

THE RESULTS OF STUDENT MOBILITY REPORT

**BUILD A WEBSITE TO MANAGE VILLAGE LIBRARIES USING
PHP PROGRAMMING LANGUAGE, MYSQL AS THE
DATABASE AT THE KOMERING AGUNG VILLAGE**



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SIGNATURE APPROVALS

RESULTS OF REPORT

PRACTICE WORK OF STUDENT MOBILITY

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SUMMARY

The rapid development of information technology has influenced the way many organizations work, especially in processing data into information. Many organizations have to change their systems from conventional to digital by utilizing information technology to increase efficiency and effectiveness.

The system that runs at the Komerling Agung Village Library currently uses a manual system and the information conveyed is less efficient, so the library experiences many shortcomings, such as the difficulty of managing data on borrowing books and returning books.

With the design of a website-based library information system application to improve quality and performance in the library and assist librarian in managing user data, member data, loan data, and return data. By utilizing the library information system using the PHP programming language and MySQL as the database.

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 “Build a Website To Manage Village Libraries Using PHP Programming Language, MySQL as the Database at the Komerling Agung Village”. 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:


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10. 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 studied at Nanjing Vocational College of Information and Technology (NJCIT).

12. All the parties that the author cannot mention one by one, and have helped the completion of this report.

Recognizing that there are still many flaws and errors in both the composition and the languages used, it is hoped for constructive advice and criticism. I hope this report benefits all of us.

Bandar Lampung, 17 August 2021

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CHAPTER I

INTRODUCTION

1.1 Background

Technology has made it easier for humans to process data to produce information that is more guaranteed speed and accuracy of processing. Meanwhile, information on the results of data processing is also increasingly needed both in terms of quantity and quality. Manual data processing will certainly slow down the process of meeting information needs and is prone to errors so that this method is now starting to be abandoned. As a solution, now various information can be processed computerized and neatly arranged with higher accuracy, efficiency, effectiveness, and relevance, especially by utilizing one of the technological advances, computers.

Komerling Agung Village Library is still managed manually. Store data in different places. When information is needed in a fast time, it will be a little difficult to fulfill because the data must be collected first. And this data collection of course takes time. So time efficiency is not available. In addition, the information produced is also very likely to be said to be less accurate considering the existing data still stand alone.

To overcome these problems we need a system that can facilitate the processing of library data so that it can assist librarian in processing data quickly and accurately and the data can be stored safely. For this reason, the author wants to build a system with the title "BUILD A WEBSITE TO MANAGE VILLAGE LIBRARIES USING PHP PROGRAMMING LANGUAGE, MYSQL AS THE DATABASE AT THE KOMERING AGUNG VILLAGE" then this system is expected to help officers and the public in processing library data and conducting borrowing and returning book transactions.

1.2 Formulation of the Research

Based on the above background, the problem can be formulated as follows :

1. The library information system in Komerling Agung Village still uses the conventional system.
2. How to make the information system in managing the library more effective?

1.3 The Scope of Research

Based on the formulation of the problem above, the problem is limited as follows :

- a. The data in the Komerling Agung Village Library, includes: user data, member data, book data, borrowing data, return data, and fines data.
- b. The processes in the Komerling Agung Village Library, namely: the process of storing book data, member data, borrowing and returning books.
- c. Komerling Agung Village library reports, include: member reports, book reports, book category reports, book borrowing reports and book return reports.
- d. Komerling Agung Village Library Information System Using Indonesian Language.

1.4 Research Purposes and Benefits of Research

1.4.1 Research Purposes

The research purposes, among others :

1. Produce an information system that can make it easier to process village library data.
2. Provide solutions to solve data management problems when needed.
3. To avoid mistakes in borrowing and returning books.

1.4.2 Benefits of Research

The benefits of this research, among others :

1. Assist officers in data processing Assist officers in processing data at the Komerling Agung Village Library.

2. Make it easy for visitors (community) to get information related to the books available in the library.

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 Writing System

The writing system used in this research report is divided into several main topics, namely :

CHAPTER I INTRODUCTION

This chapter contains the background of the problem, problem formulation, problem definition, research objectives and research benefits.

CHAPTER II LITERATURE REVIEW

This chapter contains theories related to “Build a Website To Manage Village Libraries Using PHP Programming Language, MySQL as the Database at the Komerung Agung Village”.

CHAPTER III RESEARCH METHODS

This chapter explains what will be used in making website design, E-R Diagram of the database, and how the website works.

CHAPTER IV RESULT AND DISCUSSION

This chapter contains the implementation of the flow, analysis and discussion of the flow that will be designed.

CHAPTER V CONCLUSION AND SUGGESTION

This chapter contains conclusions from testing the system whether this system can be used properly.

REFERENCES

ATTACHMENT

CHAPTER II

LITERATURE REVIEW

As the basis for the theories supporting this research, I quote several theories put forward by experts.

2.1 System Understanding

The system is a series consisting of two or more components that are interconnected and interact with each other to achieve a goal where the system is usually divided into smaller sub-systems that support a larger system (Romney and Steinbart, 2015).

Thus it can be concluded that the system is a set of interrelated elements that together achieve a certain goal in an orderly process that can support a larger system and are interdependent to achieve certain goals.

2.2 Information Understanding

Information systems are organized ways to collect, ensure, and process and store data and organized ways to store, manage, control and report information in such a way that an organization can achieve its stated goals. (Krismiaji, 2015).

2.3 Information System Understanding

Information system is a set of management operational functions that are able to produce an appropriate, fast and clear decision so that it becomes an arrangement that is arranged in a systematic and orderly manner (Aswati, 2015).

There are other definitions of information systems, including :

- a. Gelinas, Oram and Wiggins, information system is a man-made system that generally consists of a set of computer-based components and manuals designed to collect, store and manage data and provide output information to users.
- b. Wilkinson, information system is a framework that coordinates resources (human and computer) to convert input (input) into output (information) in order to achieve company goals.

- c. Alter, information system is a combination of work procedures, information, people and information technology organized to achieve goals within an organization.

2.4 Website

Website is a collection of pages consisting of several pages that contain information in the form of digital data in the form of text, images, videos, audio, and other animations provided through an internet connection (Abdullah, 2015).



Figure 2.1. Website Logo (freepnglogos.com)

2.5 PHP (*Hypertext Pre Processor*)

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* (A Lutfi, 2017).



Figure 2.2. PHP Logo (www.php.net)

2.6. 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 GNU General Public License and free, is a web an easy-to-use server that can serving dynamic web page display (Mearaj, Maheshwari, & Kaur, 2019).



Figure 2.3. XAMPP Logo (www.stickpng.com)

2.7 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).







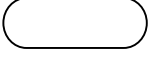
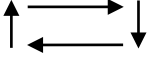
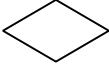
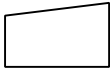



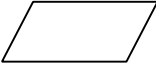
Figure 2.4. MySQL Logo (www.logo.wine)



2.8 Data Development

2.8.1 Flowchart

According to (A.S., Rosa dan Shalahuddin, 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. 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


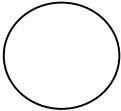
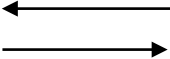
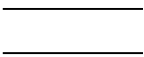
Symbol	Description
Document 	Shows the documents used for input and output.
Manual Process 	Shows work done manually.
Computerized Process 	Shows the process of operating a computer program.
Savings 	Shows archive.
Terminator 	Used to give the start and end of a process.
Flow Line 	Used to show the flow 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.
Liaison 	Symbol used to indicate the connection of a broken flow chart
<i>Input/Output Data</i> 	Process input/output data, parameters, information.

<p>Flow Line</p> 	Used to show the flow of the process.
<p>Defined Process</p> 	A symbol used to indicate an operation whose details are shown elsewhere.

2.8.2 DFD (Data Flow Diagram)

Data Flow Diagram (DFD) is a graphical representation of a system. DFD describes the components of a system, data flows from the origin, destination, and storage of the data. In short, Data Flow Diagrams model the flow of data in a symbolic form. DFD can also be a more detailed explanation of the context diagrams made previously. (A.S., Rosa dan Shalahuddin, M., 2018).

Table 2.2. Data Flow Diagram Symbols

Symbol	Information
<p>External Entity</p> 	En External entities can be people or related units that interact with the system but outside the system.
<p>Process</p> 	People, units that perform or use data transformations. physical component not identified.
<p>Data Flow</p> 	Shows specific directions from source to destination.
<p>Data Store</p> 	The data storage area or the data referenced by the process.


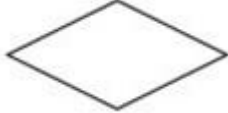



2.8.3 Entity Relationship Diagram (ERD)

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 2.3. Symbols Entity Relationship Diagram (ERD)

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 many-to-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.

2.9 System Development Method

The system development method is the SDLC (System Development Life Cycle) method or often referred to as the waterfall approach. The waterfall method was first introduced by Windows W. Royce in 1970.

The waterfall model provides a software lifeflow approach so that sequentially or sequentially starting from the analysis, coding design, testing and support stages. (A.S., Rosa dan Shalahuddin, M., 2018).

The waterfall method according to(A.S., Rosa dan Shalahuddin, M., 2018) namely:

a. Software Requirements Analysis

The process of gathering requirements is carried out in an incentive and detailed manner to specify software requirements so that it can be understood what kind of software is needed by the user. Software requirements specifications at this stage need to be documented. So, the software used includes : Operating System Windows 10, 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 representations, and coding procedures. This stage translates software requirements from the requirements analysis stage to the design representation so that it can be implemented into a program at a later stage. The software design produced at this stage also needs to be documented.

c. Program code generation

The design must be translated into a software program. The result of this stage is a computer program 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 for a software to change when it has been sent to the user. Changes can occur due to errors that appear and go undetected during testing or the software must adapt to a new environment. The support or maintenance phase can repeat the development process from analyzing

specifications to changes to existing software, but not to creating new software.

2.10 Related Research

(Pradityatama & Purnama, 2013) Information System Library at UPT. Smart House Pacitan District, Involvement of information system is effective and efficient in storing data, process data, and provide the desired information appropriately and accurately. UPT at the library. Smart House Pacitan in data processing book, Data borrower, and the data members are still using conventional means. This is less efficient because it is still difficult in many record books, the borrower of data, and data members. So the data processing errors often occur. With computerized data processing library is expected to overcome the problems encountered. With that in the wake of information technology is expected to facilitate the process of employees working in data processing. Data management library is in need of a ease and effectiveness in the treatment in order to obtain the expected results.

(Mawadati, Dharmasakti, & Satria, 2020) Make Database to Manage Library Village, Karang Taruna Citra Muda Desa Madurejo Yogyakarta has a long-term project which is currently being worked on and implemented, namely the Village Library and the Garbage Bank. For the village library project, the implementation is considering not optimal yet and the management finds it difficult to manage the village library because of the limited members who are willing to voluntarily manage the library. Thus in this community service activity, we teach them how to make a database for the village library so that it can help ease the task of the library management. The method used is counseling as well as practicing to make and operate the database. The results of this counseling carried out by devotees is a village library database which can be updated continuously in the future by the management team. The use of databases in library management can help ease the burden of library managers and can help improve the arrangement of books, which can then indirectly increase interest in visiting and reading interest of the community.

