

THE RESULT OF STUDENT MOBILITY REPORT

**CREATE A WEBSITE TO MANAGE OF THE VILLAGE
INFORMATION SYSTEM IN MATARAM ILIR USING PHP
PROGRAMMING LANGUAGE AND THE DATABASE AT NANJING
VOCATIONAL COLLEGE OF INFORMATION AND TECHNOLOGY**



**By : NASRIL AHMAD
1911068014P**

**DEPARTMENT OF SISTEM KOMPUTER INSTITUT
INFORMATIKA DAN BISNIS DARMAJAYA
BANDAR LAMPUNG
2021**

**SIGNATURE APPROVALS
RESULT OF REPORT
PRACTICE WORK OF STUDENT MOBILITY**

**CREATE A WEBSITE TO MANAGE OF THE VILLAGE INFORMATION
SYSTEM OF MATARAM ILIR USING PHP PROGRAMMING LANGUAGE
AND THE DATABASE AT NANJING VOCATIONAL COLLEGE OF
INFORMATION AND TECHNOLOGY**

**BY:
NASRIL AHMAD
1911068014P**

It Has Qualified To Be Accepted

Knowing,

Counselor

Pravtice Advisor

Dodi Yudo Setiawan, S.Si., M.T.I

NIK. 11340809

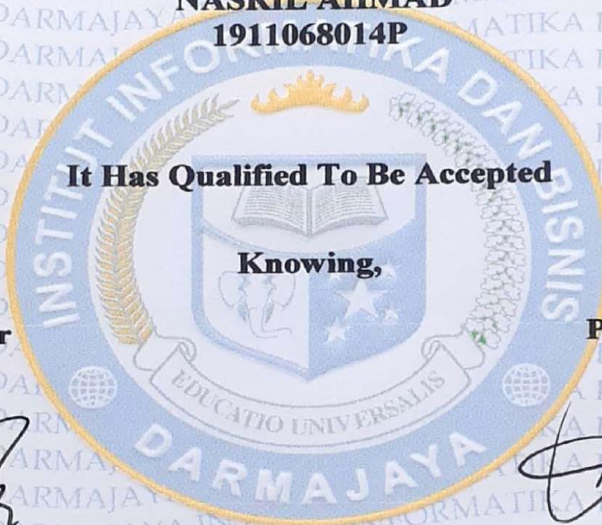
M.Dwiyan Aditya, S.Pd., M.pd

NIK.14011016

**Approve,
Head of Computer System**

Nurfiara, S.Kom., M.Kom

NIK. 10060304



SIGNATURE APPROVALS CURRICULUM VITAE

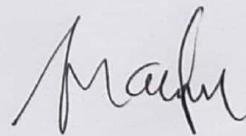
1. Identity

- a. Nama : Nasril Ahmad
- b. Student Number : 1911068019P
- c. Place/ Date of birth : 12 Mey 1998
- d. Religion : Islam
- e. Address : Jln. Srikresna Kec. rajabasa jaya, Kelurahan rajabasa
- f. Tribe : Lampung
- g. Nationalite : Indonesia
- h. Email : nasriahmad1234567890@gmail.com
- i. No phone : 081271475659

2. Educational Background

- a. Junior High School : SMP Gaya Baru
- b. Vocational High School : SMK N 1 BAKAUHENI

Bandar lampung, 17 Agustus 2021



Nasril Ahmad

NPM : 1911068014P

SUMMARY

Mataram Iir Village, Central Lampung Regency, has an information system that is still in manual form and has not been automated so that it is slow in the process of adding, changing or deleting data and other population data collections. The purpose of making this website as an Information System for Population Data Processing in the Village of Mataram Iir is in order to help provide alternative solutions to problems in the village of Mataram Iir. The method in this activity uses certain techniques, namely field studies by understanding the population data of the village. The result of this activity is a set of Population Data Information System software in Mataram Iir Village, Central Lampung Regency.

PREFACE

Praise the author, pray to god almighty who has bestowed his gift so that the author can complete a report practice work of student mobility entitled “create website to manage car rental using php/mysql at the nanjing vocational college of information and technology”. This report is compiled as a report on practical work carried out in the country of China, namely at the Nanjing Vocational College Of Information and Technology campus which was held from March 11th, 2021 to June 29th, 2021.

The report was prepared with help from different sides, and the writer expressed gratitude to:

1. Mr. Ir. Firmansyah Y.A., MBA., MSc., as the Chancellor IIB Darmajaya.
2. Mr. Dr. RZ. Abdul Aziz, ST., MT., as the Vice Chancellor I IIB Darmajaya.
3. Mr. Ronny Nazar, SE., MT., as the Vice Chancellor II IIB Darmajaya.
4. Mr. Muprihan Thaib, S.Sos., MM., as the Vice Chancellor III IIB Darmajaya.
5. Mr. Prof. Dr. Ir. RA Bustomi Rosadi M.S., as the Vice Chancellor IV IIB Darmajaya.
6. Mrs. Nurfiana, S.Kom., M.Kom., as the Head of the Computer Systems Department IIB Darmajaya.
7. Dodi Yudo Setiawan.S.Si.,M.Ti as the Counselor who helped me a lot and has been patient in guiding the author until report is completed.
8. Author’s parent are Mr. Aminoto and Mrs. Fatimah who have provided prayers, motivation and support for the success of the author.
9. Ms. Gao Yun, Mr. Ni Jing, Ms. Kong Feng, Mr. Chen Shilin, Ms. Li Jie, Mr. Eric, Ms. Zhang Yan and all Foreigner lecturers who always guide the author during their studies
10. at Nanjing Vocational College Of Information and Technology (NJCIT).

11. Melina, Heri and Nasril and all my classmates in the courses the author took

11. Melina, Heri and Nasril and all my classmates in the courses the author took who always help the outhor while studied at Nanjing Vocational College Of Information and Technology (NJCIT).
12. All the parties taht the author cannot mention one by one, and have helped the completion of this report.
13. Recognizing that there are still many flwas and errors in both the composition and the languages used, it is hoped for contructive advice and criticism. I hope this report benefits all of us.

Bandar Lampung, 17 Agustus 2021



Nasril Ahmad
NPM : 1911068014P

TABLE OF CONTENTS

| | |
|--|-----|
| SIGNATURE APPROVALS | ii |
| RESULT OF REPORT | ii |
| CURRICULUM VITAE | iii |
| SUMMARY | iv |
| PREFACE | v |
| TABLE OF CONTENTS | vii |
| TABLE OF FIGURE | x |
| LIST OF TABLES | xii |
| BAB 1 | 1 |
| INTRODUCTION | 1 |
| 1.1 Background | 1 |
| 1.2 Formulation Of The Problem | 2 |
| 1.3 Scope of Problem | 2 |
| 1.4 Research Objectives and Benefits | 3 |
| 1.4.1 Research Objectives | 3 |
| 1.4.2 Research Benefits | 3 |
| 1.5 Time and Place of Implementation..... | 4 |
| 1.5.1 Execution Time | 4 |
| 1.5.2 Place of Execution | 4 |
| 1.6 Systematics of Writing | 4 |
| BAB II | 6 |
| LITERATURE REVIEW..... | 6 |
| 2.1 Definition of Village | 6 |
| 2.2 Definition of System | 6 |
| 2.3 Definition of Information | 7 |
| 2.4 Literature Study | 7 |
| 2.5 Understanding Website | 7 |

| | |
|--|----|
| 2.6 PHP (Hypertext Preprocessor) | 8 |
| 2.7. XAMPP | 8 |
| 2.8 MYSQL and Database | 8 |
| 2.10.1. Flowchart | 9 |
| 2.10.2 Entity Relationship Diagram (ERD) | 11 |
| BAB III | 12 |
| RESEARCH METHODS | 12 |
| 3.1 Software Development Method | 12 |
| 3.2. Research Object | 13 |
| 3.3 Types and Sources of Data | 14 |
| 3.3.1. Primary Data | 14 |
| 3.3.2 Secondary Data | 14 |
| 3.4 Data Collection Method | 14 |
| 3.4.1 Field Study | 14 |
| 3.5 Design | 15 |
| 3.5.1 System Design | 15 |
| 3.5.2 Flowchart | 16 |
| 3.5.5 Physical Design..... | 19 |
| 3.6 System Interface | 23 |
| 3.7 Access to the Village Information System Interface System Population data .. | 23 |
| 3.7.1 Resident Interface | 23 |
| 3.7.2 Admin Interface | 25 |
| BAB IV | 27 |
| RESULTS AND DISCUSSION | 27 |
| 4.1 Agency Overview | 27 |
| 4.1.1 General History | 27 |
| 4.2 Problem Identification | 27 |
| 4.4 System Implementation | 28 |
| 4.4.1 Application Development Results | 28 |
| BAB V | 33 |
| CONCLUSIONS AND SUGGESTIONS | 33 |
| 5.1 Conclusion | 33 |
| 5.2 Suggestions | 34 |

| | |
|---|----|
| REFERENCES | 35 |
| ATTACHMENT | 36 |
| 1.Database Technology Course | 36 |
| 2.Computer Network Course | 37 |
| <u>3.Broadband Access Technology</u> | 37 |
| 4.. Digital Signal Course | 39 |
| 5 .Programming Course | 42 |
| 6. Object Oriented Programming Course | 43 |

TABLE OF FIGURE

| | |
|--|----|
| Figure 3.1. Flowchart | 16 |
| Figure 3.2. Entity Relationship Diagram | 17 |
| Figure 3.3. Logical Design | 18 |
| Figure 3.4 Login Menu Interface Design | 23 |
| Figure 3.5 Resident and Admin Choice | 23 |
| Figure 3.6 Family Card Resident input | 24 |
| Figure 3.7 Interface design Add Resident Family Card | 24 |
| Figure 3.8 Interface Design Population 1 | 25 |
| Figure 3.9 Population Data Input Interfa 1 | 25 |
| Figure 4.1 Login Menu Interface Design 1 | 28 |
| Figure 4.2 Resident and Admin Choice Men 1 | 29 |
| Figure 4.3 Family Card Resident input in 1 | 29 |
| Figure 4.4 Interface design Add Resident 1 | 30 |
| Figure 4.5 Interface Design Population S 1 | 30 |
| Figure 4.6 Population Data Input Interfa 1 | 31 |

| | |
|--|----|
| Figure 4.7 Family Card Data Input Interf 1 | 31 |
| Figure 4.8 .Design of Population Output 1 | 32 |

LIST OF TABLES

| | |
|--|----|
| Table 2.1 Flowchart Symbols | 9 |
| Table 2.2 Symbols Entity Relation | 11 |
| Table 3.1 Religijs Table | 19 |
| Table 3.2 Document Table | 19 |
| Table 3.3 File Table | 19 |
| Table 3.4 Access rights Table | 20 |
| Table 3.5 User Access Rights Table | 20 |
| Table 3.6 KK Table | 20 |
| Table 3.7 Classifacation Table..... | 21 |
| Table 3.7 Classifacation Document Table..... | 21 |
| Table 3.9 Online Table | 21 |
| Table 3.10 Resident Table | 22 |
| Table 3.11 Message Table | 22 |

BAB 1

INTRODUCTION

1.1 Background

The development of technology is very rapid as it is today, both in government and private institutions are required to be able to follow and know the swift flow of information in all fields, especially in the field of computers.

With technology we seem to be able to rule the world in the palm of our hands. With the internet and databases that use websites. Data can be stored, retrieved and easily without the hassle of using the manual method. To make it happen, we need to create a website-based Information System. One way to create a website is with PHP.

The Mataram Ilir village government is one of the governments in charge of regulating, managing resources in government at the village level and has an obligation to carry out population administration as a form of service to the community. Population registration and civil registration are the sub-pillars of population administration and need to be managed as well as possible in order to provide benefits in improving governance and development. Population Data Management is the responsibility of the village/kelurahan government as the spearhead of the population. The service needs to be done correctly, quickly and precisely so that the population gets satisfactory service.

In this modern era, the rapid development of technology requires government agencies at the village level to implement a computerized and automated data processing so that they can provide precise and accurate information. The population information system is intended to increase efficiency and to make population data accurate in terms of public services. Mataram Ilir Village so far has an information system that is still in manual form so that it slows down the

process of adding, changing and other population data collection processes. In addition, the data storage is still in the form of files so that it slows down in accessing the data.

