate the government in improving public services effectively, efficiently, and transparently to the public. The government must be able to adapt to the rapid development of information technology to make work easier and faster.

The regent has the main task of handling regional autonomy affairs. Public services carried out by the Sukarame District are making business permits, the environment, public complaints, and electricity applications. However, earning letters in Sukarame District is carried out conventionally because it uses Microsoft Word and Excel. The data is processed using the general ledger and causes input errors and complex data retrieval.

A management information system can assist in data processing, storage, letter submission, report generation, and online public complaints. This system expects to improve the service performance of the Sukarame District Office.

## **METHOD**

The research method uses qualitative. Research materials are from journals, ebooks, books, and articles related to public service management and information systems. The object of research is employees who need to solve problems in public services in Sukarame District.

The research uses extreme method programs, namely software that can be developed quickly and has several properties: planning, design, coding, and testing phases.

### **1. Planning**

During the planning stage, interviews conducting to determine user needs and system features. The planning stages are as follows:

- a. Data collection through literature study and discussions.
- b. System analysis aims to understand the process of public services.

Public services in Sukarame District are as follows:

#### **1) Mail data processing**

Currently, data processing notes are in the agenda book for future reference. If the community wants to submit files, they must do so directly at the sub-district office. In turn, this reduces productivity.

#### **2) District profile**

The office wall magazine includes information about the employee's profile and activities. As a result, the community's access to information is limited, and they must visit the sub-district office if they want to learn more.

#### **3) Community complaints feature**

The community can carry out complaints related to infrastructure and respond to complaints from the District.

### **2. Design**

It aims to make a grouping of supporting elements, interfaces, and program architecture. In addition, the design is made using Astahcommunity and described in the creation of use case diagrams, activities, and classes.

The following is an example of a design use image required by information system users in improving public services in Sukarame District, namely as follows:

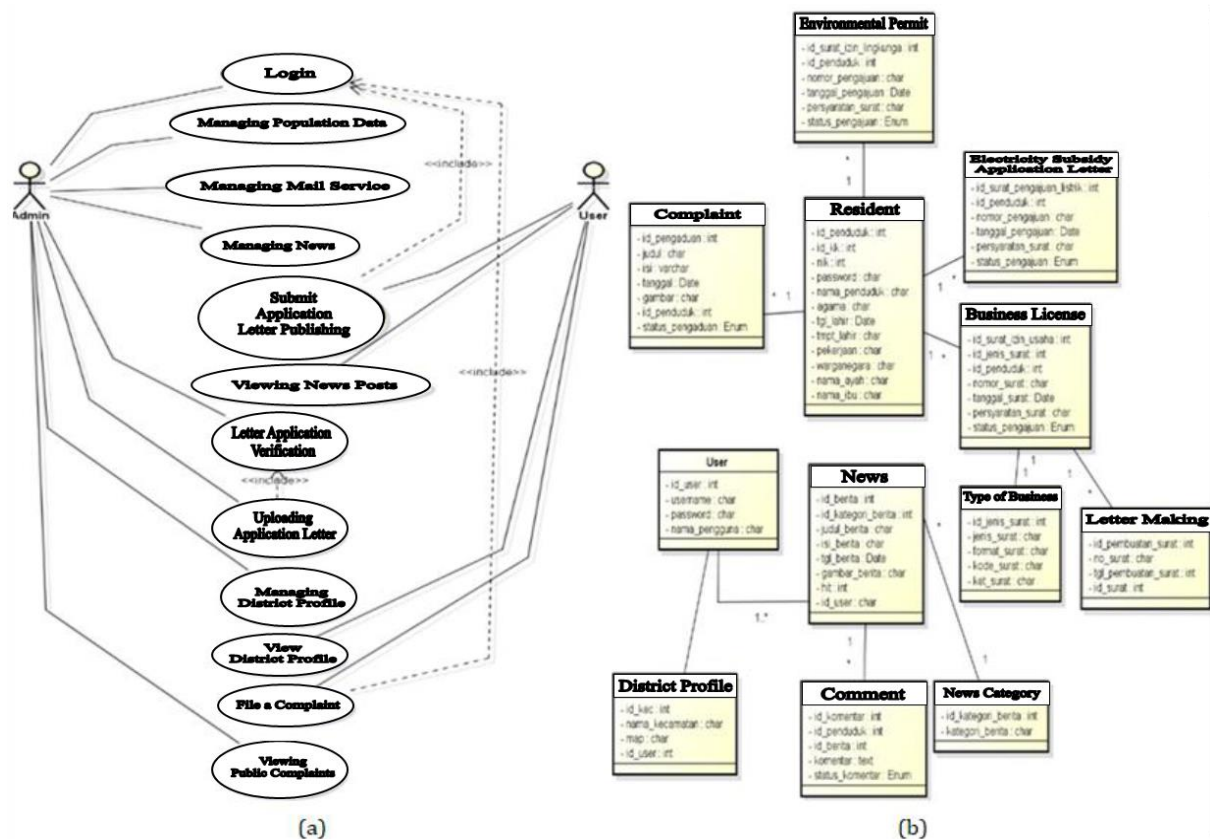
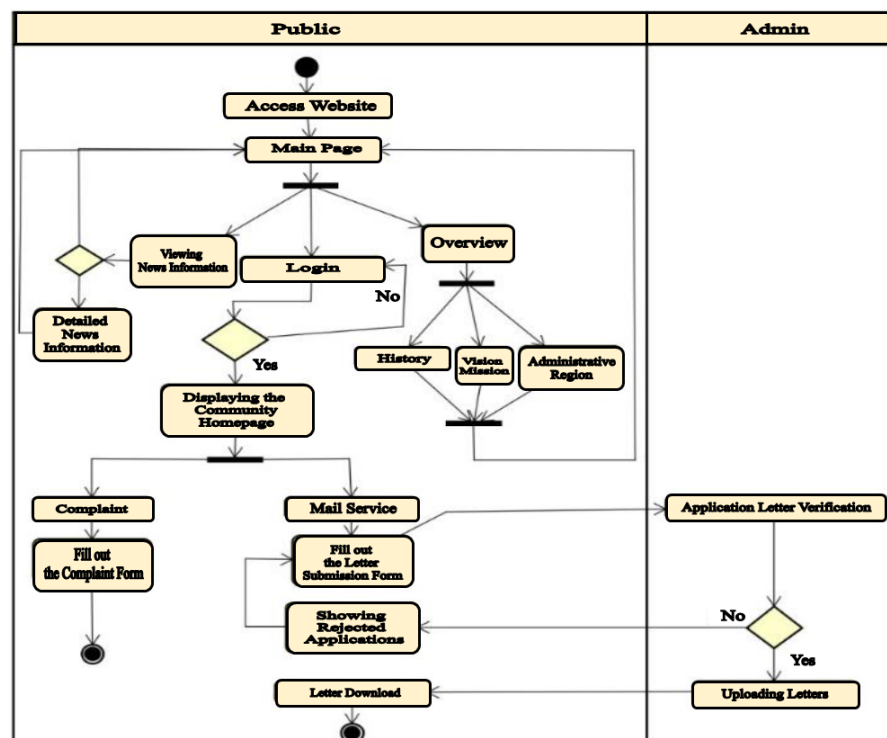


Figure 1 Design Use Case Diagrams (a) and Class Diagrams (b)



### Figure 2 Activity Diagram Design

Users consist of admins and the public. The admin user is tasked with processing data and news, logging in, and assisting with mail validation services, village activities, community complaints, and sub-district profile info.

Then community users can log in and out, view valid letters and community complaints, issue letters, and read the information on village activities and sub-district profiles.

### 3. Coding

The design is converted into a functioning information system using Adobe Dreamweaver and the Laravel framework. There is a minimal library that makes native coding more straightforward and quicker.

### 4. Testing

Testing utilizes a black box to comprehend the system's functionality. In addition, application development suggestions implement by assessing system testing results.

## **RESULTS AND DISCUSSION**

### **Management Information System**

According to Davis (2010:3), a management information system is an integrated human/machine system to present information on an organization's operations, management, and decision-making functions.

The benefits of information systems are:

1. We are anticipating and understanding economic opportunities.
2. Help ensure the quality and skills of HR.
3. Facilitate access to data in a timely and accurate manner.
4. Develop planning efficiently.
5. Help analyze the implementation of the program.
6. Increase productivity and development of management systems.