CHAPTER III

RESEARCH METHODS

3.1 Software Development Method

The method chosen by the author as the basis for determining the creation of a website based on the software development method is by using the waterfall model. This model provides a sequential software flow approach starting from the analysis, coding design, testing and support stages (A.S., Rosa dan Shalahuddin, M., 2018).

3.2 Design

3.2.1 System Design

The design of the library information system in Komerling 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.

3.2.2 Flowchart

The flowchart is a depiction of the flow of documents related to the system to be built, the flowchart of the information system describes the system design

that is currently running at the Komerang Agung Village Library, how the community carries out the process of borrowing books.

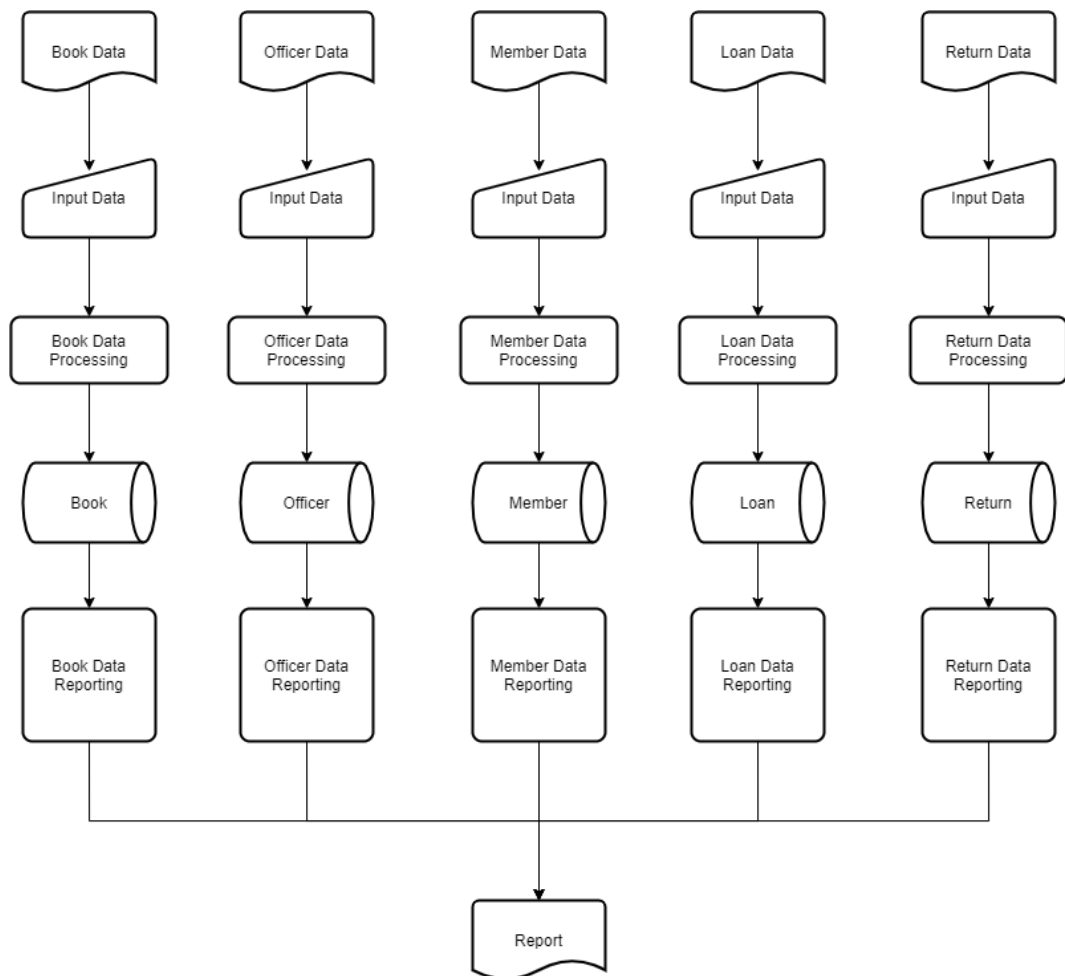


Figure 3.1. Flowchart

3.2.3 Data Flow Diagrams (Data Flow Diagrams)

Data Flow Diagram (DFD) is a functional relationship of values calculated by the system, including input values, output values and internal storage. Data Flow Diagram (DFD) is a graphic depiction that shows the flow of data from its source in an object and then passes through a process that transforms it to another destination that is on another object and is often and often used to describe an existing system or a new system that will be developed or designed. Data Flow Diagram describes the flow of data in the system with a clear structure. The use of this notation in the Data Flow Diagram is very helpful for

understanding a system and building a running system up to the system that will be built for the Komering Agung Village Library.

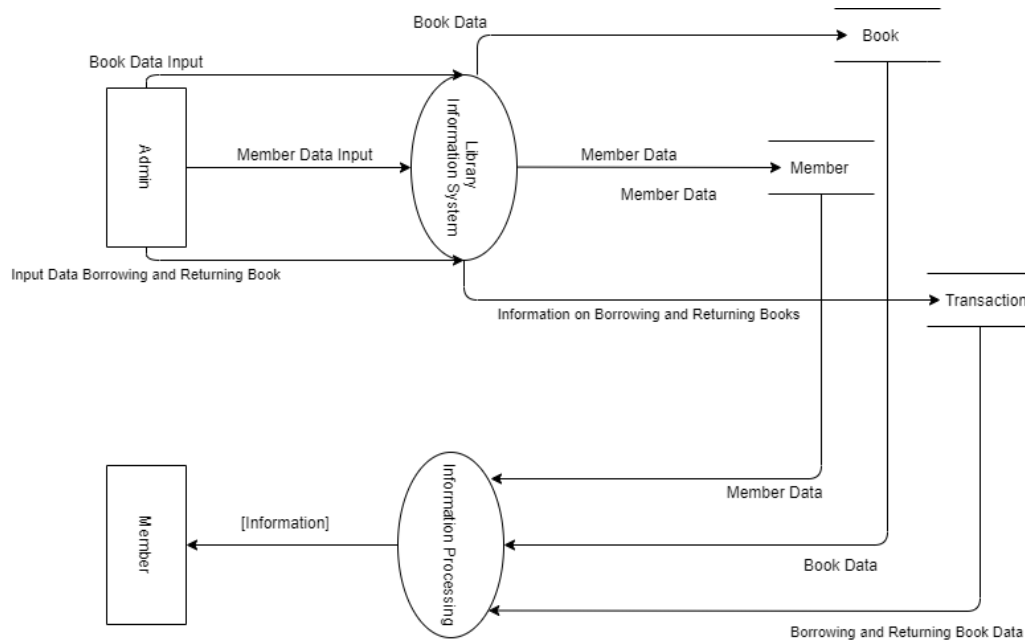


Figure 3.2. Data Flow Diagram (DFD)

3.2.4 Conteks Diagram

Is the highest level of the data flow diagram that describes the entire input or output of the system. Context diagrams provide an overview of the system as a whole. In the context diagram there is only one process and there is no data store.

In this context diagram it is concluded that capital borrowers can borrow capital by providing a form and letter of loan capital that has been displayed by the system with a more detailed flow so that capital borrowers do not need a long time to get funds.

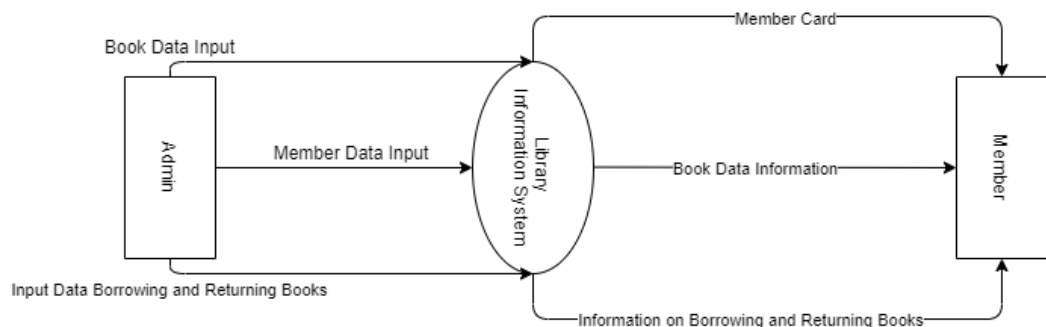


Figure 3.3. Conteks Diagram

3.2.5 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.