1.2 Formulation Of The Problem

“Based on the background that has been stated, the formulation of the problem in this report is: How to make an information system website for managing population data in Mataram Ilir village so that it can help produce precise and accurate information and can become an archive material for Matam Ilir village using php to increase the effectiveness of adding data, changing population data in Mataram Ilir village? ”

1.3 Scope of Problem

Limitation of the problem in writing the Community Service Work Practice (PKPM) is as follows :

1. In the village of Mataram Ilir, there is no population data processing facility through website based information system.
2. Still using manual paper forms in some of the population data collection processes which can result in delays in data reporting.
3. Population data storage media that are still prone to data loss and data damage.
4. Making this Population Information System using the php programming language.
5. The database used is MySQL with xampp software.

1.4 Research Objectives and Benefits

1.4.1 Research Objectives

- a. The establishment of a Population Information System that can be used by the village of Mataram Ilir in terms of population data collection, changes in population data and deletion of population data.
- b. Making a Population Data Processing Information System Website in the Village of Mataram Ilir Village so as to produce precise and accurate population data reports, in order to help provide alternative solutions to problems regarding data processing of residents of Mataram Ilir Village.
- c. Make it easy for the Mataram ilir village government to serve as village archive material to be safe and accurate.

1.4.2 Research Benefits

The benefits expected in the preparation of this research report are:

1. For Writers

- a. The author aims to implement the knowledge that has been obtained when studying while studying at the Darmajaya Institute of Informatics and Business.
- b. The author can add experience as well as knowledge and insight about the population and the website.

2. For Academics

- a. Knowing the ability of students to know the material received during the lecture period.

b. As a benchmark for students' understanding and mastery of the theory that has been given as well as material to

3. For Mataram Ilir Village

Make it easy to record data and search for population data, to make it easier, faster, accurate and efficient.

1.5 Time and Place of Implementation

1.5.1 Execution Time

The implementation of the student Student Mobility program period 10 is carried out for 1 semester, starting from 15 march 2021 to 17 June 2021.

1.5.2 Place of Execution

The implementation of this practical work was carried out at Nanjing Vocational College of Information and Technology (NJCIT).

1.6 Systematics of Writing

BAB I INTRODUCTION

In this chapter, the author describes the general background, scope/limits of practical work that limits the problems, objectives and benefits and systematics of writing which is an overview of the entire chapter.

BAB II LITERATURE REVIEW

This chapter describes things with a framework of thought, namely how community service is carried out by utilizing various relevant libraries.

BAB III RESEARCH METHOD

This chapter discusses the methods applied when researching by digging up information from the Village Government to obtain valid data with the aim of

discovering, developing, or proving certain knowledge so that in turn it can be used to understand, solve, and anticipate problems in his field

BAB IV RESULT AND DISCUSSION

This chapter discusses the planning and analysis of the system design that will be made.

BAB V CONCLUSIONS AND SUGGESTIONS

In this chapter the author tries to draw some important conclusions from all the descriptions in the previous chapters and provide suggestions that are considered necessary for the company.

REFERENCES

ATTACHMENT

BAB II LITERATURE REVIEW

2.1 Definition of Village

According to Law no. 32 of 2004, Village is a legal community unit that has jurisdictional boundaries, is authorized to regulate and manage tasks in the interests of the local community based on local origins and customs that are recognized and/or formed in the national government system and located in districts/cities.

2.2 Definition of System

A system is an important tool and is needed by a company or official agency. This is because with an integrated system, the performance of a company or agency will be more focused and systematic. However, to get a positive impact from using the system, all elements involved in it must work together to achieve predetermined goals.

There are two groups of approaches in defining the system, namely those that emphasize its components or elements. A systems approach that emphasizes more on procedures defines the system as a network of interconnected procedures, gathered together to perform an activity or to complete a specific goal. While the systems approach that emphasizes more on elements or components defines the system as a collection of elements or components or subsystems that interact to achieve certain goals.

2.3 Definition of Information

Understanding Information is a collection of data or facts that have been processed and processed in such a way as to produce something that can be understood and provides benefits to the recipient. Data and facts are the "raw material" of information, but not all of them can be processed into information. Currently, the high value of information is due to the speed at which the information is obtained, so the latest technologies are needed to obtain, process and transmit it. Information can also be interpreted as a framework that coordinates resources (human and computer) to convert inputs (inputs) into outputs (information) in order to achieve company goals.

2.4 Literature Study

That is the method of collecting data by studying literature books, papers and other scientific works related to the problem under study.

2.5 Understanding Website

Website can be interpreted as a collection of pages that display various kinds of text information, data, still or moving images, animation data, sound, video or a combination of all of them, both static and dynamic, which form a series of interconnected buildings. Each of which is linked by a network of pages or hyperlinks. In general, a website is a collection of various web pages that are summarized in a domain or subdomain, which is located on the WWW (World Wide Web) and of course on the Internet. Web pages are usually documents written in Hyper Text Markup Language (HTML) format.

2.6 PHP (Hypertext Preprocessor)

PHP is a language specifically designed for use on the web. PHP is a tool for creating dynamic web pages. At first PHP was short for Personal Home Page (Personal Site). Currently PHP stands for Hypertext Pre Processor (ALutfi,2017).

2.7. XAMPP

XAMPP is free software, which supports multiple operating systems, is a compilation of several programs. Function is as a stand-alone server (localhost), which consists of Apache programs HTTP Server, MySQL database, and language translator written in PHP and Perl programming. XAMP name stands for X (four system any operation), Apache, MySQL, PHP and Perl. This program is available in the GNU General Public License and free, is a web an easy-to-use server that can serve dynamic web page display (Mearaj, Maheshwari, & Kaur, 2019).

2.8 MYSQL and Database

MySQL is a SQL database management system software that is multithreaded, multiuser, by applying the concept of database operations, especially for selecting or selecting and entering data, which allows data operations to be done easily automatically (Jatmika, 2017).

2.9 Definition of Population Data






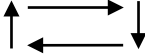
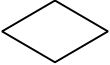
Population is matters relating to the number, growth, distribution, mobility, distribution, quality, welfare conditions, which are related to politics, economy, social, culture, religion and the environment (Law No. 23 of 2006) Population is matters relating to the number , structure, age, gender, religion, birth, marriage, pregnancy, death, distribution, mobility and quality as well as its resilience concerning politics, economy, social and culture.



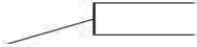
2.10 Data Development





2.10.1. Flowchart

According to (A.S., Rosa and Salahuddin, M., 2018), Flowcharts describe the details of a process, stages and sequences graphically. Flowcharts contain charts that have flows that describe the steps to solving a problem. The flowchart can be defined as a picture that describes the process to be seen or studied. In addition, flowcharts are usually used to plan the stages of an activity. So, Flowchart or flowchart is a method to describe the stages of problem solving (procedures) along with the flow of data with standard symbols that are easy to understand .

Table 2.1 Flowchart Symbols

| Symbol | Description |
|---|--|
| Document  | Shows the documents used for input and output. |
| Manual Process  | Shows work done manually. |
| Computerized Process  | Shows the process of operating a computer program. |
| Savings  | Shows archive. |
| Terminator  | Used to give the start and end of a process. |
| Flow Line  | Used to show the flow of the process. |
| Decision  | Used for a selection of conditions in the program. |

| | |
|--|--|
| Keyboard  | Indicates input using the keyboard. |
| Hard disk  | Storage media, using a hard disk device. |
| Information  | Used to provide other information. |

| | |
|---|---|
| Liasion  | Symbol used to indicate the connection of a broken flow chart |
| <i>Input/Output Data</i>  | Process input/output data, parameters, information. |
| Flow Line  | Used to show the flow of the process. |
| Defined Process  | A symbol used to indicate an operation whose details are shown elsewhere. |
| | |






2.10.2 Entity Relationship Diagram (ERD)

One of the diagramming tools used to model data abstractions is the Entity Relationship Diagram (ERD). According (A.S., Rosa dan Shalahuddin, M., 2018) Entity Relationship Diagram (ERD) is a tool used to perform abstract data

modeling with the aim of describing or describing the structure of the data used. ERD serves to model data structures and relationships between data, to describe it, several notations and symbols are used.

The following symbols are used in the ERD :

Table 2.2 Symbols Entity Relation

| Symbol | Information |
|---|--|
|  | Entity, which is a collection of objects that can be identified as a unit. |
|  | Relationships, namely relationships that occur between one or more entities. Types of relationships include: one-to-one, one-to-many, and manyto-many. |
|  | Attributes, namely the characteristics of the entity or relationship which is a detailed description of the entity. |
|  | Line, relationship between entity and its attributes and the entity set with the relation set. |
|  | Input/output data, namely the process of input/output data, parameters, information. |

BAB III RESEARCH METHODS

3.1 Software Development Method

The method chosen by the author as the basis for determining website creation based on the software development method is to use the waterfall model. This

model provides a sequential software flow approach starting from the analysis, coding design, testing and support stages (A.S., Rosa and Salahuddin, M., 2018).

According to (A.S., Rosa and Salahuddin, M., 2018) the waterfall method is:

A. Software Requirements Analysis

The process of gathering requirements is carried out in an incentive and detail manner to determine software requirements so that users can understand what kind of software is needed. Software requirements specifications at this stage need to be documented. So the software used includes: Windows 10 Operating System, XAMPP, MySQL Database, Draw.io, Bootstrap, VSCode.

B.. Design

Software design is a multi-step process that focuses on software design including data structures, software architecture, interface representation, and coding procedures. This stage translates software requirements from the requirements analysis stage to a design representation so that it can be implemented into the program at a later stage. The software design produced at this stage also needs to be documented.

C. Programming code

The design must be translated into a software program. The result of this stage is a computer program that is in accordance with the design that has been made at the design stage.

D. Test

Testing focuses on the software in terms of logic and functionality and ensures that all parts have been tested. This is done to minimize errors and ensure that the output produced is as desired.

E. Support or maintenance

It is possible that the software changed when it was delivered to the user. Changes may occur due to errors that appear undetected during testing or the software must adapt to a new environment. The support or maintenance phase may repeat the development process from analyzing specifications to changes to existing software, but not to creating new software.

3.2. Research Object

The object of this research activity is at the Kelurahan Office of Mataram Ilir Village, Seputih Subdistrict, Surabaya, Central Lampung. Where the emphasis of the problem is on information systems Processing population data in Mataram Ilir Village so that it can help provide solutions to the problems faced today.

3.3 Types and Sources of Data

3.3.1. Primary Data

That is data obtained directly from the object of research at the Mataram Ilir Village Office.

Examples of these primary data are:

Family Card Data Consisting of :

- 1) Population Identification Number (NIK)

- 2) Name of Family Head
- 3) Gender
- 4) Place of Birth

3.3.2 Secondary Data

Namely data obtained indirectly from sources of information through literature and information sourced from outside the Village Office of Mataram Ilir Village.

3.4 Data Collection Method

3.4.1 Field Study

In accordance with the source of data and the purpose of the activity, in direct data collection, the author uses several data collection techniques, including:

A. Interview

Interview is a technique of collecting data through questions and answers on matters that are directly related to the problem being researched which aims to dig up information related to the problem being studied. The parties interviewed by the author include:

1. Secretary of Mataram Ilir Village
2. Several Village Officers.

B. Direct Observation

Is a method of collecting data through direct observation of the object of research, namely observing activities regarding ongoing system procedures Starting from Observation of the population data archives that are still manual in the village of Mataram Ilir.

C. Documentation

Is a data collection technique by looking at the notes and process forms on the preparation of reports at the Matarm Ilir Village Village Office.

3.5 Design

3.5.1 System Design

The design of the library information system in Komering Agung village applies the problem solving solutions that have been proposed in the system analysis. The design of this information system based on this case goes through three stages, namely:

a. **System Functional Design Stage**

At the functional design stage of the system carried out, among others: Analysis of the running system using Flowchart. The proposed system uses Context Diagrams, Data Flow Diagrams (DFD) and Entity Relationship Diagrams (ERD).

b. **Data Design Stage**

At the data design stage, among others: Creating Relationships Between Tables and Data Dictionary.

c. **Interface Design Stage**

The design stage includes making a proposed design to create an interface with the user. Views made include: Account List Display, Login Display, Village Library Main Page Display, Loan Transaction Display and Member Data Display.