### **Public Service**

Based on Law 25 of 2009 concerning public services, activities meet service needs under applicable regulations. Erika Revida, in the book *Public Service Management* (2021), defines service means assistance while general means community. So that it can conclude that public services are assistance to the community.

The principles of public service delivery are:

1. Public services use for the benefit of the general public.
2. Public services follow legal certainty in the implementation of their services.
3. The community has equal rights in receiving public services.
4. Public services have the same rights and obligations.
5. Public services must be professional.
6. Public services must be participatory.
7. All people must receive equal treatment (non-discriminatory).
8. Public services must be open in conveying information.
9. Public services must be responsible.
10. Public services must provide exceptional facilities and treatment for vulnerable groups.
11. Services must carry out on time.
12. Public services must be fast, easy, and affordable.

### Extreme Programming

According to Lubis (2016), extreme programming is a way to improve software efficiently through practical principles and techniques.

The extreme programming model is a communication method, an interactive and incremental work model. The powerful programming system has four stages: planning, design, coding, and testing (Pressman, 2010).

Pages that implementation is

- a. The main page consists of information. An example of the main menu is



Figure 3 Main course

- b. The data for the letter submission consists of the application for a business license and electricity subsidies. Examples of blanks are as follows.

**Data Surat Izin Usaha**

**Note:**  
Harap dibaca sebelum melakukan pengajuan Surat Izin Usaha:

1. Scan Kartu Keluarga (KK), Format Image/jpg/png
2. Scan KTP Atas Nama Yang Akan Membuat IUMK, Format Image/jpg/png
3. Scan Tanda Lulus PBB Tahun berjalan, Format Image/jpg/png
4. Scan fotocopy Surat Keterangan Usaha dari Kelurahan, Format Image/jpg/png
5. Scan fotocopy Surat Keterangan Domisili Usaha dari Kelurahan, Format Image/jpg/png
6. Pas Foto Terbaru, Format Image/jpg/png
7. Scan Form Biodata IUMK, Format Image/jpg/png [Download File](#)
8. Foto Usaha, Format Image/jpg/png
9. Usaha harus Ada di Kecamatan Sukarame Walupun Yang Punya Usaha Tidak Berdomisili di Kecamatan Sukarame
10. Jumlah Modal Usaha Tidak Lebih Dari 50 Juta

[Ajukan Surat](#)

No	Nomor Surat	Persyaratan	Status	Aksi
No data available in table				

Showing 0 to 0 of 0 entries

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Figure 4 Letter Submission Data

- c. Filling in the submission of a letter aims to make a letter submitted by the public. Example

**Tambah Data Surat Izin Usaha**

**Data Perusahaan/Usaha**

Nama Perusahaan:

Domisili Perusahaan:

NPWP:

Kegiatan Usaha:

Sarana Usaha:

Alamat Usaha:

Jumlah Modal Usaha:

**Data Persyaratan/Usaha**

Fotocopy KTP:  [Choose File](#) No file chosen

Pas Foto:  [Choose File](#) No file chosen

Surat Keterangan Berdomisili Kelurahan:  [Choose File](#) No file chosen

Blanko Biodata IUMK:  [Choose File](#) No file chosen

Fotocopy SK:  [Choose File](#) No file chosen

Fotocopy Tanda Lulus PBB:  [Choose File](#) No file chosen

Surat Keterangan Usaha dari Kelurahan:  [Choose File](#) No file chosen

Foto Usaha:  [Choose File](#) No file chosen

[Simpan](#) [Kembali](#)

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Figure 5 Letter Submission Form

- d. Business license, this letter can print according to the community's needs. The admin staff approves the process required to get this letter. Here's an example of the form.