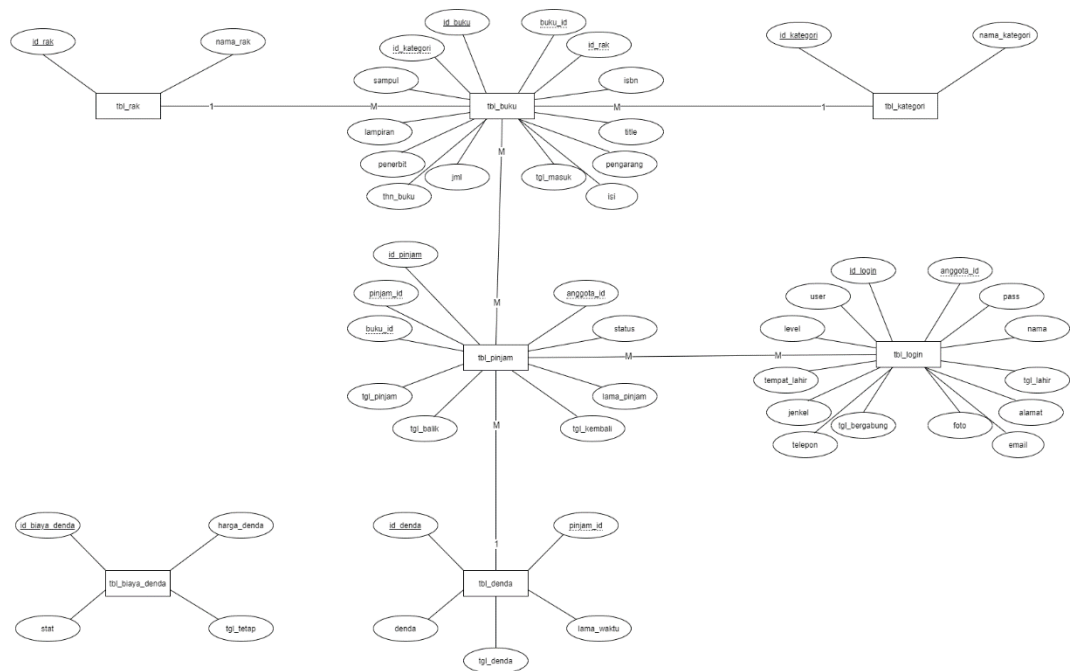


Figure 3.4. Entity Relationship Diagram

3.2.6 Logical Design

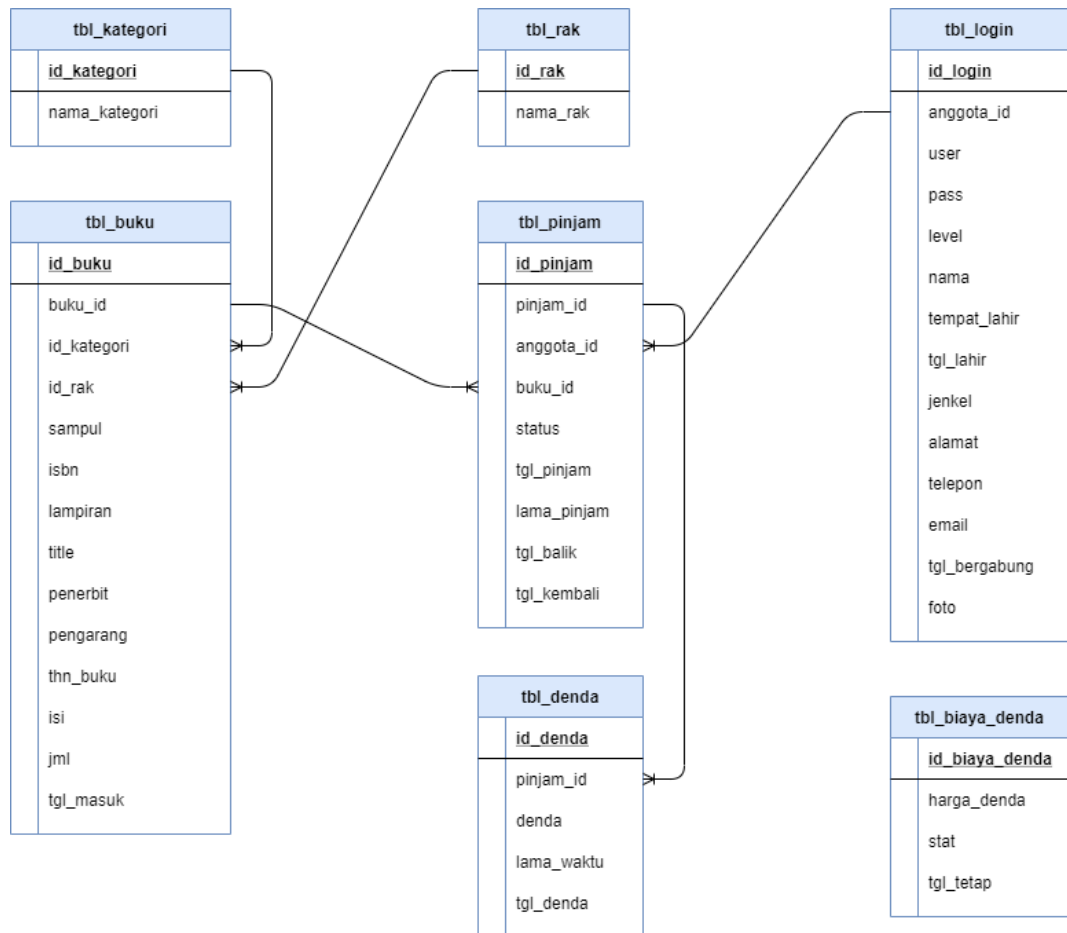


Figure 3.5. Logical Design

3.2.7 Physical Design

Table 3.1. Fine Fee Table

Field	Type	Default	Description
(PK) id_biaya_denda	int(11)	not null	ID Fine Fee (Primary Key)
harga_denda	varchar(255)	not null	Fine Pice
Stat	varchar(255)	not null	Loan Status
tgl_tetap	varchar(255)	not null	Fixed Date

Table 3.2. Book Table

Field	Type	Default	Description
(PK) id_buku	int(11)	not null	ID Book (Primary Key)
(FK) buku_id	varchar(255)	not null	Book ID (Foreign Key)
(FK) id_kategori	int(11)	not null	Category ID (Foreign Key)
(FK) id_rak	int(11)	not null	Rack ID (Foreign Key)
Sampul	varchar(255)	null	Book Cover
Isbn	varchar(255)	null	
Lampiran	varchar(255)	null	Attachment
Title	varchar(255)	null	Book Title
penerbit	varchar(255)	null	Book Publisher
pengarang	varchar(255)	null	Book Author
thn_buku	varchar(255)	null	Book Year Created
Isi	text	null	Book Content
Jml	int(11)	null	Book Amount
tgl_masuk	varchar(255)	null	Book Entry Date

Table 3.3. Fine Table

Field	Type	Default	Description
(PK) id_denda	int(11)	not null	Fine ID (Primary Key)
(FK) pinjam_id	varchar(255)	not null	Loan ID (Foreign Key)
denda	varchar(255)	not null	Fine
lama_waktu	int(11)	not null	Loan Period
tgl_denda	varchar(255)	not null	Fine Period

Table 3.4. Category Table

Field	Type	Default	Description
(PK) id_kategori	int(11)	not null	Category ID (Primary Key)
nama_kategori	varchar(255)	not null	Category Name

Table 3.5. Login Table

Field	Type	Default	Description
(PK) id_login	int(11)	not null	Login ID (Primary Key)
(FK) anggota_id	varchar(255)	not null	Member ID (Foreign Key)
User	varchar(255)	not null	Username
Pass	varchar(255)	not null	Password
Level	varchar(255)	not null	Choice : Admin or Member
Nama	varchar(255)	not null	Full Name
tempat_lahir	varchar(255)	not null	Place of birth
tgl_lahir	varchar(255)	not null	Date of birth
jenkel	varchar(255)	not null	Sex
alamat	text	not null	Address
telepon	varchar(25)	not null	Phone Number
email	varchar(255)	not null	Email
tgl_bergabung	varchar(255)	not null	Join Date
Foto	varchar(255)	not null	Picture

Table 3.6. Loan Table

Field	Type	Default	Description
(PK) id_pinjam	int(11)	not null	Loan ID (Primary Key)

(FK) pinjam_id	int(11)	not null	Loan ID (Foreign Key)
(FK) anggota_id	int(11)	not null	Member ID (Foreign Key)
(FK) buku_id	int(11)	not null	Book ID (Foreign Key)
Status	varchar(255)	not null	Book Status
tgl_pinjam	varchar(255)	not null	Loan Date
lama_pinjam	int(11)	not null	Loan Period
tgl_balik	varchar(255)	not null	Return Date
tgl_kembali	varchar(255)	null	Return Date

Table 3.7. Rack Table

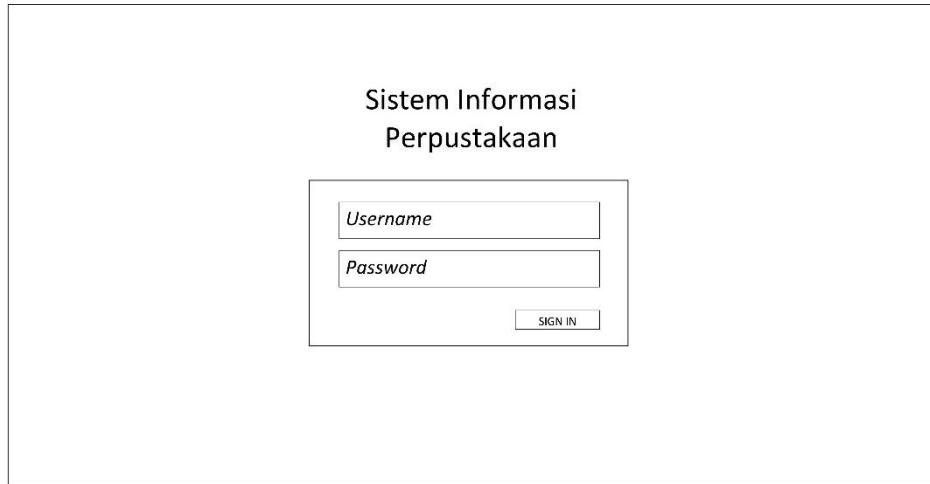
Filed	Type	Default	Description
(FK) <i>id_rak</i>	int(11)	not null	Rack ID (Primary Key)
nama_rak	varchar(255)	not null	Rack Name

3.3 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.

3.4 Access System Interface For Library Members

3.4.1 Admin Interface



The image shows a login interface for an Admin user. At the top center, the text "Sistem Informasi Perpustakaan" is displayed. Below this, there is a central box containing two input fields: "Username" and "Password". A "SIGN IN" button is located at the bottom right of this box.

Figure 3.6. Login Interface Design For Admin



The image shows a dashboard interface for an Admin user. At the top right, there is a user profile section with "Admin!" and a "Sign out" link. On the left side, there is a vertical navigation menu with the following items: "Admin", "Dashboard", "Data Pengguna", "Data", "Data Buku", "Kategori", "Rak", "Transaksi", "Peminjaman", "Pengembalian", and "Denda". The main content area is titled "Dashboard" and contains four empty rectangular boxes arranged horizontally.