3.5.2 Flowchart

The flowchart is a depiction of the flow of documents related to the system to be built, the information system flowchart describes the system design that is currently running in the village information system. Population data, how this data information system can be used as village archive material.

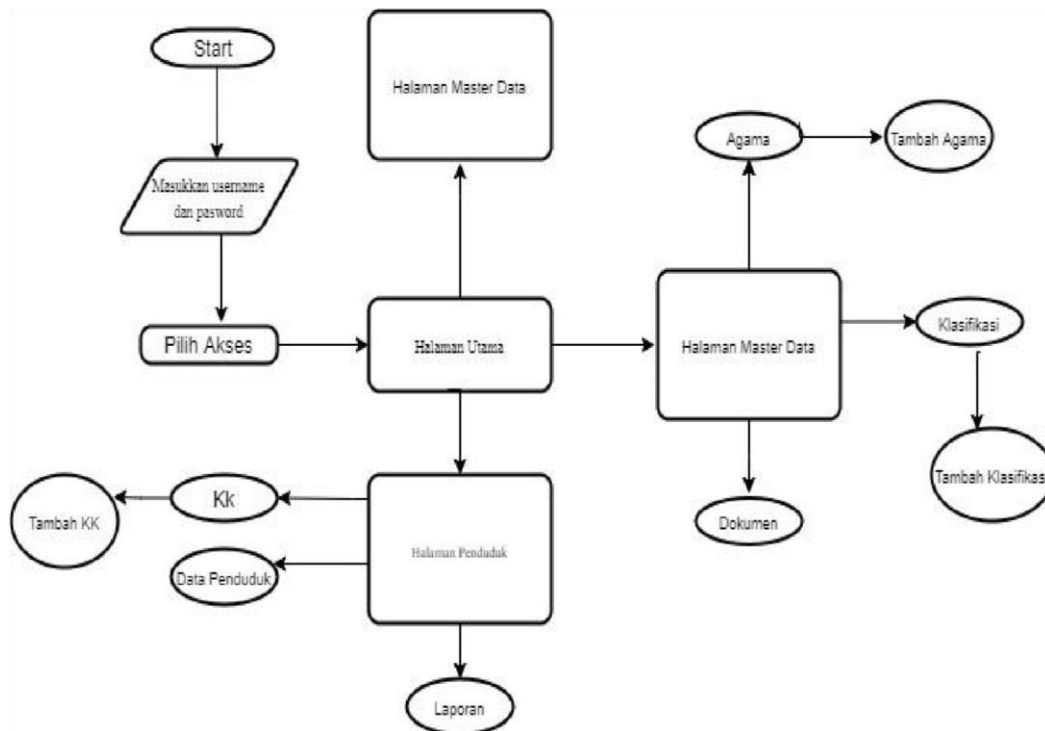


Figure 3.1. Flowchart 1

3.5.3 Entity Relationship Diagram

ERD (Entity Relationship Diagram) is a model to explain the relationship between data in the database based on basic data objects that have relationships between relationships. ERD (Entity Relationship Diagram) to model data structures and relationships between data, to describe it used several notations and symbols.

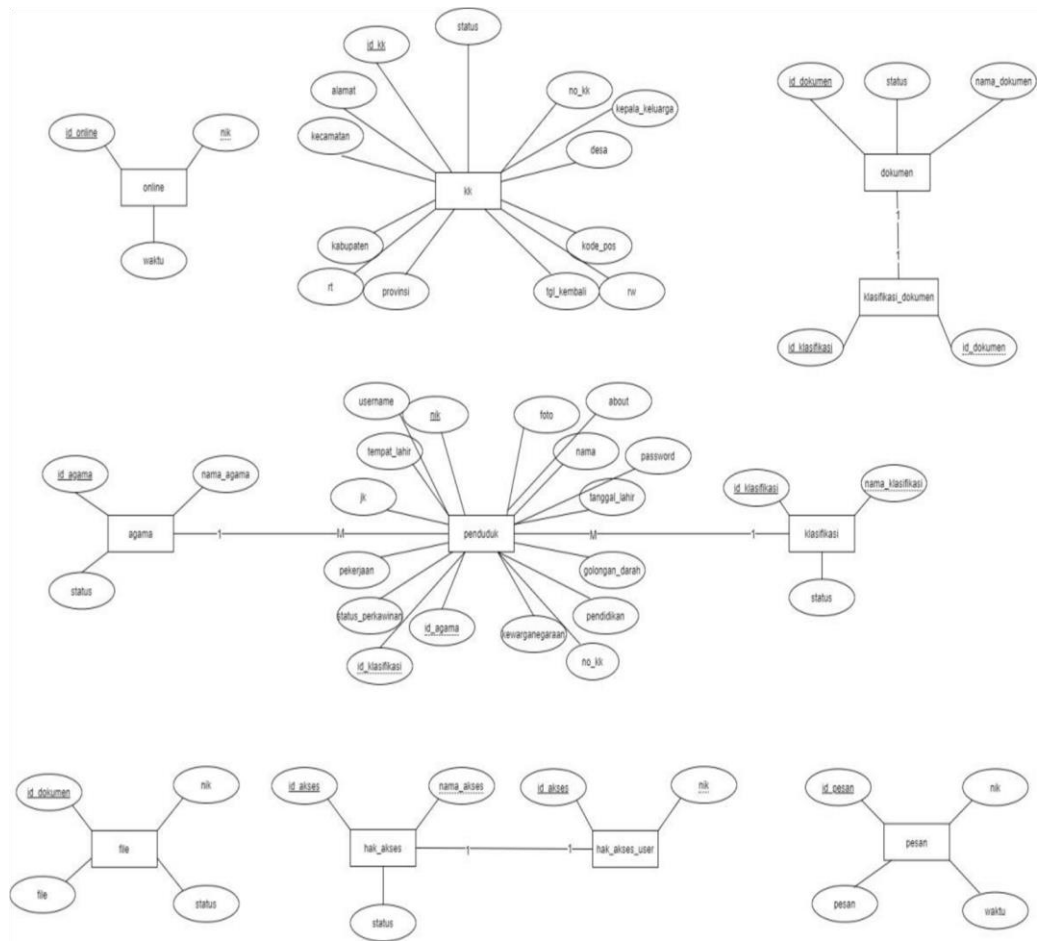


Figure 3.2. Entity Relationship Diagram
3.5.4 Logical Design

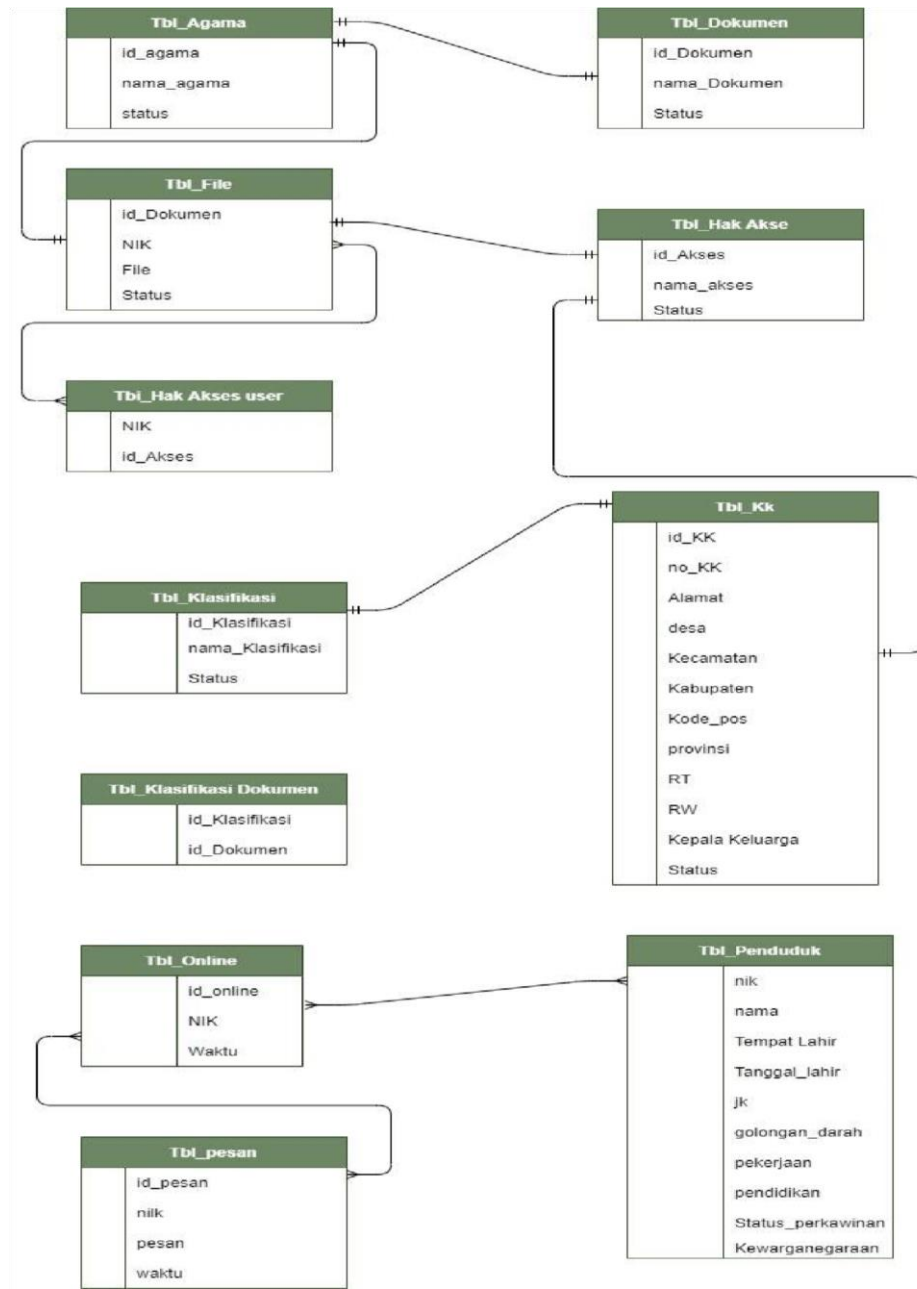


Figure 3.3. Logical Design 1

3.5.5 Physical Design

| Field | Type | Default | Description |
|-------|------|---------|-------------|
|-------|------|---------|-------------|

| | | | |
|--------------|--------------|------|----------------------------|
| (PK)Id_agama | Varchar (10) | None | ID Religious (Primary Key) |
| Nama_agama | Varchar (30) | Null | Name _religion |
| Status | Int (11) | Null | Status |

Table 3.1 Religious Table

| Field | Type | Default | Description |
|----------------|--------------|---------|---------------------------|
| (PK)Id_Dokumen | Varchar (30) | None | ID Document (Primary Key) |
| Nama_Dokumen | Varchar (50) | Null | Name Dokument |
| Status | Int (1) | Null | Status |

Table 3.2 Document Table

| Field | Type | Default | Description |
|----------------|--------------|---------|---------------------------|
| (PK)Id_Dokumen | Varchar (30) | Null | ID Document (Primary Key) |
| Nik | Varchar (30) | Null | Nik |
| File | Text | Null | File |
| Status | Int (1) | Null | Status |

Table 3.3 File Table

| Field | Type | Default | Description |
|--------------|--------------|---------|-------------------------|
| (PK)Id_Akses | Varchar (10) | None | ID Access (Primary Key) |

| | | | |
|------------|--------------|------|-------------|
| Nama_akses | Varchar (10) | None | access name |
| Status | Int (1) | None | Status |

Table 3.4 Access rights Table

| Field | Type | Default | Description |
|----------|--------------|---------|-------------|
| Nik | Varchar (10) | None | Nik |
| id_akses | Varchar (10) | None | access ID |

T

Table 3.5 User Access Rights Table

| Field | Type | Default | Description |
|-----------------|--------------|---------|---------------------|
| Id_Kk | Varchar (10) | Null | ID kk |
| No_Kk | Varchar (50) | Null | no kk (Primary Key) |
| Alamat | Varchar (30) | Null | Address |
| Desa | Varchar (30) | Null | Village |
| Kecamatan | Varchar (30) | Null | Districts |
| Kabupaten | Varchar (30) | Null | District |
| Kode_pos | Varchar (10) | Null | Postal code |
| Provinsi | Varchar (30) | Null | Province |
| RT | Varchar (5) | Null | RT |
| RW | Varchar (5) | Null | RW |
| Kepala Keluarga | Varchar (50) | Null | head of family |
| Status | Varchar (1) | Null | Status |