**PEMERINTAH BANDAR LAMPUNG  
KECAMATAN SUKARAME**  
 Perum Korps Blok B6 Korps Raya  
 Bandar Lampung, 35131

**SURAT IZIN USAHA MIKRO DAN KECIL**  
 Nomor : IUMK.01.XI.2020

Berdasarkan Peraturan Presiden Nomor 98 Tahun 2014 tentang Perizinan Untuk Usaha Mikro dan Kecil (Lembar Negara Republik Indonesia Tahun 2014 Nomor 222), Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 83 Tahun 2014 tentang Pedoman Pemberian Izin Usaha Mikro dan Kecil, Peraturan Walikota Bandar Lampung Nomor 30 Tahun 2015 tentang Pendelegasian Kewenangan Pelaksanaan Izin Usaha Mikro dan Kecil kepada Camat di Kota Bandar Lampung, bersama ini menyatakan dan memberikan izin kepada:

Nama : SUHENDA  
 NIK : 123  
 Alamat : JL. P DAMAR  
 Nomor Telepon : 082273661010

Untuk mendirikan Usaha Mikro dan Kecil yang mencakup perizinan dasar berupa : menempati lokasi domisili, melakukan kegiatan usaha baik produksi maupun penjualan barang dan jasa, dengan identitas :

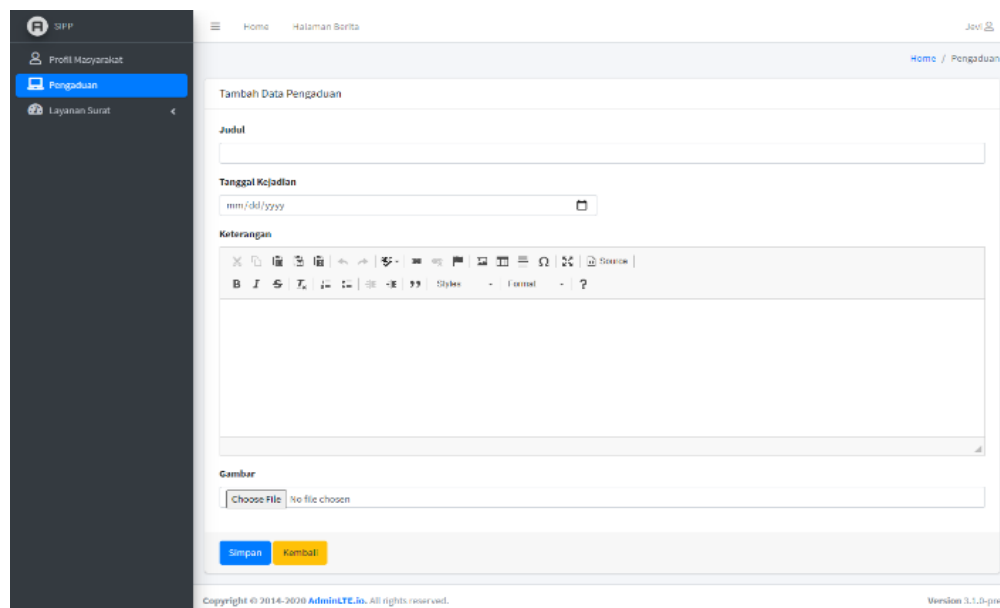
Nama Perusahaan : PEMPEK NABILA  
 Bentuk Perusahaan : PERORANGAN  
 NPWP : 674057773322000  
 Kegiatan Usaha : PERDAGANGAN HASIL PENGOLAHAN IKAN  
 Sarana Usaha : RUMAH TINGGAL  
 Alamat Usaha : JL. P DAMAR  
 Jumlah Modal Usaha : Rp. 350,000,000  
 Nomor Pendaftaran : 01.IUMK.P.SUKARAME.XI.2020  
 Masa Berlaku Izin Usaha : 11 NOVEMBER 2020

Ditetapkan : Sukarame  
 Pada tanggal : 11 November 2020  
 CAMAT SUKARAME

**Zolabuddin Al Zam Zam, S.Sos., MM**  
 Pembina  
 NIP.1972061919922031002

Figure 6 Business License

- e. Public complaints, namely communication media between the community and staff to submit complaints. Here is the general complaint form page Figure 8.



Home / Halaman Berita

Home / Pengaduan

Tambah Data Pengaduan

Judul

Tanggal Kejadian

mm/dd/yyyy

Keterangan

Gambar

Choose File | No file chosen

Simpan Kembalikan

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Figure 7 Community Complaint Form

## CONCLUSION

To improve the performance of public services in Sukarame District. An information system is needed, namely extreme programming, making it easier to make electricity application permits, business licenses, general complaint systems, and online sub-district profiles.

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