Figure 3.7. Dashboard Interface Design For Admin

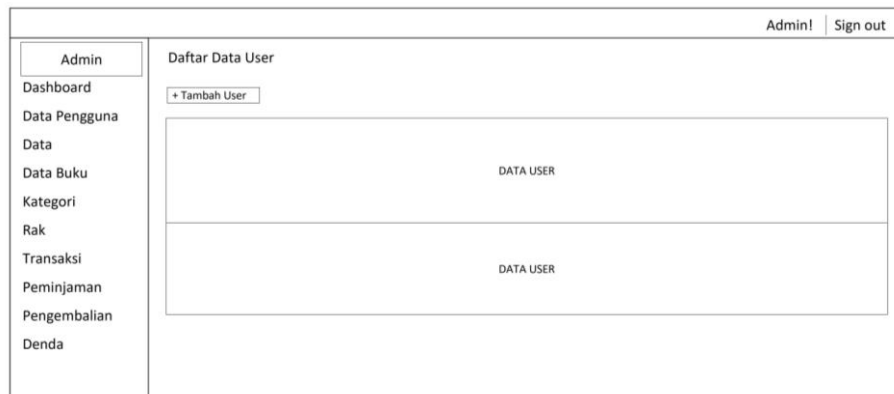


Figure 3.8. User Data Interface Design For Admin

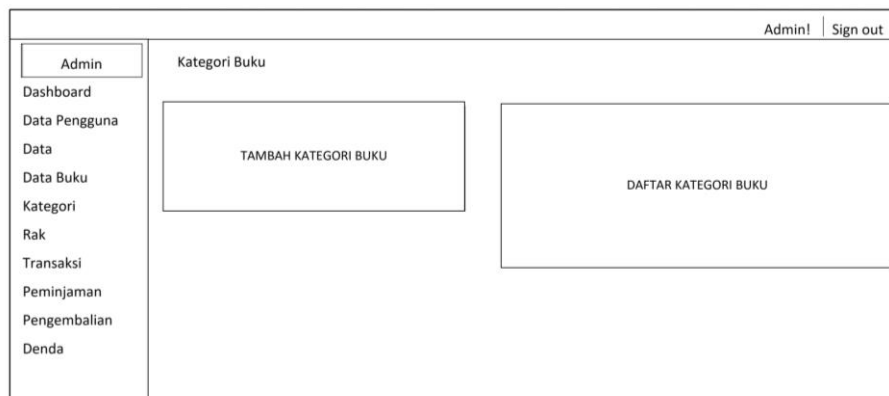


Figure 3.9. Category Interface Design For Admin

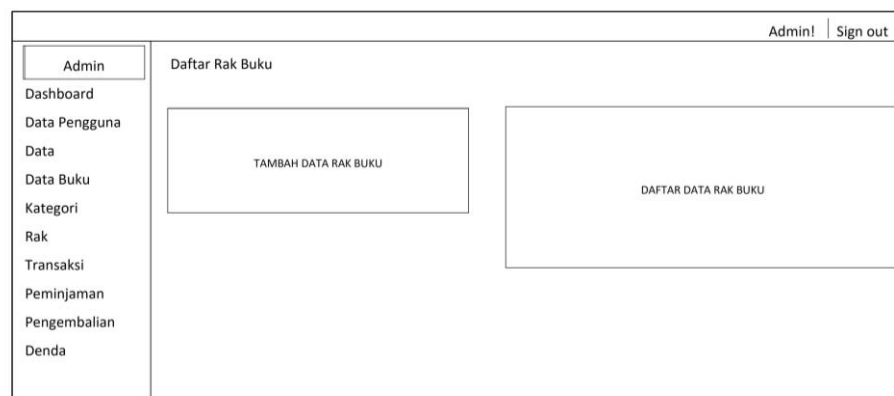


Figure 3.10. Rack Interface Design For Admin

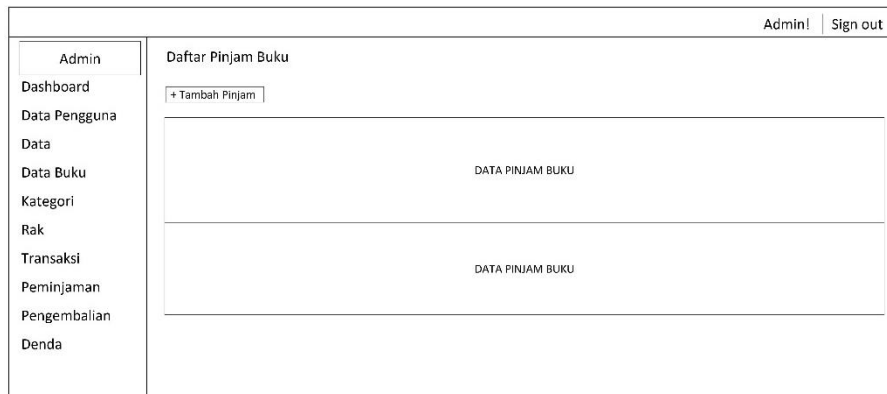


Figure 3.11. Loan Interface Design For Admin

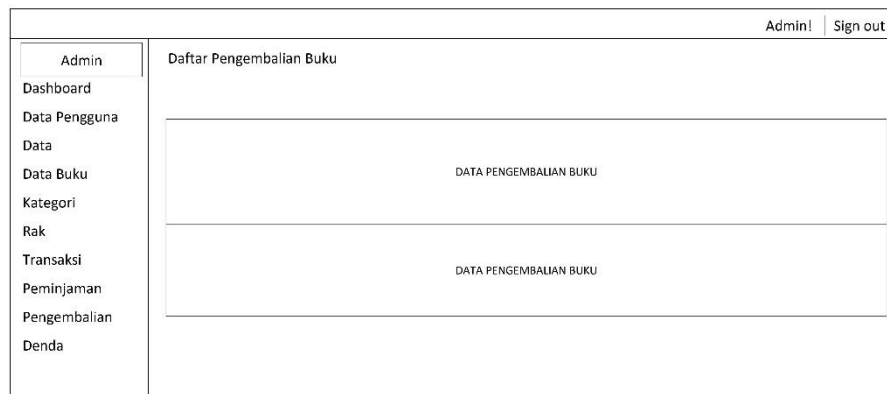


Figure 3.12. Return Interface Design For Admin

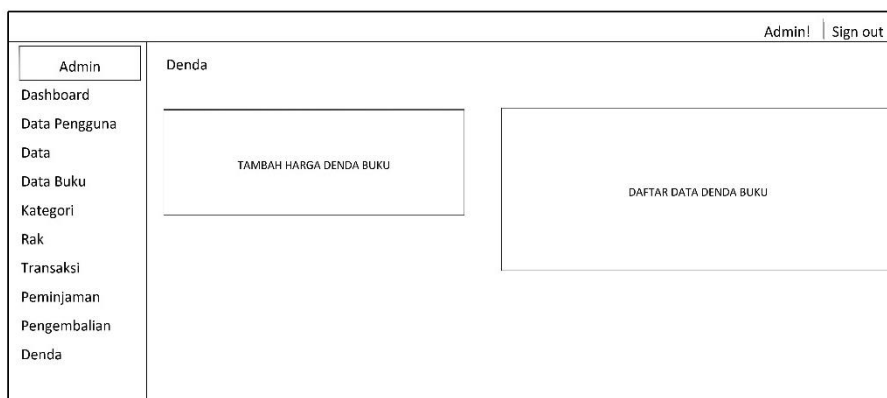
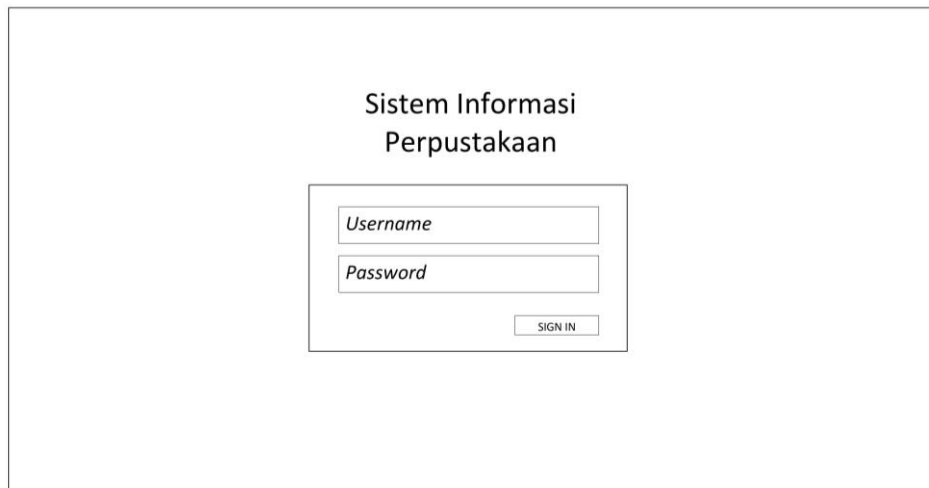


Figure 3.13. Fine Interface Design For Admin

3.4.2 Member Interface



The image shows a login interface for a library system. At the top center, the text "Sistem Informasi Perpustakaan" is displayed. Below this, there is a central box containing two input fields: "Username" and "Password". A "SIGN IN" button is located at the bottom right of this box.

Figure 3.14. Login Interface Design For Member



The image shows a loan data interface for a member. At the top right, there is a user status indicator "Anggota!" and a "Sign out" link. On the left side, there is a vertical menu with the following items: "Anggota", "Data Peminjaman", "Data Pengembalian", "Cari Buku", "Data Anggota", and "Cetak Kartu Anggota". The "Anggota" item is currently selected. The main content area is titled "Data Pinjam Buku" and contains a large empty box with the text "DATA BUKU YANG DI PINJAM" centered inside it.

Figure 3.15. Loan Data Interface Design For Member



Figure 3.16. Return Data Interface Design For Member



Figure 3.17. Searching Book Data Interface Design For Member



Figure 3.18. Member Data Interface Design For Member



Figure 3.19. Print Member Card Interface Design For Member

CHAPTER IV

RESULTS AND DISCUSSION

4.1 Software and Hardware Specifications

a. Hardware Spesification

The hardware used in making the application is as follows:

1. Processor Intel® Core™ i5-3427U CPU @ 1.80GHz (4 CPUs),
~2.3GHz
2. Memory 4096 MB / 4 GB RAM
3. SSD 128 GB
4. Monitor 14 inch

b. Software Spesification

The Software used in making the application is as follows :

1. Operating System Windows 10
2. XAMPP
3. PHP
4. Draw.io
5. VSCode
6. Bootstrap

4.2 Implementation

4.2.1 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 :

4.2.2 Admin Interface

In this view, admin can input their username and password to login to the website.

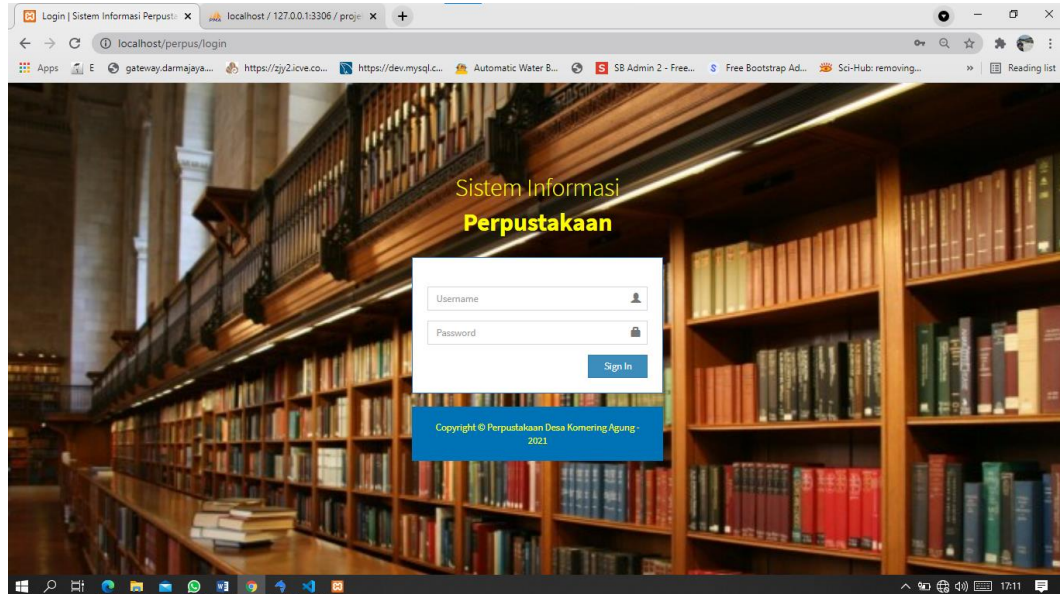


Figure 4.1. Website Login Interface For Admin

In this view the admin can see a dashboard containing: Number of Members, Types of Books, Number of Books Borrowed, and Number of Books that have been Returned.

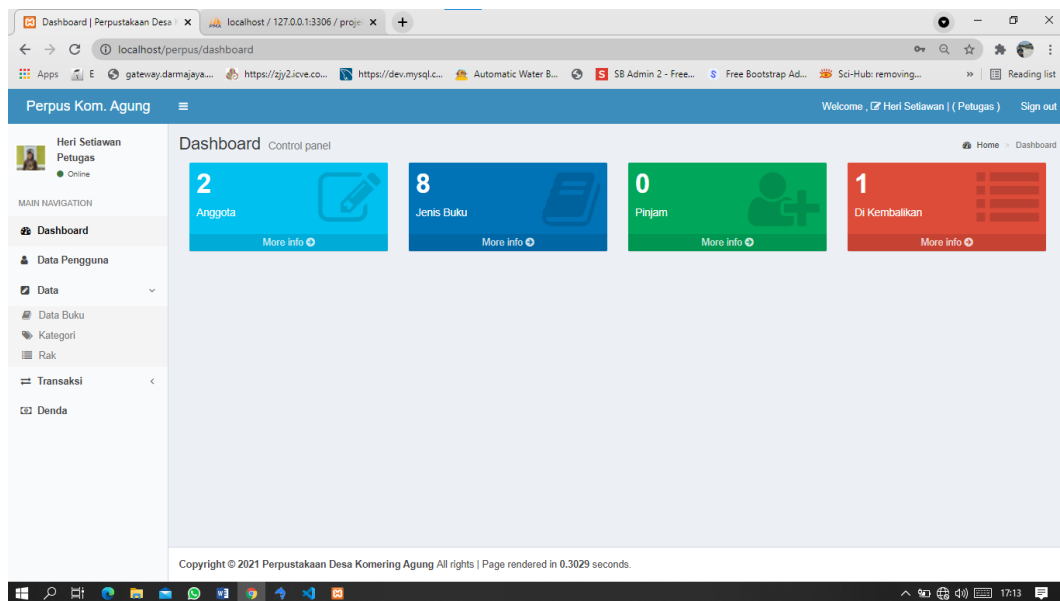


Figure 4.2. Website Dashboard Interface For Admin

In this view the admin can view, edit, delete, and add User Data consisting of Admin and Members.