Table 3.6 KK Table

| Field | Type | Default | Description |
|------------------|--------------|---------|------------------------------------|
| Id_Klasifikasi | Varchar (10) | | Classification ID (Primary Key) |
| nama_Klasifikasi | Varchar (50) | Null | Classification Name |

| | | | |
|--------|---------|------|--------|
| Status | Int (1) | Null | Status |
|--------|---------|------|--------|

Table 3.7 Classification Table

| Field | Type | Default | Description |
|----------------|-------------|---------|-------------------|
| Id_Klasifikasi | Varchar (5) | None | Classification ID |
| Id_Dokumen | Varchar (5) | None | ID Document |

Table 3.8 Classification Document

| Field | Type | Default | Description |
|-----------|--------------|---------|-------------|
| Id_online | Int (11) | None | ID Online |
| Nik | Varchar (15) | None | NIK |
| Waktu | Varchar (25) | None | Time |

Table 3.9 Online Table

| Field | Type | Default | Description |
|---------------|---------------|---------|----------------|
| Nik | Varchar (100) | None | Nik |
| Nama | Varchar (150) | Null | Name |
| Tempat_Lahir | Varchar (50) | Null | Place of birth |
| Tanggal_Lahir | Varchar (10) | Null | Date of birth |

| | | | |
|-------------------|-------------------------------------|------|----------------|
| Jk | enum('L', 'P') | Null | JK |
| Golongan_darah | Varchar (5) | Null | Blood group |
| Pekerjaan | Text | Null | Work |
| Pendidikan | Varchar (5) | None | Education |
| Status Perkawinan | enum('KAWIN' , 'BELUM KAWIN') | None | NIK |
| Kewarganegaraan | Varchar (50) | Null | Marital status |
| Status | Int (1) | Null | Status |

Table 3.10 Resident Table

| Field | Type | Default | Description |
|----------|--------------|---------|-------------|
| Id_Pesan | Int (11) | None | ID Message |
| Nik | Varchar (15) | None | Nik |
| Pesan | Text | None | Message |
| Waktu | Varchar (50) | None | Time |

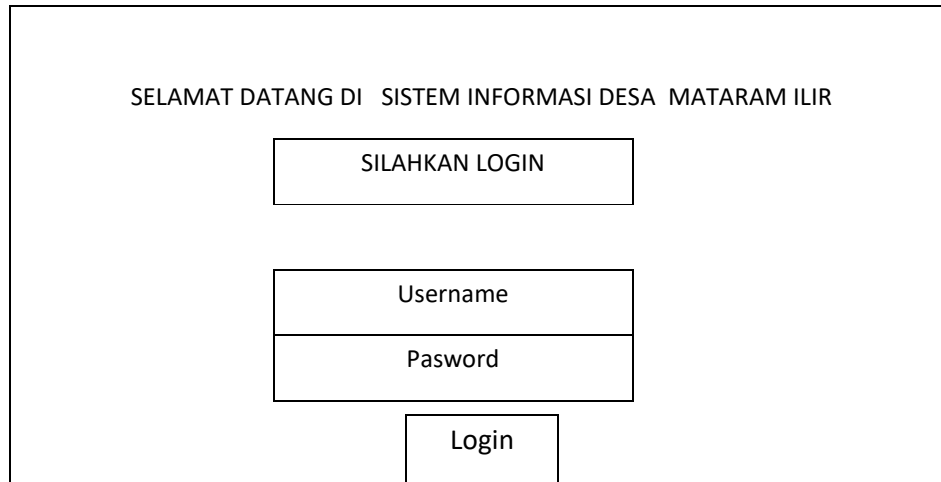
Table 3.11 Message Table

3.6 System Interface

The proposed system interface consists of 2 (two) access rights, namely the system interface with Member (user) access rights, and the Admin access rights system interface. The system to be built is used by all website-based access rights

3.7 Access to the Village Information System Interface System Population data

3.7.1 Resident Interface



SELAMAT DATANG DI SISTEM INFORMASI DESA MATARAM ILIR

SILAHKAN LOGIN

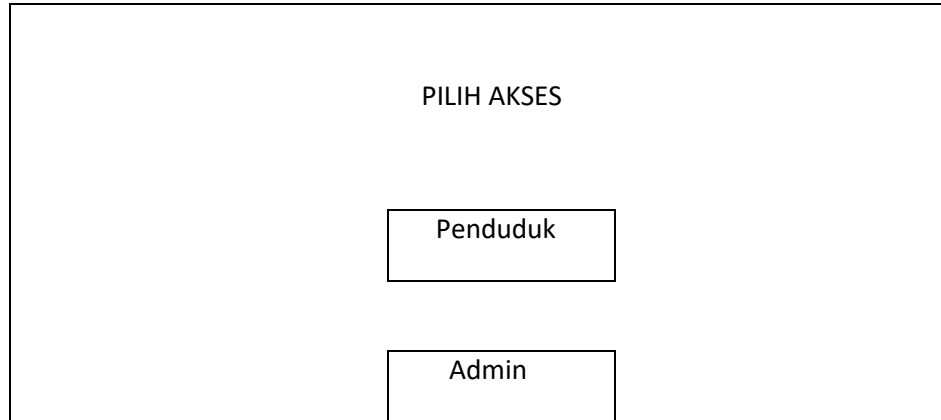
Username

Pasword

Login

The image shows a login interface design. At the top, it says 'SELAMAT DATANG DI SISTEM INFORMASI DESA MATARAM ILIR'. Below that is a button labeled 'SILAHKAN LOGIN'. Underneath is a form with two input fields: 'Username' and 'Pasword'. At the bottom of the form is a 'Login' button.

Figure 3.4 Login Menu Interface Design 1



PILIH AKSES

Penduduk

Admin

The image shows a choice menu interface design. At the top, it says 'PILIH AKSES'. Below that are two buttons: 'Penduduk' and 'Admin'.

Figure 3.5 Resident and Admin Choice Men 1

SIWADES : SELAMAT DATANG DI SISTEM INFORMASI DESA MATARAM ILIR

| | | | | | | | |
|--|---------------------------|----|-----|------|----|---------------------|------|
| Dashboard Kartu Keluarga Chatting an | ANGGOTA II KK II PENDUDUK | | | | | | |
| | +Tambah Keluarga | | | | | | |
| | No | KK | NIK | Nama | JK | Tempat tgl lahir | opsi |

Figure 3.6 Family Card Resident input i 1

| | |
|----------------|----------------------|
| NIK | <input type="text"/> |
| Nama | <input type="text"/> |
| JK | <input type="text"/> |
| Golongan Darah | <input type="text"/> |
| Pendidikan | <input type="text"/> |
| Pekerjaan | <input type="text"/> |

Figure 3.7 Interface design Add Resident 1 Family Card

3.7.2 Admin Interface

| | | | |
|--|--|--|--|
| Data Penduduk : SELAMAT DATANG DI SISTEM INFORMASI Penduduk DESA MATARAM ILIR | | | |
| | <input type="button" value="Anak-Anak"/> <input type="button" value="Remaja"/> <input type="button" value="Dewasa"/> <input type="button" value="lansia"/> | <input type="button" value="Laki-Laki"/> | <input type="button" value="Perempuan"/> |



Chatting an

Figure 3.8 Interface Design Population 1

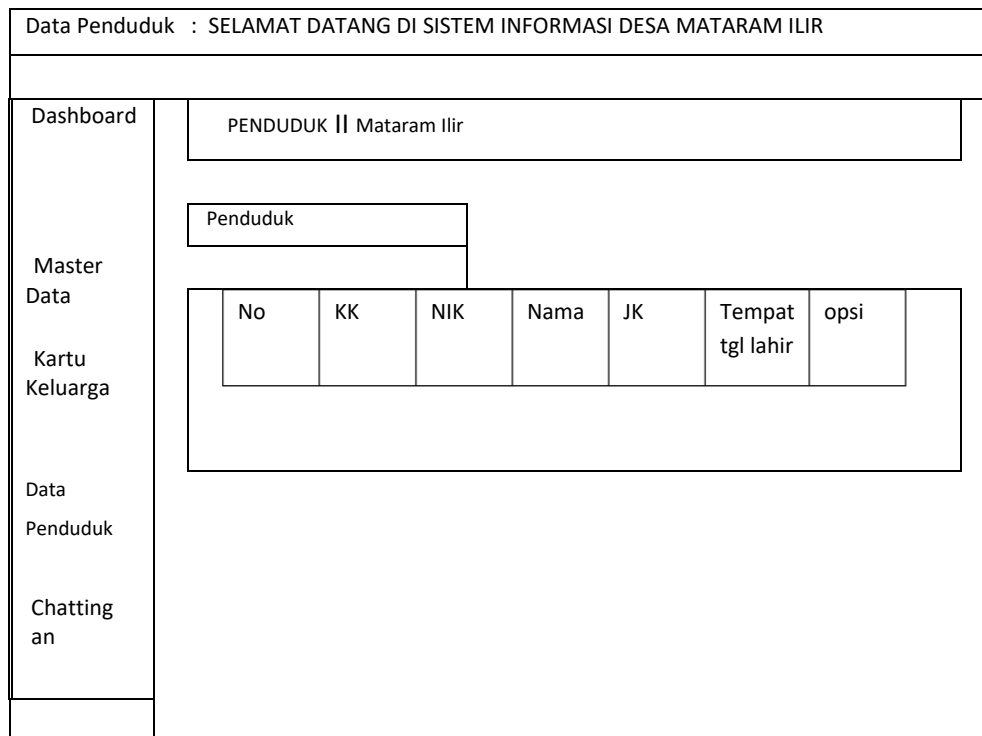


Figure 3.9 Population Data Input Interfa 1

Data Penduduk : SELAMAT DATANG DI SISTEM INFORMASI DESA MATARAM ILIR

| | | | | | | | |
|--|----------------------------|----|-----|------|----|------------------|------|
| Dashboard Master data Penduduk Kartu Keluarga Data Penduduk Chatting an | Kartu Keluarga Penduduk | | | | | | |
| | +Tambah KK | | | | | | |
| | No | KK | NIK | Nama | JK | Tempat tgl lahir | opsi |
| | | | | | | | |
| | | | | | | | |

Figure 3.10 Family Card Data Input Inter 1

Data Penduduk : SELAMAT DATANG DI SISTEM INFORMASI DESA MATARAM ILIR

| | | |
|---|---------------------|-------------------|
| Dashboard Master data Penduduk Kartu Keluarga Data Penduduk | Laporan Penduduk | |
| | Laporan | |
| | KK | Pilih Kk |
| | Agama | Pilih Agama |
| | Klasifikasi | Pilih Klasifikasi |
| Export | | |

Figure 3.11.Design of Population Output 1

BAB IV RESULTS AND DISCUSSION

4.1 Agency Overview

4.1.1 General History

Mataram Ilir Village is located in Seputih Subdistrict, Surabaya, Central Lampung, this village is bordered by the Gaya Baru Village, Central Lampung. This village has various ethnic groups, namely Lampung, Java, Bali, Sunda with the majority of Lampung and Java, this village is still thick with the customs that they hold from their ancestors.

The people of Mataram Ilir Village are generally fishermen and farmers. The residents of this Mataram Ilir village still lack technological knowledge so that the rapid development of Mataram Ilir village technology is demanded to follow developments, especially in Mataram Ilir village government agencies.

4.2 Problem Identification

In managing data information, the Village of Mataram Ilir has not maximized the use of computers, so that the recording of data and information has several weaknesses. 1. Source of Problem

The source of the problem is in the recording of data and information, the Village of Mataram Ilir still uses paper recording.

2. Identification of Information Needs

From the identification of these problems, a decision can be made, namely

MAKING A VILLAGE INFORMATION SYSTEM
MANAGEMENT

WEBSITE that is able to manage data properly and produce information needed by the residents of Mataram Ilir Village more precisely and accurately as well as provide population information and improve the efficiency of community services.

4.3 System Analysis

The following is a textual description of the Population Data Information System at the Village Office of Mataram Ilir Village. The Population Data Information System involves the KAUR of the Government to find out the data of the villagers and seek information through the villagers directly in order to get more accurate information.