The screenshot displays the 'Daftar Data User' interface. The table contains the following data:

No	ID	Foto	Nama	User	Jenkel	Telepon	Level	Alamat	Aksi
1	AG001		Heri Setiawan	admin	Laki-Laki	089618173609	Petugas	Lampung Tengah	Edit Delete Cetak Kartu
2	AG002		Heri Okta Patama	heri	Laki-Laki	08123123185	Anggota	Lampung Tengah	Edit Delete Cetak Kartu

Figure 4.3. Website User Data Interface For Admin

In this view the admin can view, edit, delete, and add Book Data available in the Library.

The screenshot displays the 'Data Buku' interface. The table contains the following data:

No	Sampul	ISBN	Title	Penerbit	Tahun Buku	Stok Buku	Dipinjam	Tanggal Masuk	Aksi
1	Tidak Ada Sampul	979-970-886-9	Pengenalan Dasar-Dasar PLC (Programmable Logic Controller) Disertai Contoh Aplikasinya	Gava Media	2016	8	0	2021-08-30 10:26:19	Detail Delete
2	Tidak Ada Sampul	978-602-786-966-0	Pemrograman Web Membuat Sistem Informasi Akademik Sekolah Dengan PHP-MYSQL & Dreamweaver	Gava Media	2014	7	0	2021-08-30 10:24:48	Detail Delete
3	Tidak Ada Sampul	978-979-346-559-X	Ilmu Dakwah	Kencana	2016	10	0	2021-08-30 10:24:08	Detail Delete
4	Tidak Ada Sampul	978-979-294-131-9	Web Programing Membangun Aplikasi Web Handal dengan J2EE dan MVC	Andi Offset	2013	5	0	2021-08-30 10:23:09	Detail Delete

Figure 4.4. Website Book Data Interface For Admin

In this view admin can view, edit, delete, and add Book Categories available in the Library.

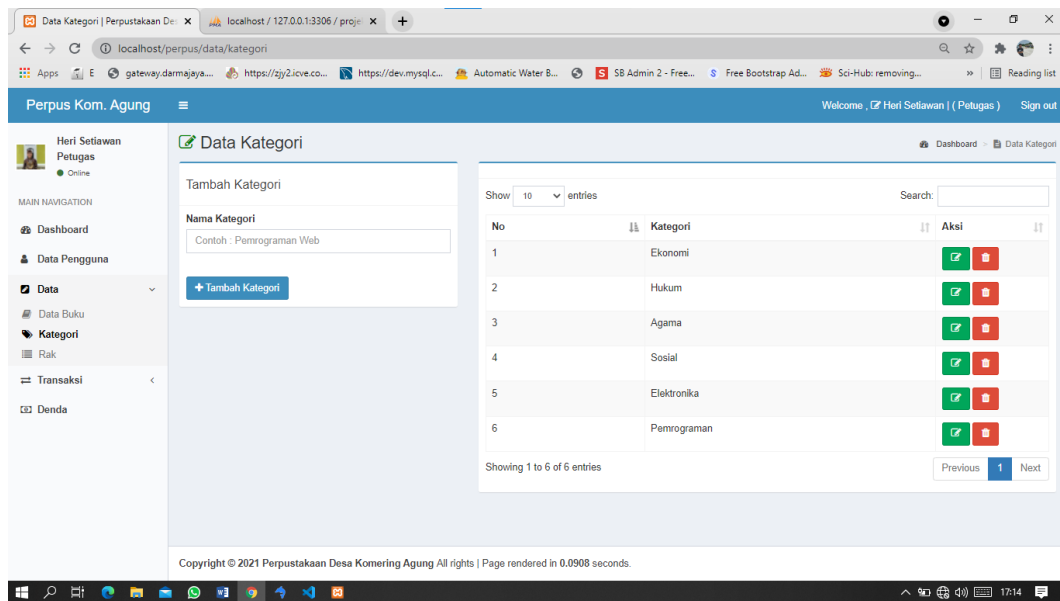


Figure 4.5. Website Category Interface For Admin

In this view admin can view, edit, delete, and add Book Rack Data available in the Library.

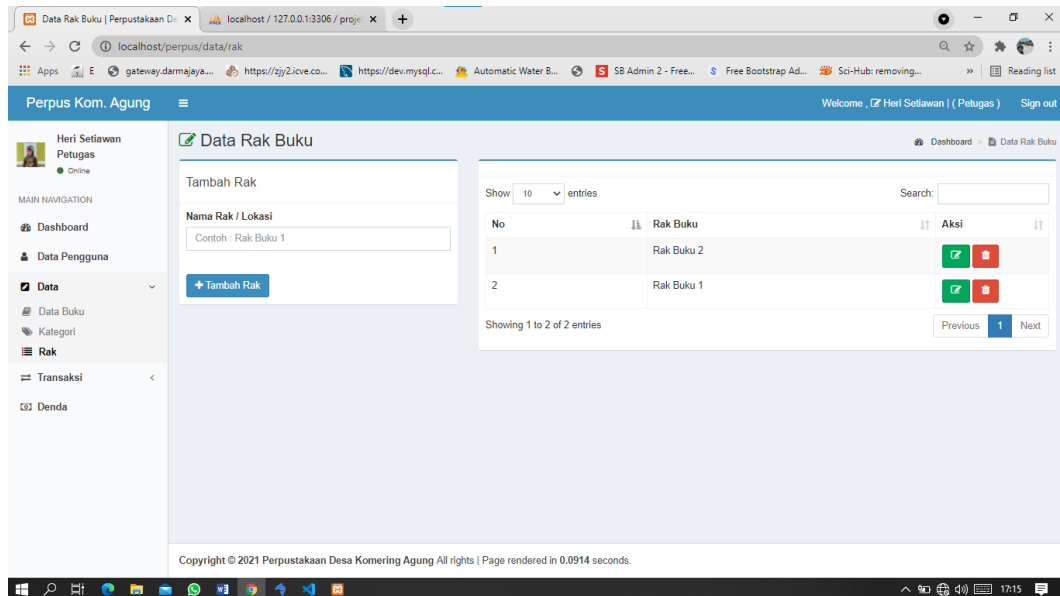


Figure 4.6. Website Rack Interface For Admin

In this view, the admin can view, delete, and add Book Borrower Data.

The screenshot displays the 'Data Pinjam Buku' interface. The table contains the following data:

No	No Pinjam	ID Anggota	Nama	Pinjam	Balik	Status	Denda	Aksi
1	PJ0012	AG002	Heri Oka Patama	2021-08-31	2021-09-02	Dipinjam	Tidak Ada Denda	Kembalikan Hapus

Figure 4.7. Website Loan Interface For Admin

In this view, the admin can see, and delete the Book Data that has been returned.

The screenshot displays the 'Data Pengembalian Buku' interface. The table contains the following data:

No	No Pinjam	ID Anggota	Nama	Pinjam	Balik	Status	Kembali	Denda	Aksi
1	PJ001	AG002	Heri Oka Patama	2021-08-30	2021-09-01	Di Kembalikan	2021-08-30	Rp0,-	Hapus Edit

Figure 4.8. Website Return Interface For Admin

In this view, the admin can view, edit, and add the current Penalty Price Data.

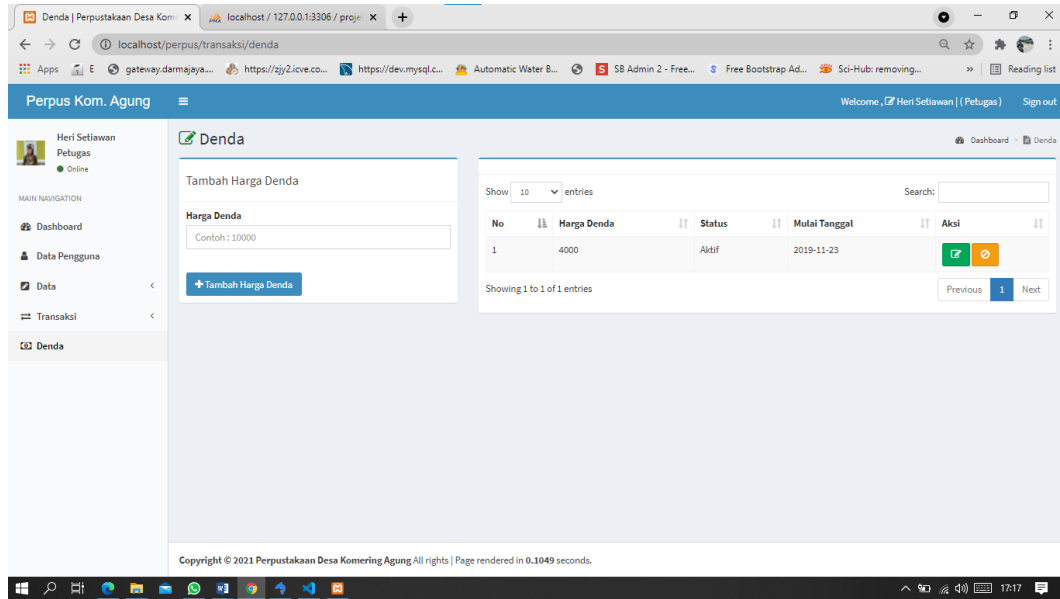


Figure 3.9. Website Return Interface For Admin

4.2.3 Member Interface

In this view, members can input their username and password to login to the website.

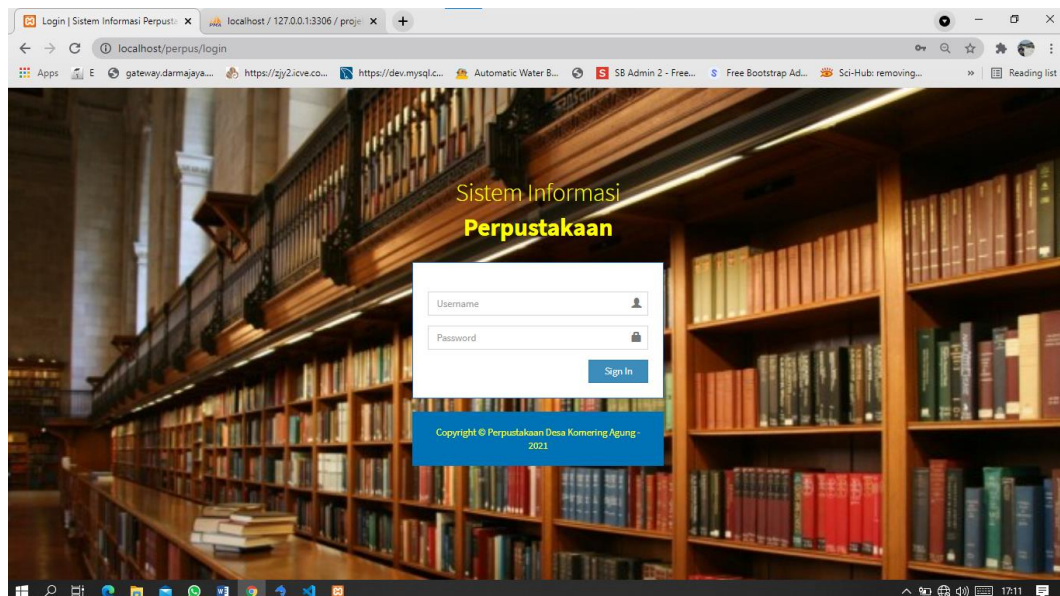


Figure 4.10. Website Login Interface For Member

In this view, members can see the Book Data that is being borrowed.

The screenshot shows the 'Data Pinjam Buku' interface. The user is logged in as Heri Okta Patama (Anggota). The page displays a table with the following data:

No	No Pinjam	ID Anggota	Nama	Pinjam	Balik	Status	Denda	Aksi
1	PJ0012	AG002	Heri Okta Patama	2021-09-31	2021-09-02	Dipinjam	Tidak Ada Denda	Detail Pinjam

Showing 1 to 1 of 1 entries. Navigation: Previous 1 Next.

Figure 4.11. Website Loan Interface For Member

In this view, members can see the Book Data that has been returned.

The screenshot shows the 'Data Pengembalian Buku' interface. The user is logged in as Heri Okta Patama (Anggota). The page displays a table with the following data:

No	No Pinjam	ID Anggota	Nama	Pinjam	Balik	Status	Kembali	Denda	Aksi
1	PJ001	AG002	Heri Okta Patama	2021-08-30	2021-09-01	Di Kembalikan	2021-08-30	Rp0,-	Detail Pinjam

Showing 1 to 1 of 1 entries. Navigation: Previous 1 Next.

Figure 4.12. Website Return Interface For Member

In this view, members can search and view the Book Data available in the Library.

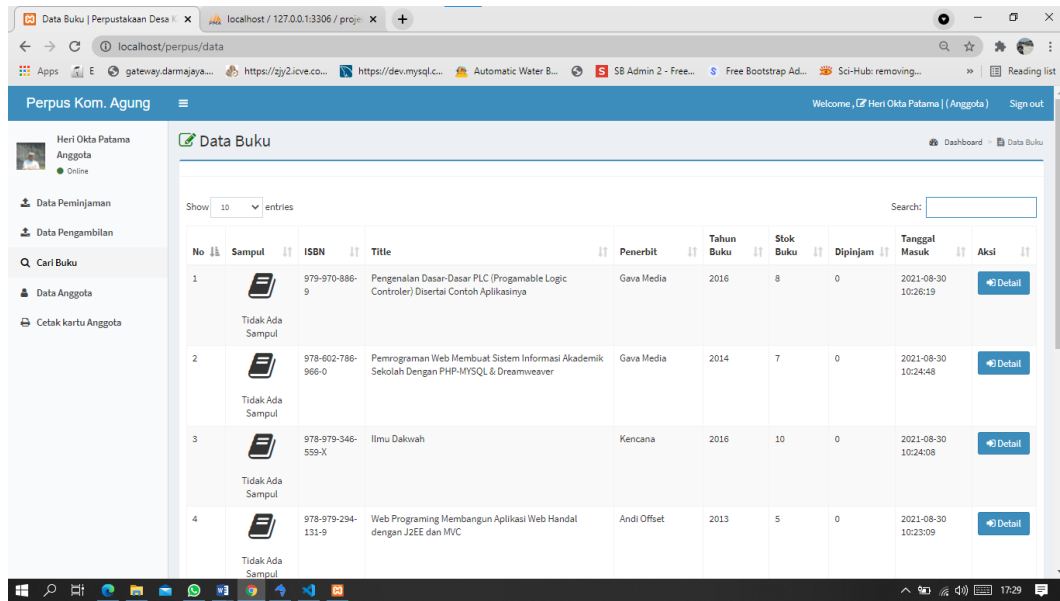


Figure 4.13. Website Book Data Interface For Member

In this view, members can change and update User Data.

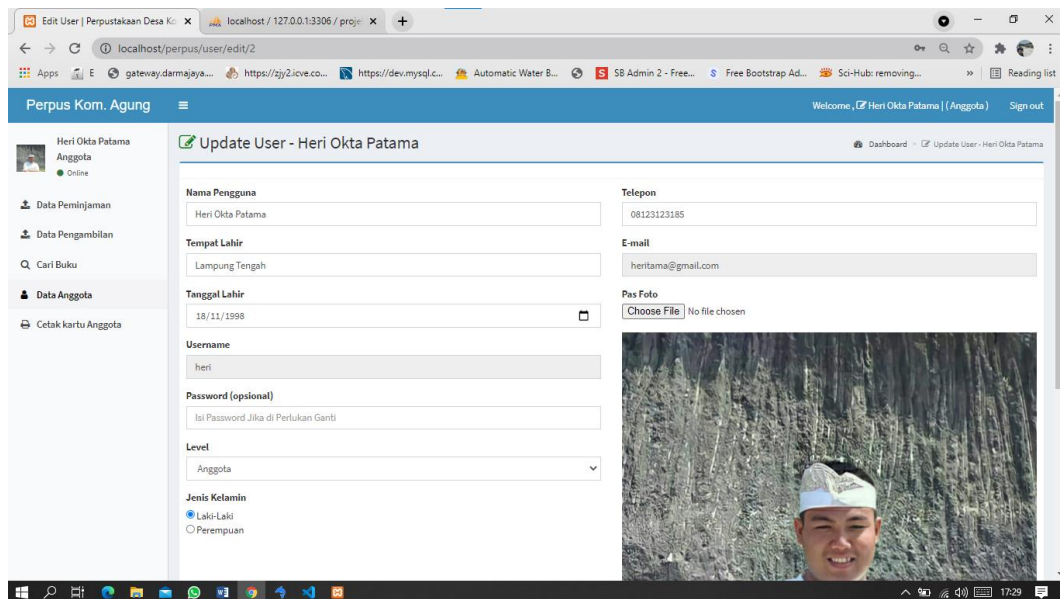


Figure 4.14. Website User Data Interface For Member

In this view, members can print Library Member Cards.



Figure 4.15. Website Print Member Card Interface For Member

CHAPTER V

CONCLUSION AND SUGGESTION

Based on the analysis research and discussion in the previous chapter, some conclusions can be drawn regarding Build a Website To Manage Village Libraries Using PHP Programming Language MySQL as The Database at The Komerling Agung Village as follows :

5.1 Conclusion

Based on the results and discussion, the conclusions of this study are as follows :

1. With this research on Build a Website To Manage Village Libraries Using PHP Programming Language MySQL as The Database at The Komerling Agung Village, Perutaaan Desa which previously used a conventional system can now switch to a digital system.
2. With this website, it can assist officers in processing data in the Komerling Agung Village Library.
3. With this website, it can provide convenience for visitors to get information book list and give ease of doing register and make transactions borrowing or returning books.

5.2 Suggestion

The suggestions obtained are as follows:

1. It is hoped that this research can be a new breakthrough for students so that they can make this research even better.
2. It is hoped that this project can be accepted by the community so that it can be used by the community as well as possible.