4.4 System Implementation

4.4.1 Application Development Results

In the discussion of the results of making this application, it is explained in the form of a program display that has been run. The explanation of the function of each menu contained in the display of this website is as follows :

4.4.2 Resident Interface

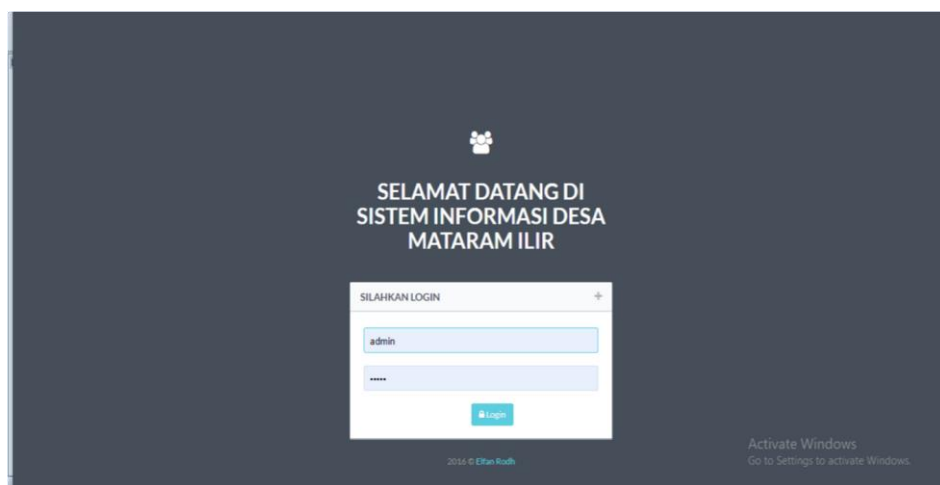


Figure 4.1 Login Menu Interface Design 1

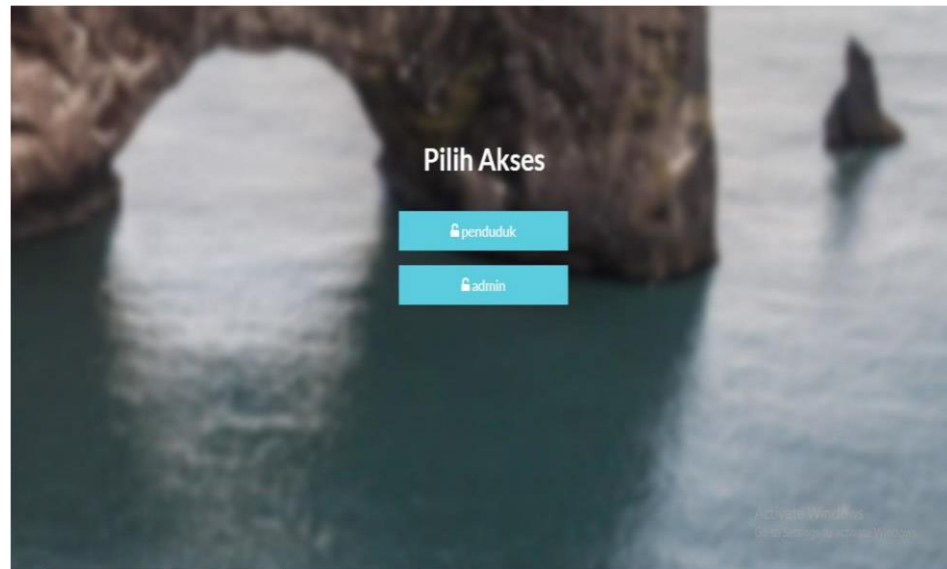


Figure 4.2 Resident and Admin Choice Men 1

SIWADES | SELAMAT DATANG DI SISTEM INFORMASI DESA Mataram Ilir | penduduk: 123451 A.N: NASRIL AHMAD

Dashboard | Kartu Keluarga | Chatting an

ANGGOTA || KK || Penduduk | Data penduduk / KK / ANGGOTA

KELUARGA NASRIL AHMAD

+ Tambah Keluarga

| No | KK | NIK | Nama | Jenis Kelamin | Tempat, Tanggal Lahir | Ops |
|----|----|--------|------------------------|---------------|--------------------------|-----|
| 1 | | 123451 | NASRIL AHMAD | LAKI - LAKI | MATARAM ILIR, 21-12-1997 | |
| 2 | | 123452 | MUHAMMAD ROHSUL ABIDIN | LAKI - LAKI | TUBAN, 1997-12-06 | |
| 3 | | 123455 | CAMELIA | PEREMPUAN | TUBAN, 1996-12-15 | |
| 4 | | 123551 | EXIGE BENA VENTURA | LAKI - LAKI | BLITAR, 22-03-1996 | |

1-4 of 4 | Activate Windows | Go to Settings to activate Windows.

Figure 4.3 Family Card Resident input in 1

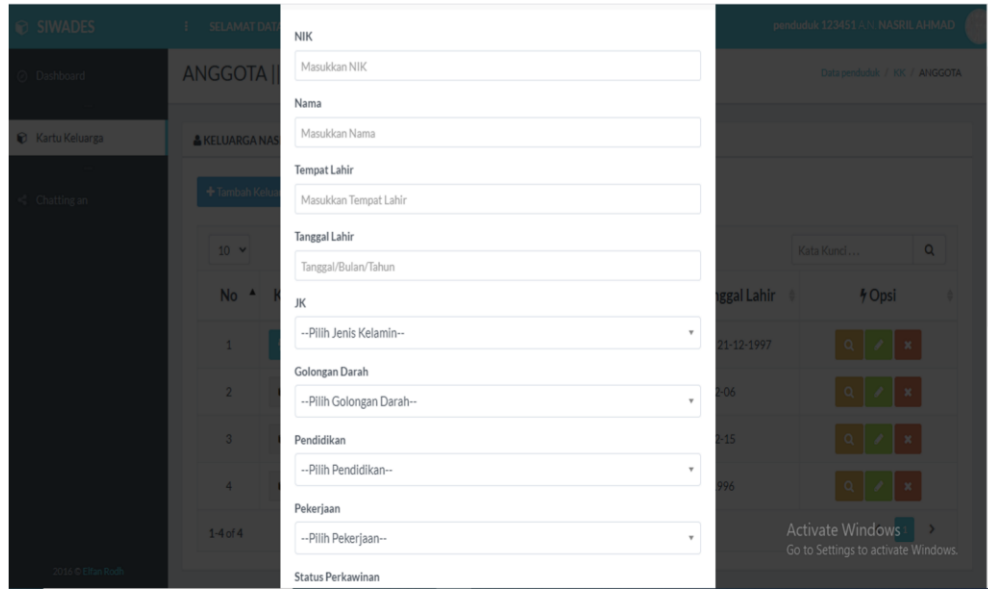


Figure 4.4 Interface design Add Resident 1

4.4.3 Admin Interface

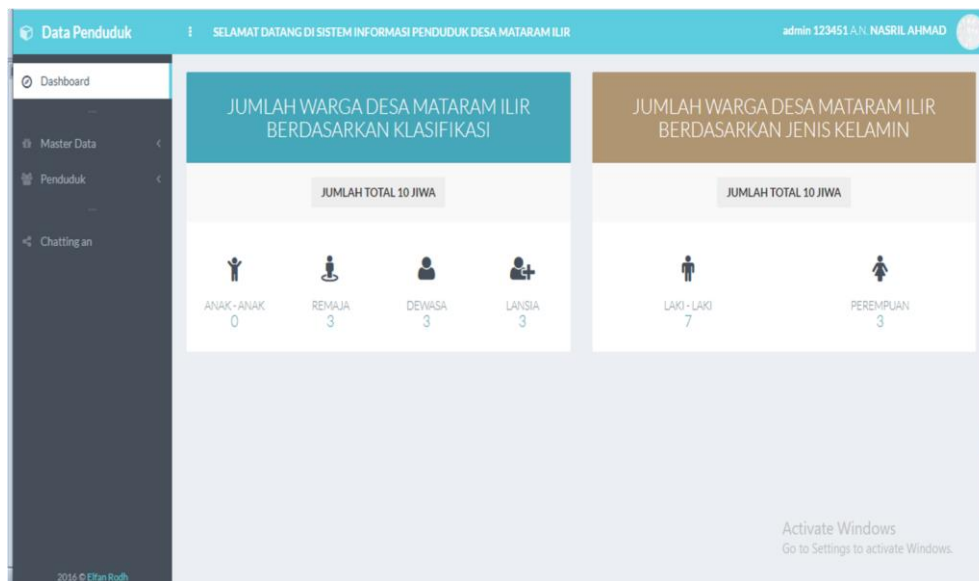
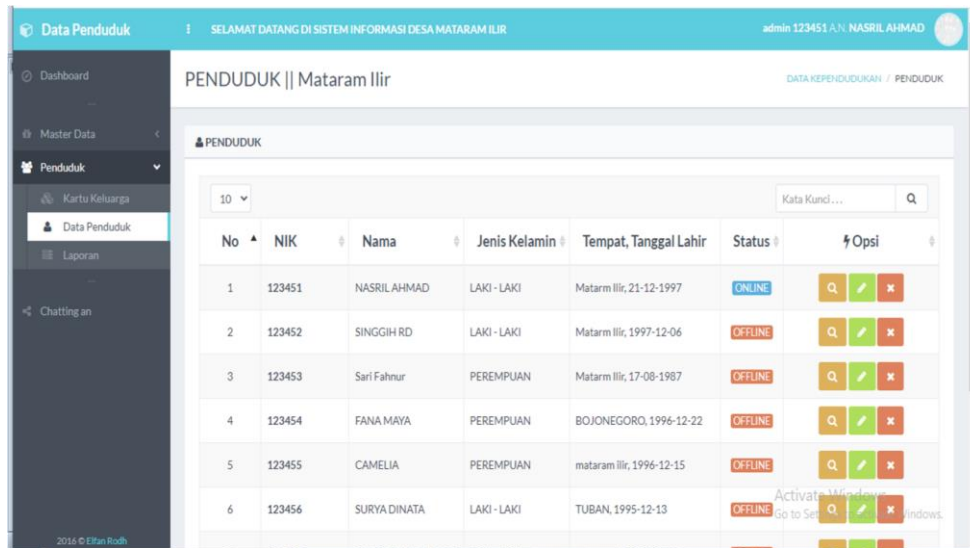


Figure 4.5 Interface Design Population S 1



Data Penduduk | SELAMAT DATANG DI SISTEM INFORMASI DESA MATARAM ILIR | admin 123451 A.N. NASRIL AHMAD

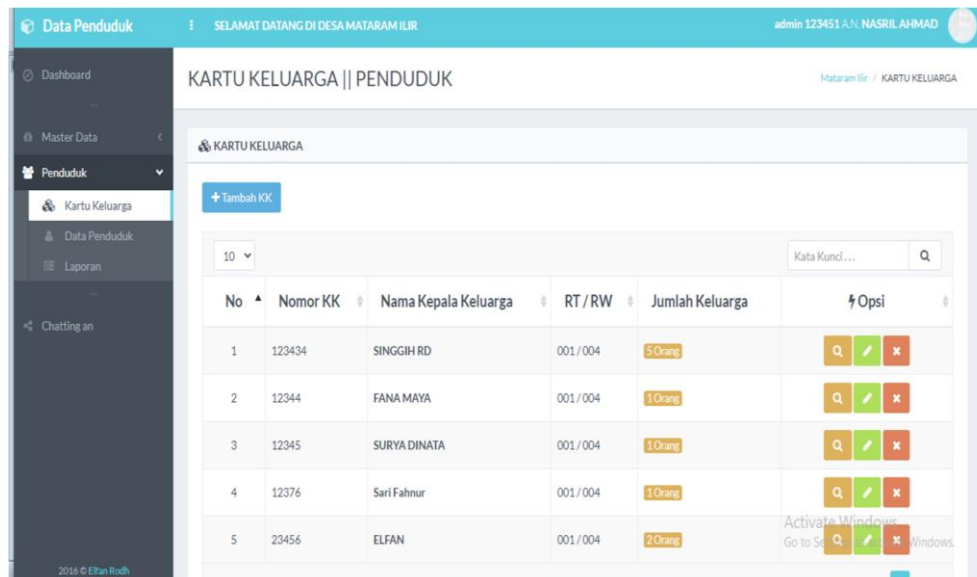
PENDUDUK || Mataram Ilir

DATA KEPENDUDUKAN / PENDUDUK

PENDUDUK

| No | NIK | Nama | Jenis Kelamin | Tempat, Tanggal Lahir | Status | Opsi |
|----|--------|--------------|---------------|--------------------------|---------|-------------|
| 1 | 123451 | NASRILAHMAD | LAKI - LAKI | Mataram Ilir, 21-12-1997 | ONLINE | [Q] [✓] [✗] |
| 2 | 123452 | SINGGIH RD | LAKI - LAKI | Mataram Ilir, 1997-12-06 | OFFLINE | [Q] [✓] [✗] |
| 3 | 123453 | Sari Fahnur | PEREMPUAN | Mataram Ilir, 17-08-1987 | OFFLINE | [Q] [✓] [✗] |
| 4 | 123454 | FANA MAYA | PEREMPUAN | BOJONEGORO, 1996-12-22 | OFFLINE | [Q] [✓] [✗] |
| 5 | 123455 | CAMELIA | PEREMPUAN | mataram Ilir, 1996-12-15 | OFFLINE | [Q] [✓] [✗] |
| 6 | 123456 | SURYA DINATA | LAKI - LAKI | TUBAN, 1995-12-13 | OFFLINE | [Q] [✓] [✗] |