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ATTACHMENT

1. Database Technology Course

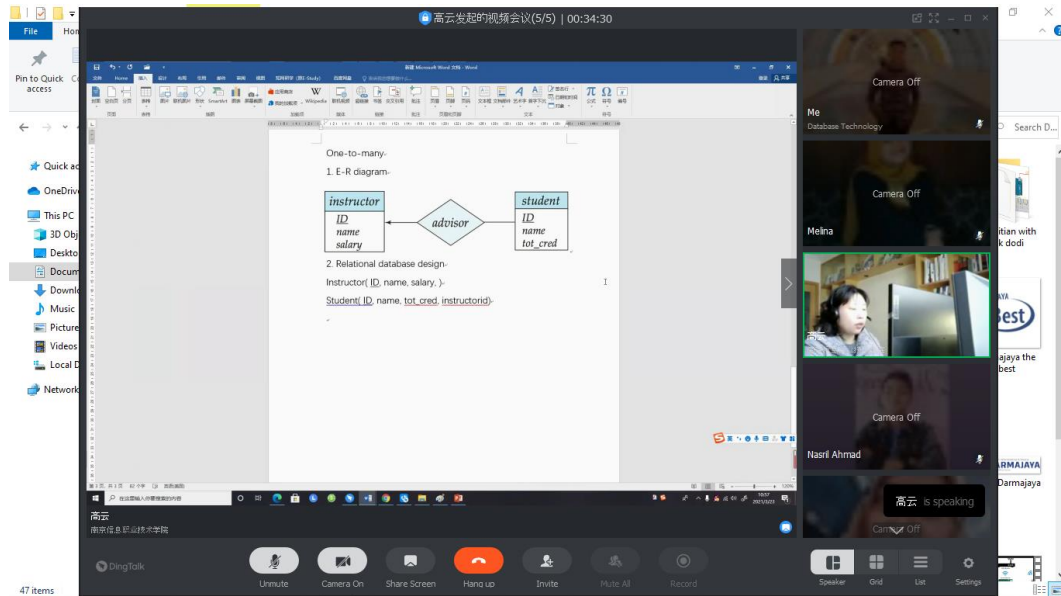


Figure 1. Documentation while learning Database Technology

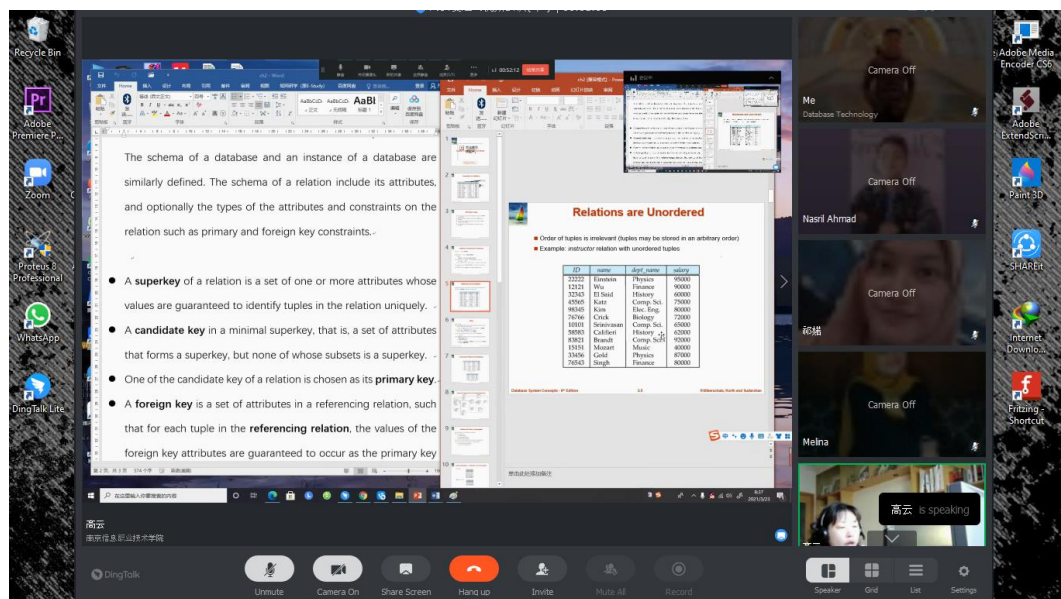


Figure 2. Documentation while learning Database Technology

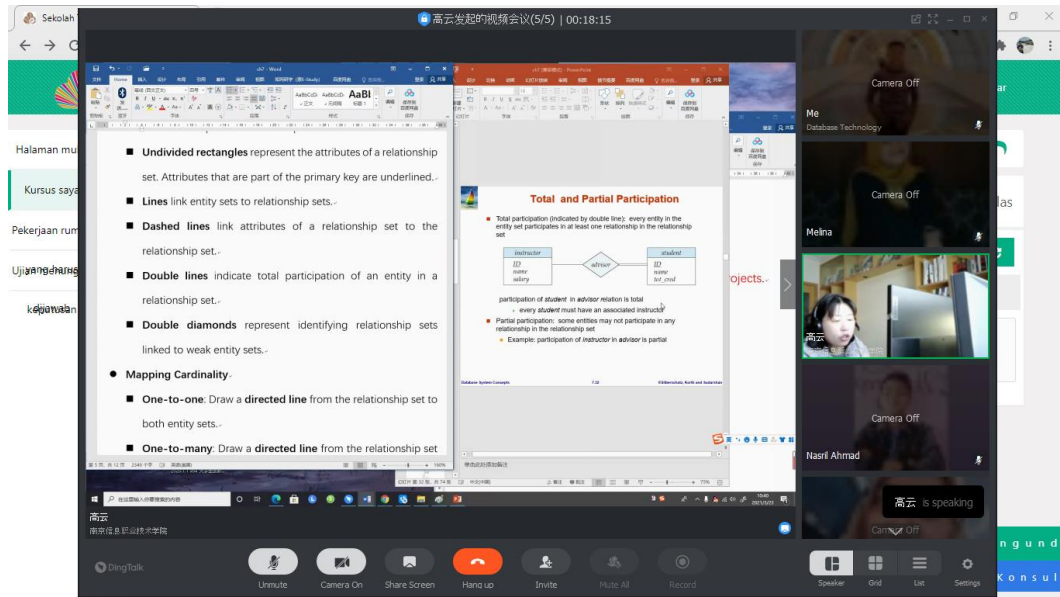


Figure 3. Documentation while learning Database Technology

2. Computer Network Course

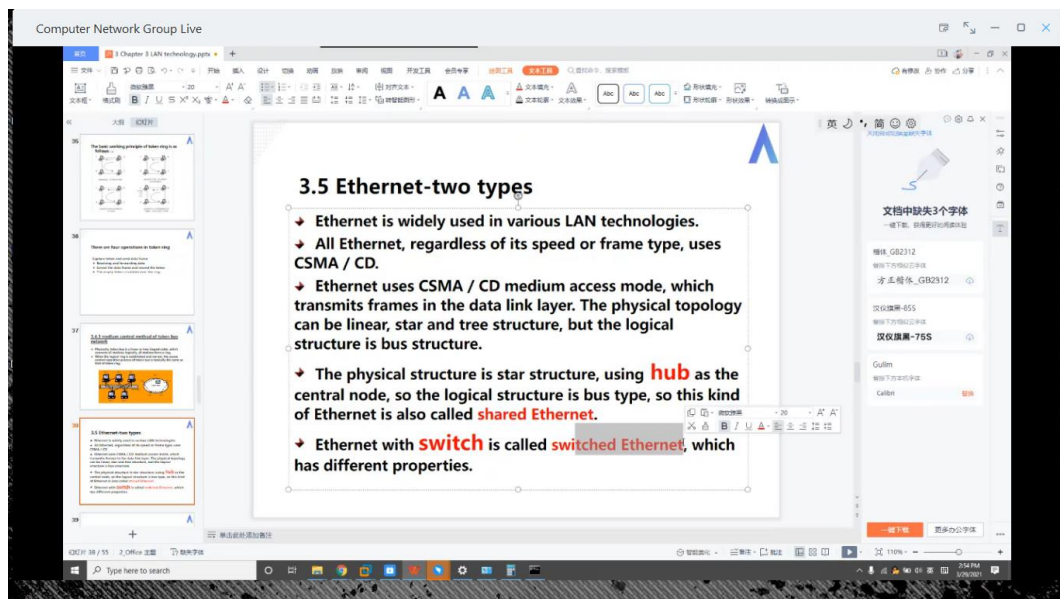


Figure 4. Documentation while learning Computer Network

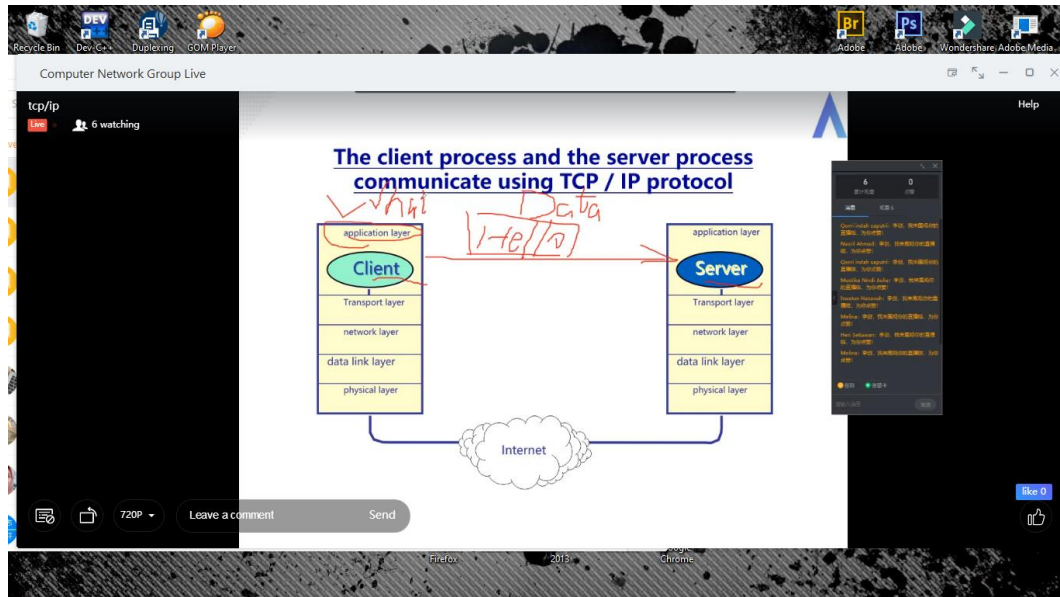


Figure 5. Documentation while learning Computer Network

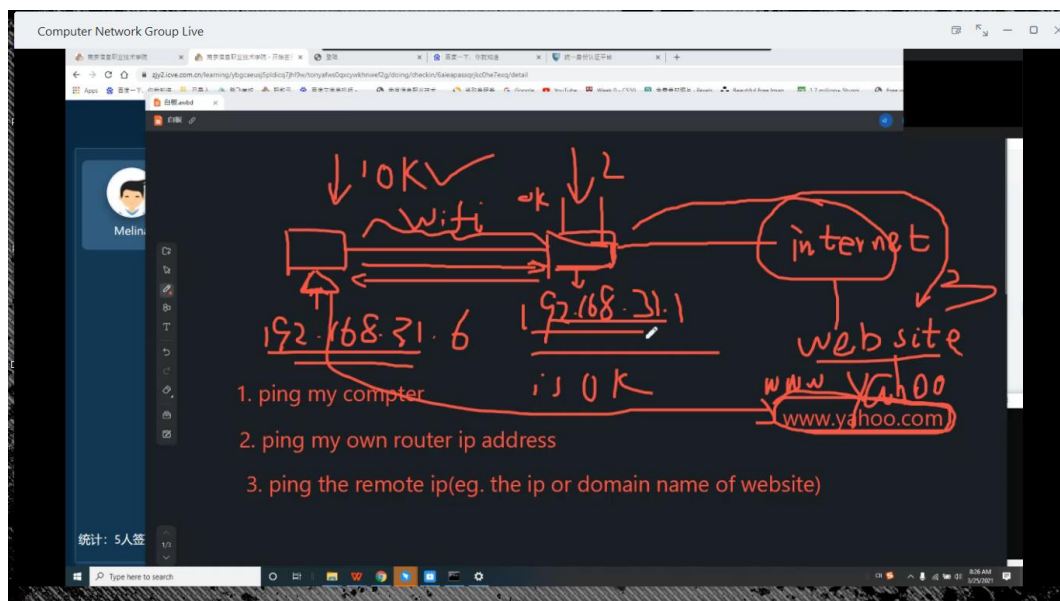


Figure 6. Documentation while learning Computer Network

3. Digital Signal Course

Hand-drawn diagram illustrating a delay block in the Z-domain:

$$x(n) \xrightarrow{X(z)} \boxed{z^{-1}} \xrightarrow{Y(z)} y(n) = x(n-1)$$

$$Y(z) = z^{-1} [X(z)]$$

Figure 7. Documentation while learning Digital Signal

Common ZT Pairs

The Table of common ZT pairs:

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$

Important!

Figure 8. Documentation while learning Digital Signal

1.1.2 Frequently Used Discrete Sequences

(1) Unit sample sequence
discrete-time impulse
unit impulse

$$\delta(n) = \begin{cases} 1, & n = 0 \\ 0, & n \neq 0 \end{cases}$$

Shifted:

$$\delta(n - n_0) = \begin{cases} 1, & n = n_0 \\ 0, & n \neq n_0 \end{cases}$$

Understanding DSP, Second Edition

Figure 9. Documentation while learning Digital Signal

4. Boadband Access Technology Course

Channels of WLAN

❖ 5.8G band division

5725 5735 5755 5775 5795 5815 5835 5850

20mHz 20mHz 20

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.