Figure 4.6 Population Data Input Interfa 1



Data Penduduk | SELAMAT DATANG DI DESA MATARAM ILIR | admin 123451 A.N. NASRIL AHMAD

KARTU KELUARGA || PENDUDUK

Mataram Ilir / KARTU KELUARGA

KARTU KELUARGA

+ Tambah KK

| No | Nomor KK | Nama Kepala Keluarga | RT / RW | Jumlah Keluarga | Opsi |
|----|----------|----------------------|-----------|-----------------|-------------|
| 1 | 123434 | SINGGIH RD | 001 / 004 | 5 Orang | [Q] [✓] [✗] |
| 2 | 12344 | FANA MAYA | 001 / 004 | 1 Orang | [Q] [✓] [✗] |
| 3 | 12345 | SURYA DINATA | 001 / 004 | 1 Orang | [Q] [✓] [✗] |
| 4 | 12376 | Sari Fahnur | 001 / 004 | 1 Orang | [Q] [✓] [✗] |
| 5 | 23456 | ELFAN | 001 / 004 | 2 Orang | [Q] [✓] [✗] |

Figure 4.7 Family Card Data Input Interf 1

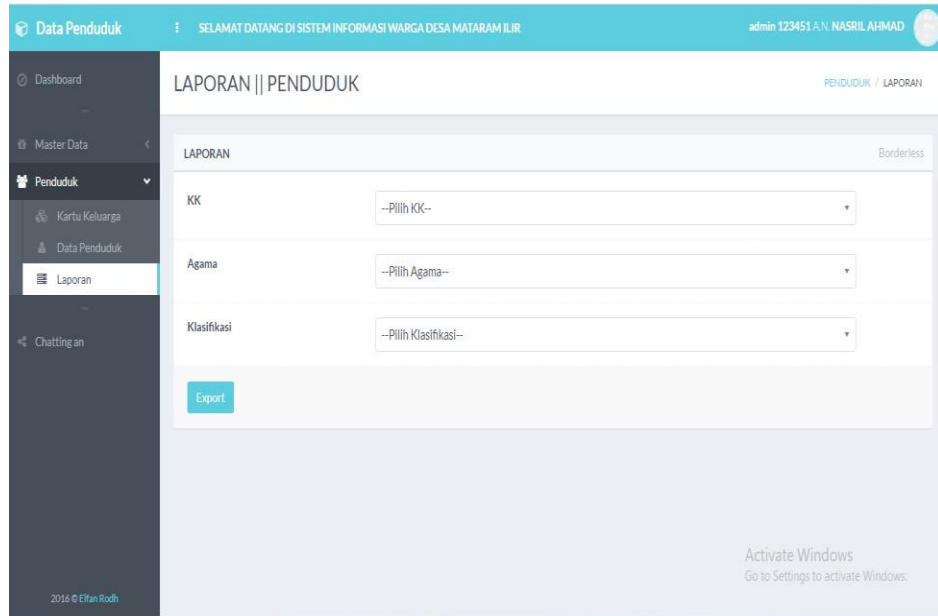


Figure 4.8 .Design of Population Output 1

BAB V

CONCLUSIONS AND SUGGESTIONS

5.1 Conclusion

Based on the research that has been carried out by the author in Mataram Ilir Village, Seputih Surabaya District, Central Lampung Regency, it can be concluded as follows :

1. The process of processing population data as Village archive material which was previously done manually, where the process is still in the form of recording and storing data that is still in the form of archives / files manually, with this Population Webiste it can facilitate the data processing process more accurately and safely.
2. With computerized processing such as inputting and updating and processing population data through family cards, Mataram Ilir Village is more familiar with increasingly advanced technology.
3. With the data storage in the form of a database, it is possible that there will be no duplication of data.
4. The design of the Population Data Processing Information System in Mataram Ilir Village can facilitate the Mataram Ilir Village government in an information system to manage Population Data in Mataram Ilir Village, Seputih Surabaya District, Central Lampung Regency.

5.2 Suggestions

From the results of research conducted by the author in Mataram Ilir Village, Seputih Subdistrict, Central Surabaya, the authors provide suggestions that can improve population information in Mataram Ilir Village, Seputih District, Central Lampung, Surabaya, as follows :

1. The population information system developed is a form of computerized information system that is not yet perfect, so it needs to be improved.
system development and improvement according to system user needs.
2. Prior to implementation, it is hoped that the website will be tested and ensured that it is in accordance with the wishes and needs of government agencies in Mataram Ilir Village, Seputih Subdistrict, Surabaya, Central Lampung.
3. It is hoped that training will be carried out in advance so that users really understand the function of how to use it as well as its maintenance. So that the website can be used properly and accurately.

REFERENCES

- Jatmika, A. (2017). Perancangan Sistem Informasi Portal Alumni Universitas Muhammadiyah Ponorogo Berbasis PHP dan MYSQL.
- Paryanta, Sutariyani, & Susilowati, D. (2017). Sistem informasi administrasi kependudukan berbasis web desa Sawahan. *IJSE – Indonesian Journal on Software Engineering Sistem*, 3(2), 77–81.
- Teknologi, U. (2015). *Metadata, citation and similar papers at core.ac.uk* 4. 5(December), 118–138.
- Haswan, F. (2018). Kelurahan Sungai Jering Berbasis Web Dengan Object. *Jurnal Teknologi Dan Open Source*, 1(2), 92–100.
- Mearaj, I., Maheshwari, P., & Kaur, M. J. (2019). Data Conversion from Traditional Relational Database to MongoDB using XAMPP and NoSQL. *ITT 2018 - Information Technology Trends: Emerging Technologies for Artificial Intelligence*, 94–98. <https://doi.org/10.1109/CTIT.2018.8649513>
- Lutfi, A. (2017). Sistem Informasi Akademik Madrasah Aliyah Salafiyah Syafi'iyah Menggunakan PHP dan MYSQL. Situbondo: AMIK Ibrahimy.
- A.S., Rosa dan Shalahuddin, M. (2018). *Rekayasa Perangkat Lunak Terstruktur dan Berorientasi Objek*. Bandung: Informatika Bandung

ATTACHMENT

1. Database Technology Course

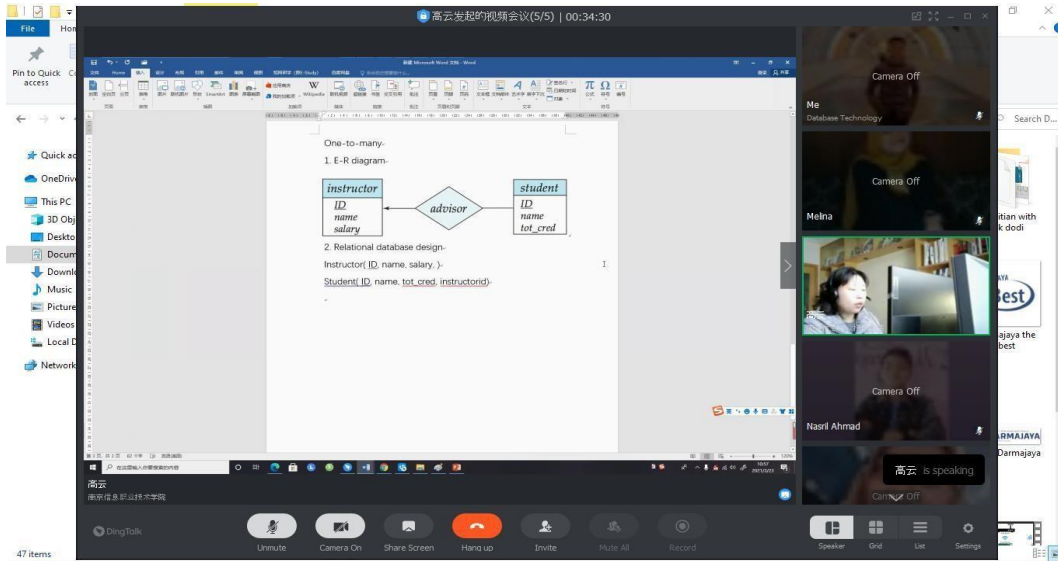


Figure 1. Documentation while learning Database Technology

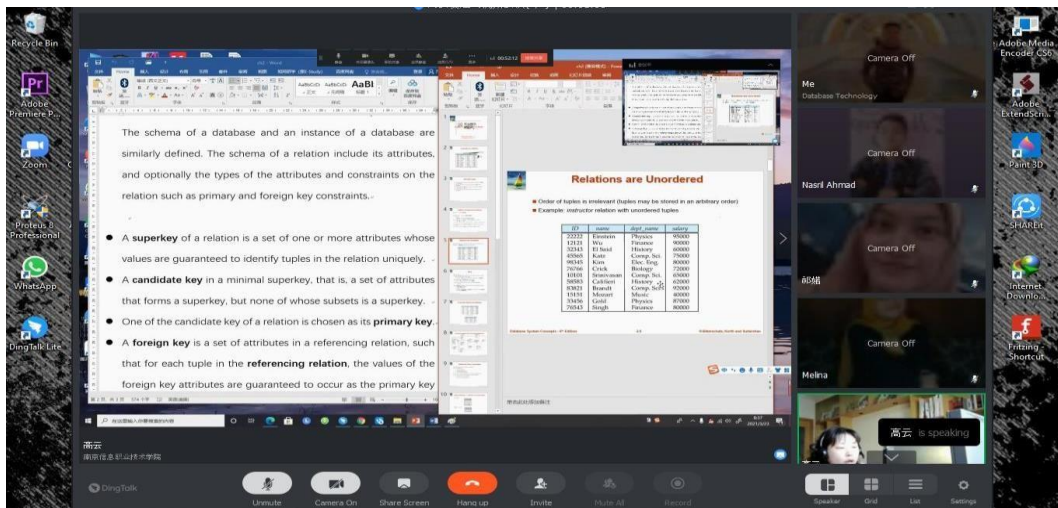


Figure 2. Documentation while learning Database Technology

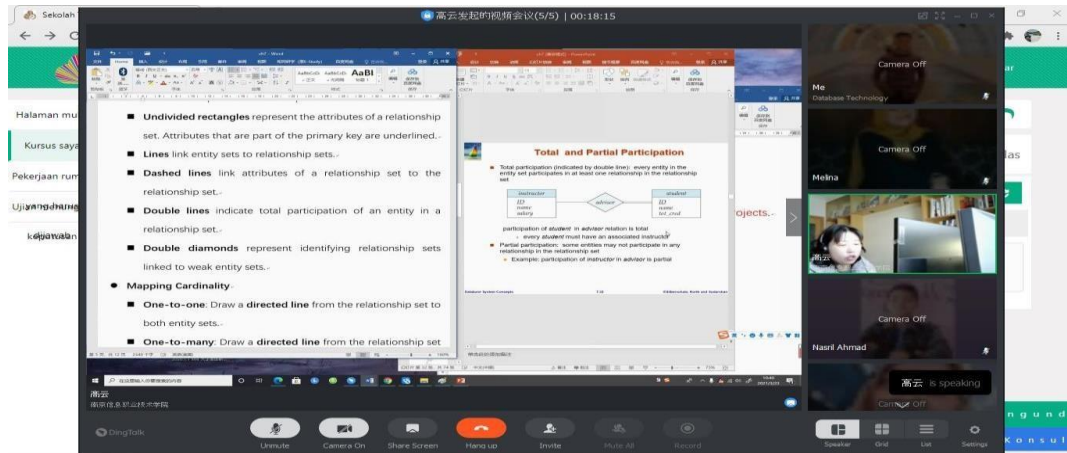


Figure 3. Documentation while learning Database Technology

2.Computer Network Course

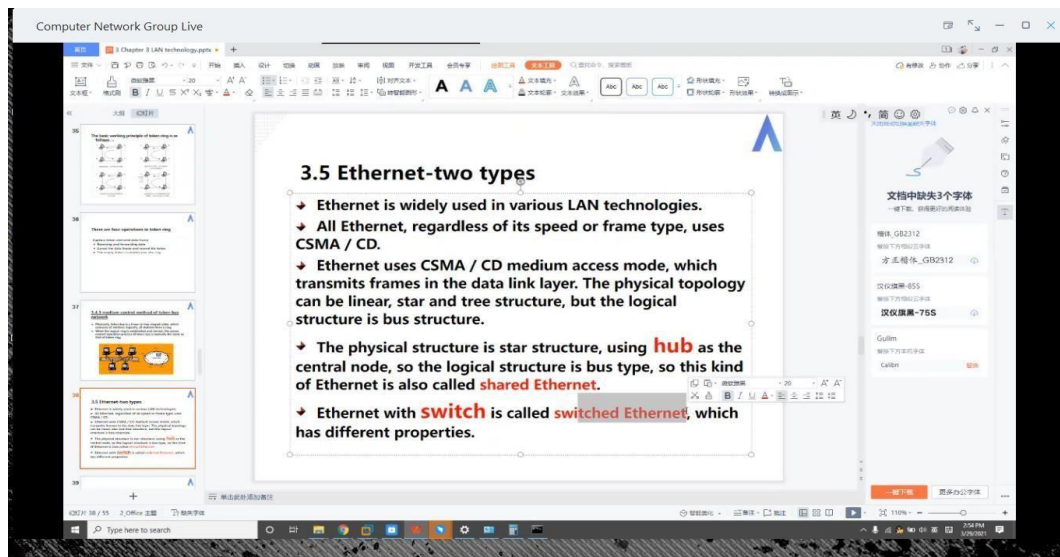


Figure 4. Documentation while learning Computer Network

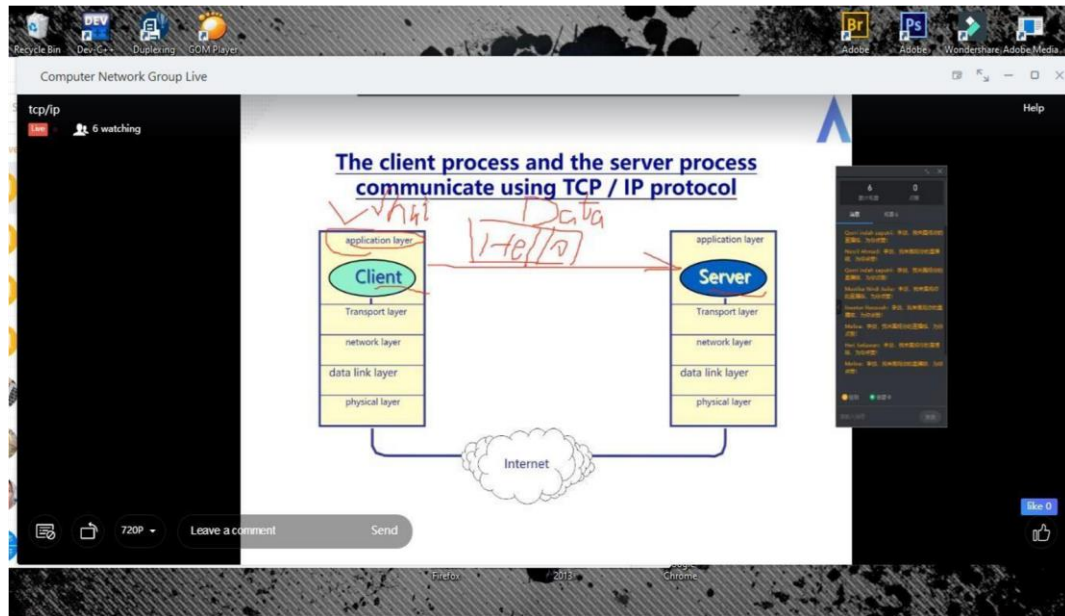


Figure 5. Documentation while learning Computer Network

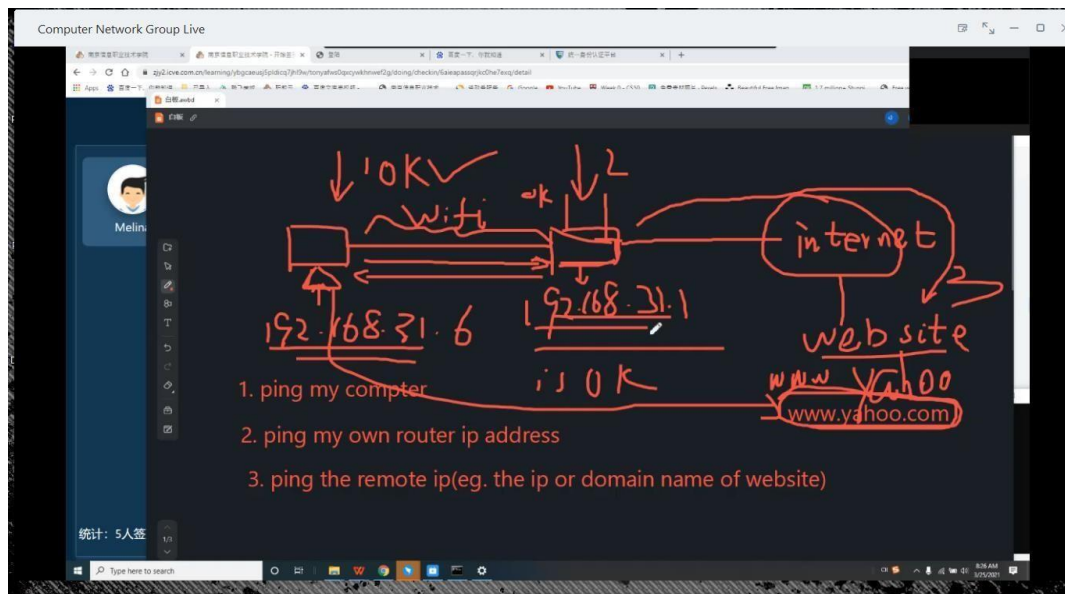


Figure 6. Documentation while learning Computer Network

3. Digital Signal Course

The screenshot shows a Zoom meeting interface. The main content is a hand-drawn diagram illustrating a delay operation. It shows an input signal $x(n]$ entering a block labeled z^{-1} (with "delay" written above it). The output signal is $y(n) = x(n-1]$. Below the diagram, the Z-transform relationship is given as $Y(z) = z^{-1} [X(z)]$. The meeting interface includes a top bar with the time 7:51, a title "张艳发起的在线课堂", and a list of participants on the right side.

Figure 7. Documentation while learning Digital Signal

The screenshot shows a Zoom meeting interface displaying a table of common Z-transform pairs. The table is titled "The Table of common ZT pairs:" and has three columns: "Signal, x(n)", "Z-transform", and "ROC". The table contains five rows of data. A red "Important!" label is placed to the right of the table. The meeting interface includes a top bar with the time 7:52, a title "张艳发起的在线课堂", and a list of participants on the right side.

| Signal, x(n) | Z-transform | ROC |
|----------------|-----------------------|-------------|
| $\delta(n)$ | 1 | $\forall z$ |
| $\mu(n)$ | $\frac{1}{1-z^{-1}}$ | $ z > 1$ |
| $-u(-n-1)$ | $\frac{1}{1-z^{-1}}$ | $ z < 1$ |
| $a^n u(n)$ | $\frac{1}{1-az^{-1}}$ | $ z > a$ |
| $-b^n u(-n-1)$ | $\frac{1}{1-bz^{-1}}$ | $ z < b$ |

Figure 8. Documentation while learning Digital Signal

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "1.1.2 Frequently Used Discrete Sequences". The slide content includes:

- (1) Unit sample sequence**
- discrete-time impulse**
- unit impulse**
- Equation:
$$\delta(n) = \begin{cases} 1, & n = 0 \\ 0, & n \neq 0 \end{cases}$$
- Shifted:**
- Equation:
$$\delta(n - n_0) = \begin{cases} 1, & n = n_0 \\ 0, & n \neq n_0 \end{cases}$$

Two graphs illustrate the unit impulse $\delta(n)$ and its shifted version $\delta(n-2)$. The right sidebar shows a font selection menu with various fonts like "方正小标宋_GBK" and "方正仿宋_GB2312".

Figure 9. Documentation while learning Digital Signal 4.

Broadband Access Technology Course

The screenshot shows a Zoom meeting interface. The main window displays a presentation slide titled "Channels of WLAN" with a sub-heading "5.8G band division". The slide content includes:

- A frequency spectrum diagram showing five non-overlapping channels (1, 2, 3, 4, 5) between 5725 MHz and 5850 MHz.
- Handwritten annotations in red: "20MHz" under channel 1, "20MHz" under channel 2, and "20" under channel 5.
- Text: "In China, the total 100MHz bandwidth of the 5.8GHz band from 5735MHz to 5835MHz is divided into five non-overlapping channels according to the 20MHz bandwidth of each channel."

The right sidebar shows a list of participants including "李洁(班主任)", "Heri Setiawan(Heri)", "Melina(Melina)", "Qorri indah saputri(...)", and "Nasril Ahmad".

Figure 10. Documentation while learning Broadband Access Technology



Figure 11. Documentation while learning Broadband Access Technology

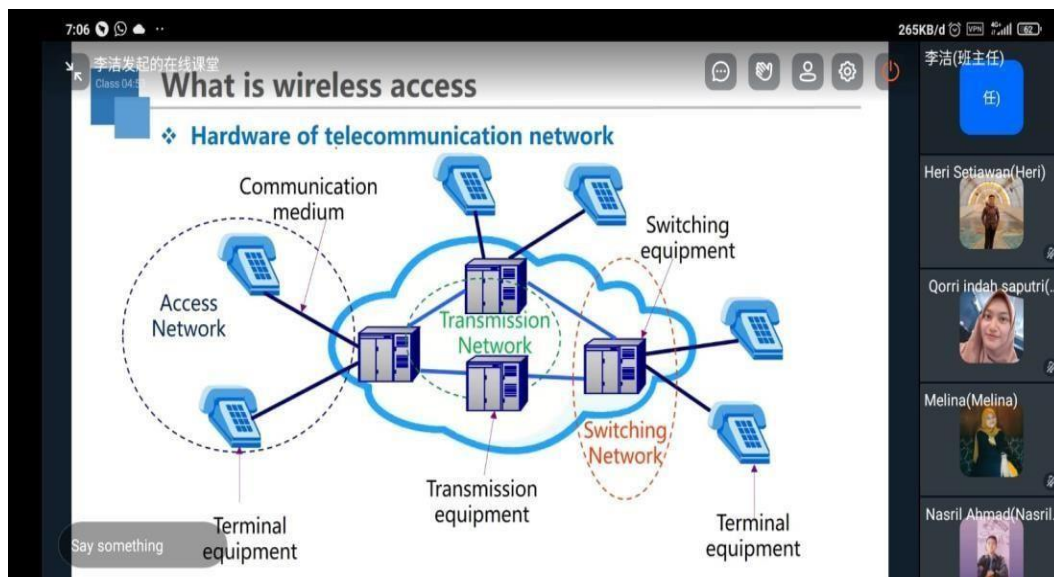


Figure 12. Documentation while learning Broadband Access Technology

5. Programming Course

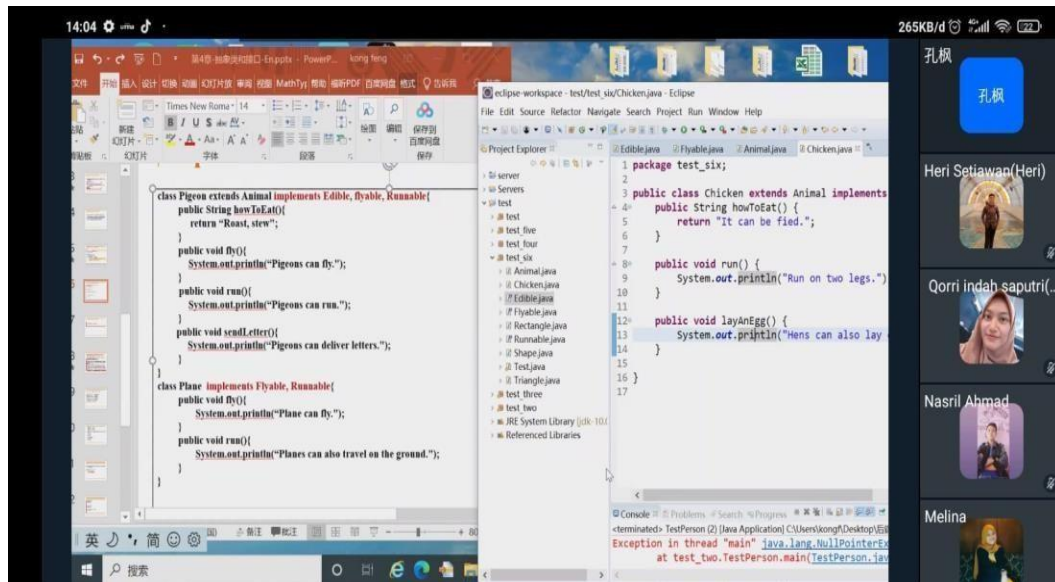


Figure 13. Documentation while learning Programming

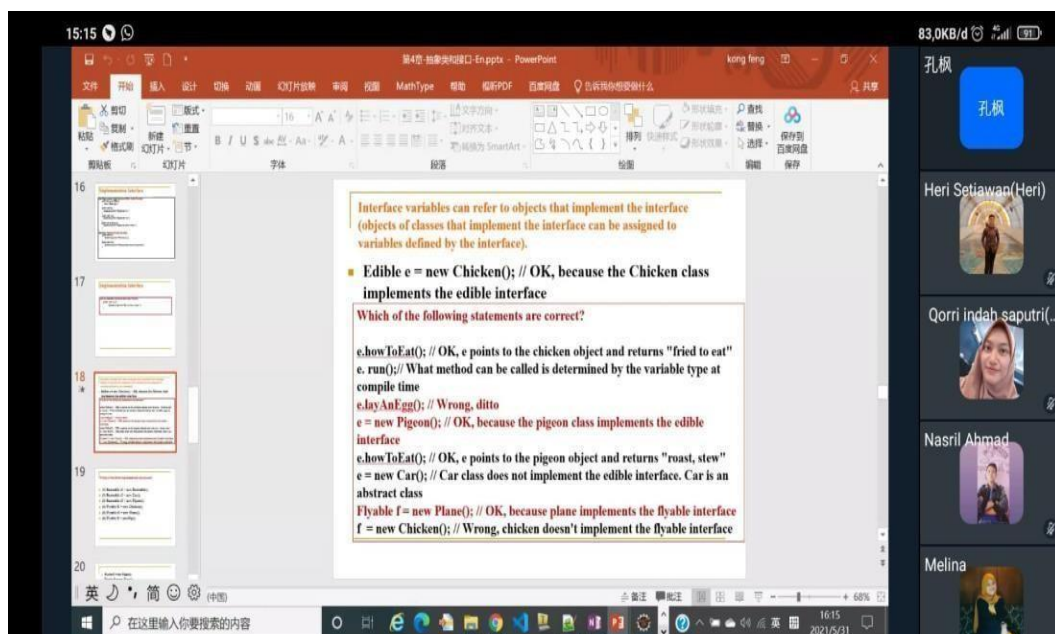


Figure 14. Documentation while learning Programming

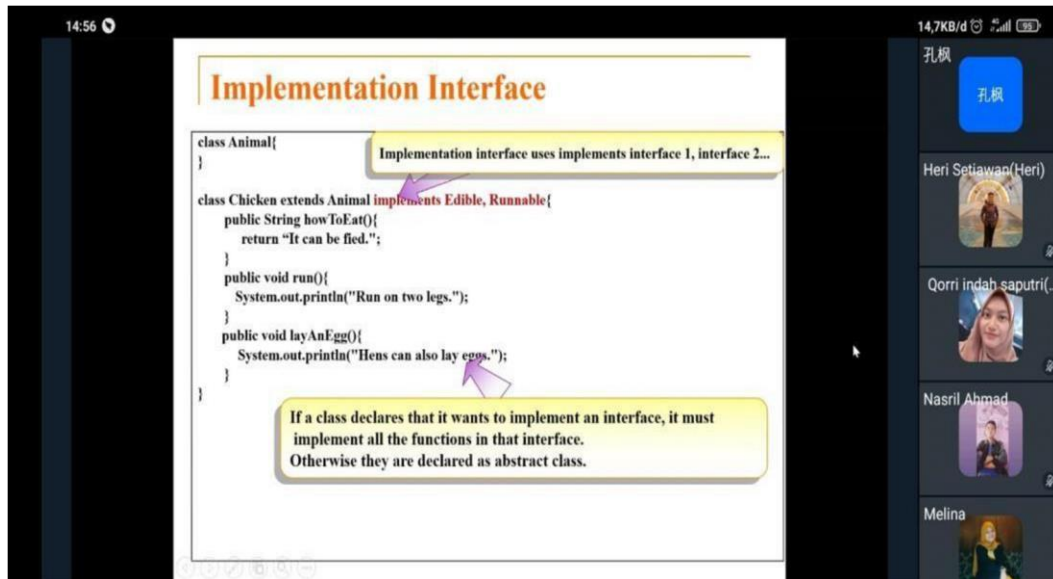


Figure 15. Documentation while learning Programming 6.

Object Oriented Programming Course

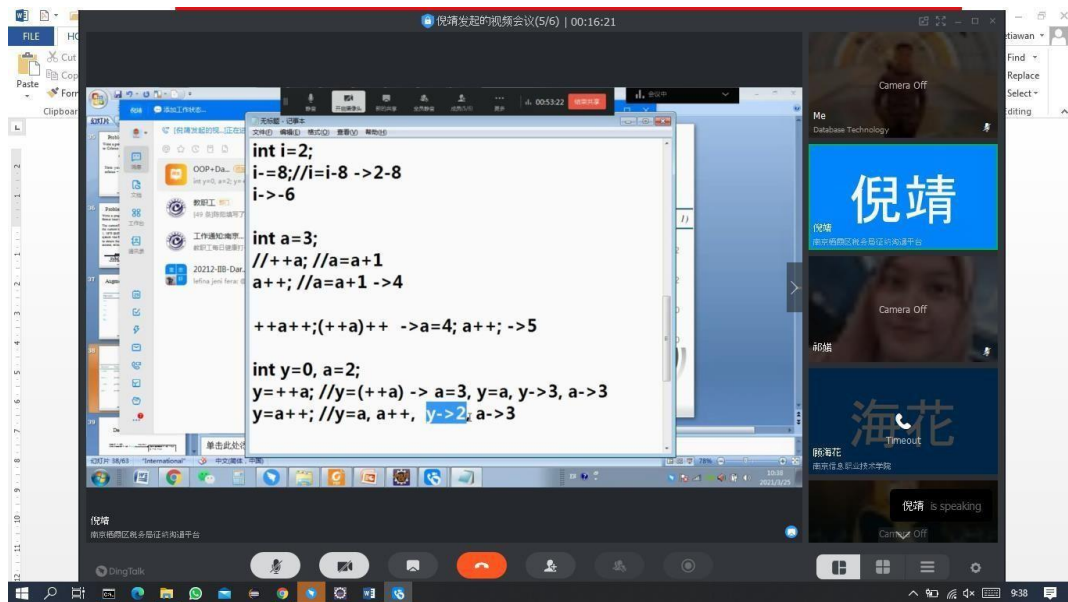


Figure 16. Documentation while learning Object Oriented Programming

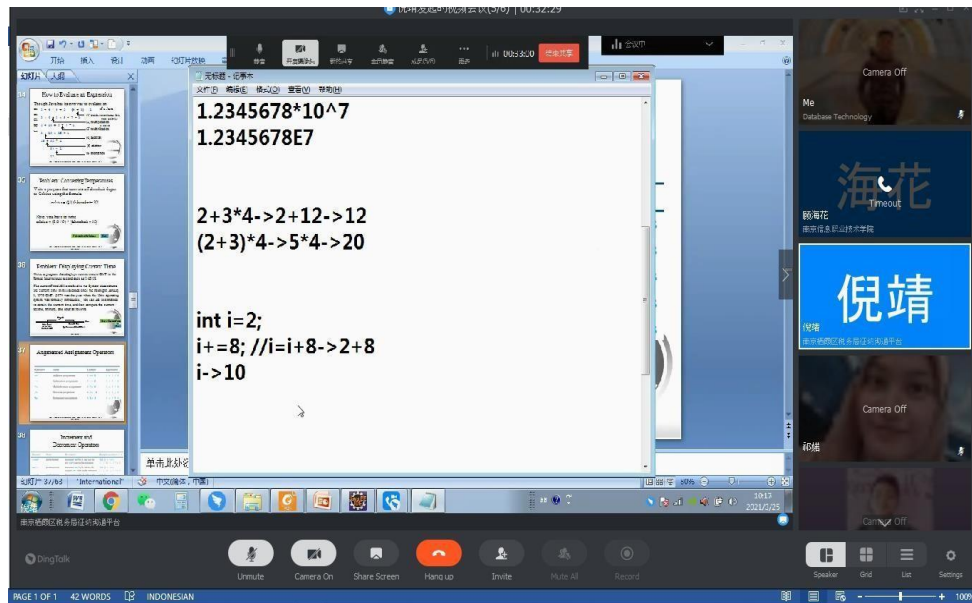


Figure 17. Documentation while learning Object Oriented Programming

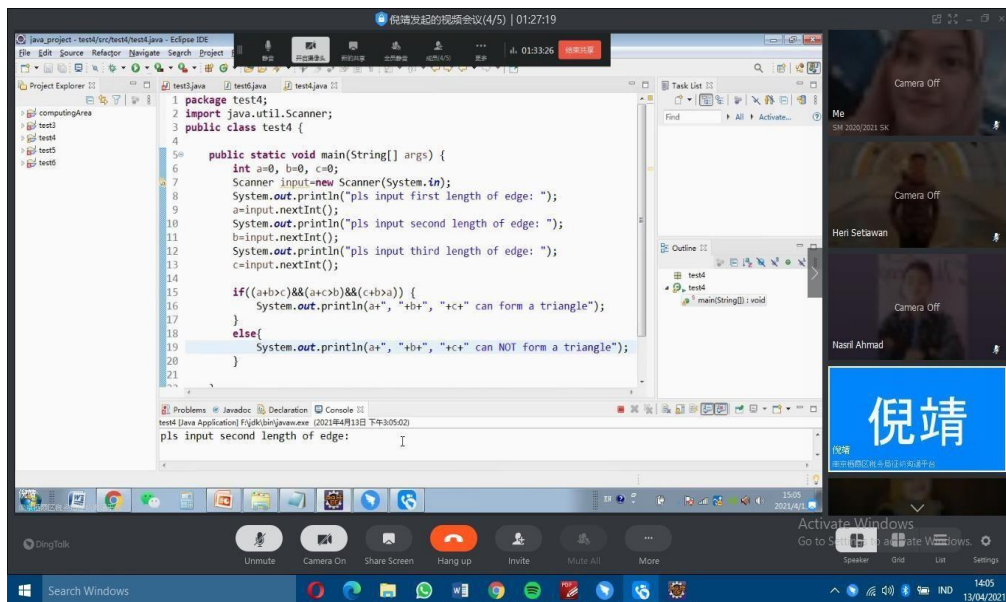


Figure 18. Documentation while learning Object Oriented Programming