Figure 10. Documentation while learning Broadband Access Technology

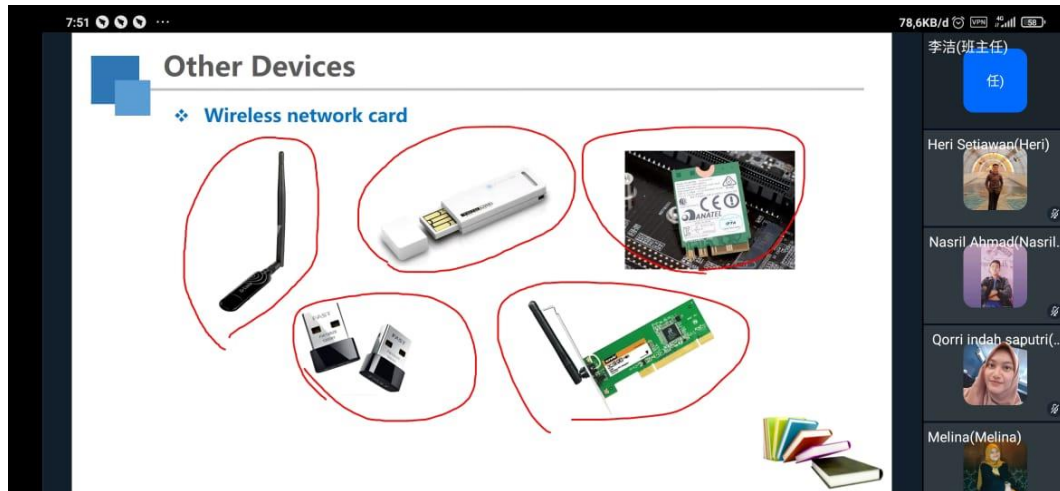


Figure 11. Documentation while learning Broadband Access Technology

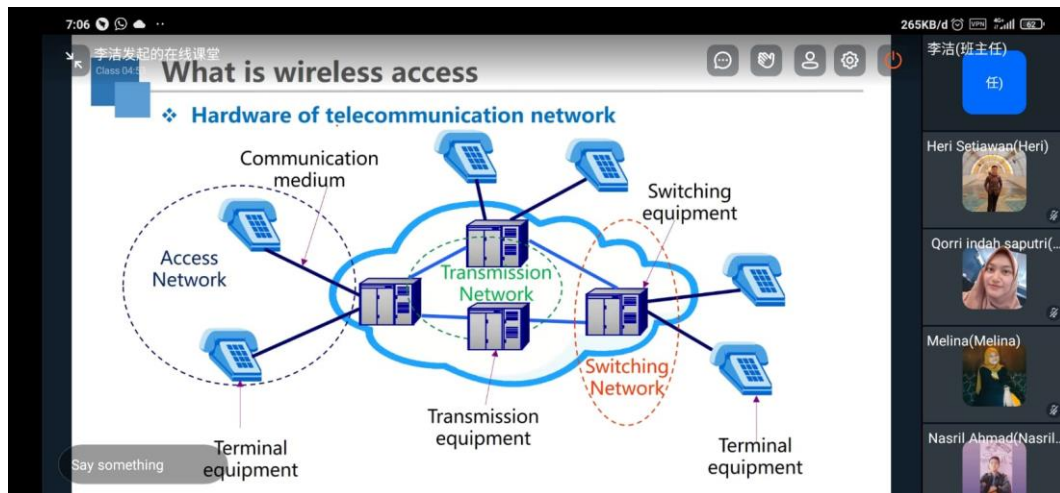


Figure 12. Documentation while learning Broadband Access Technology

5. Programming Course

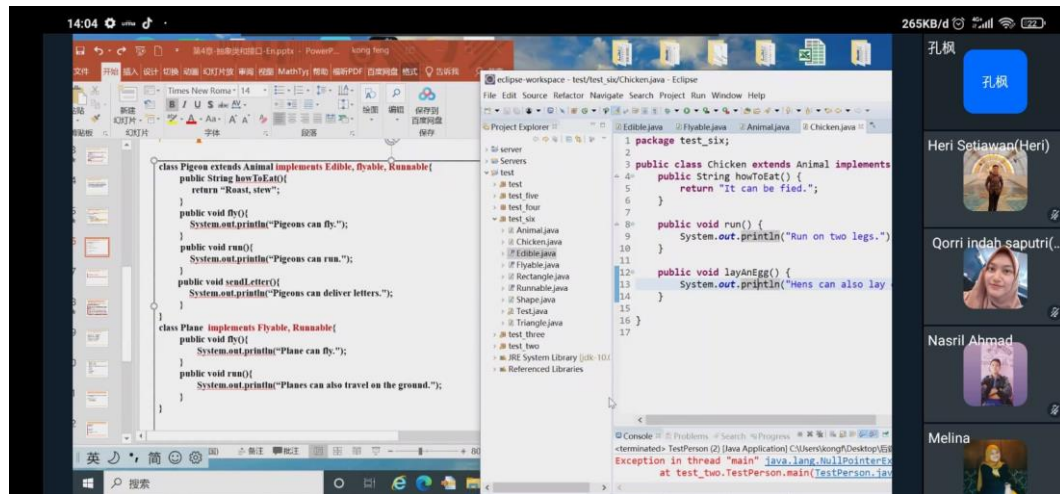


Figure 13. Documentation while learning Programming

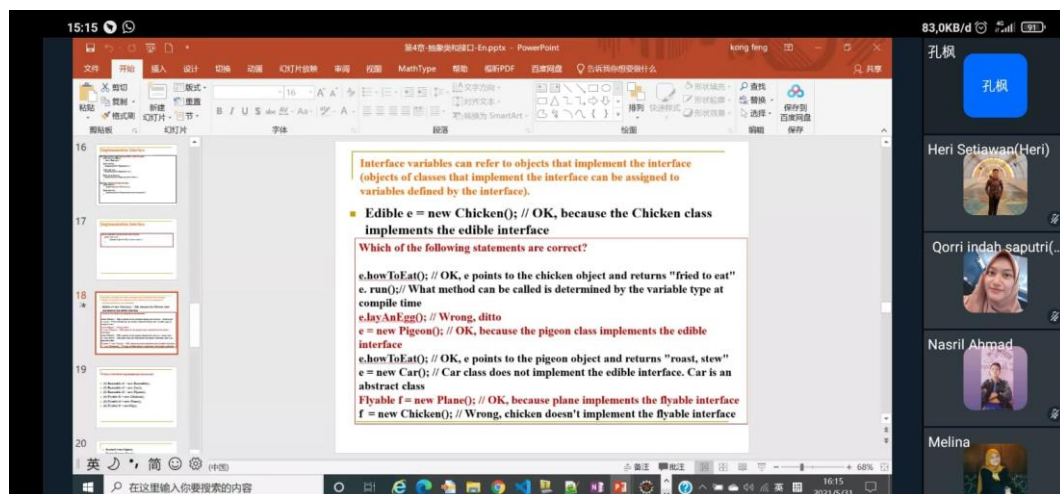


Figure 14. Documentation while learning Programming

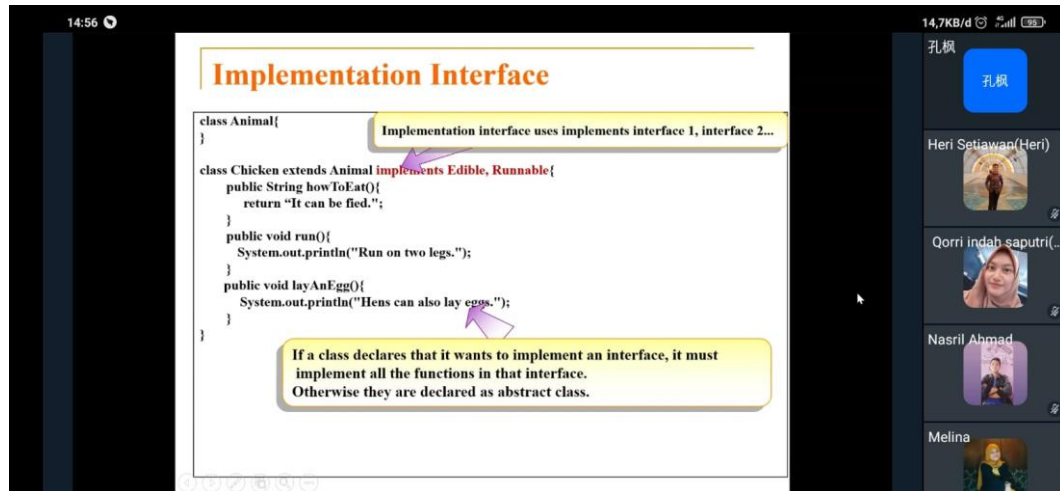


Figure 15. Documentation while learning Programming

6. Object Oriented Programming Course

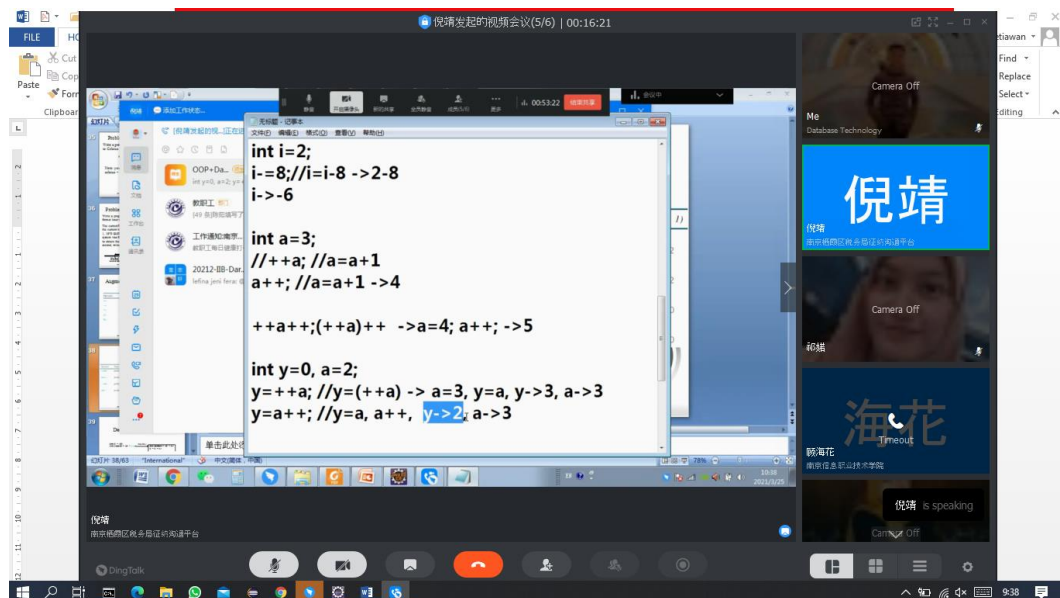


Figure 16. Documentation while learning Object Oriented Programming

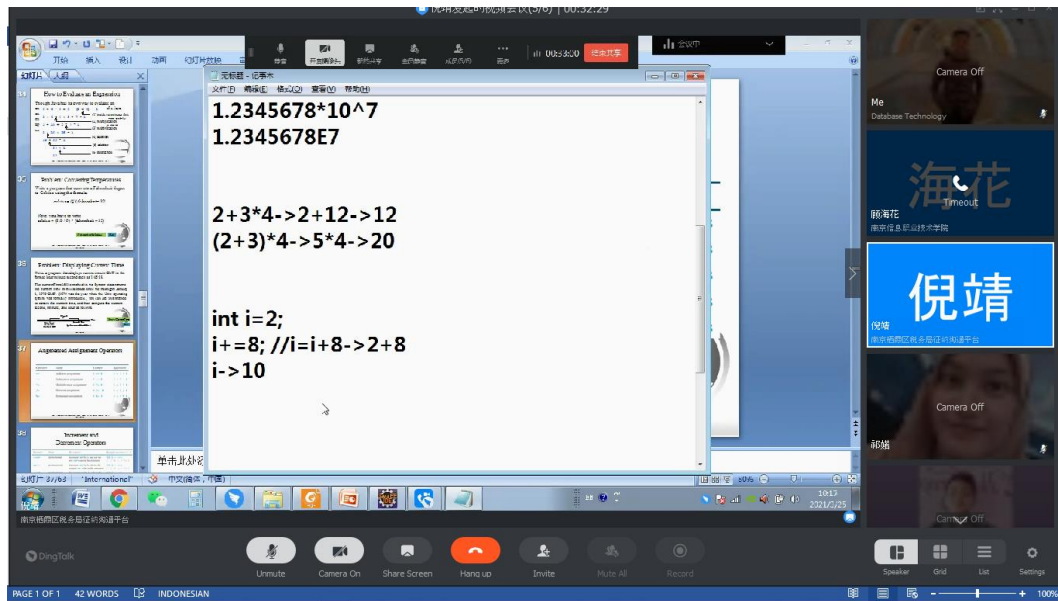


Figure 17. Documentation while learning Object Oriented Programming

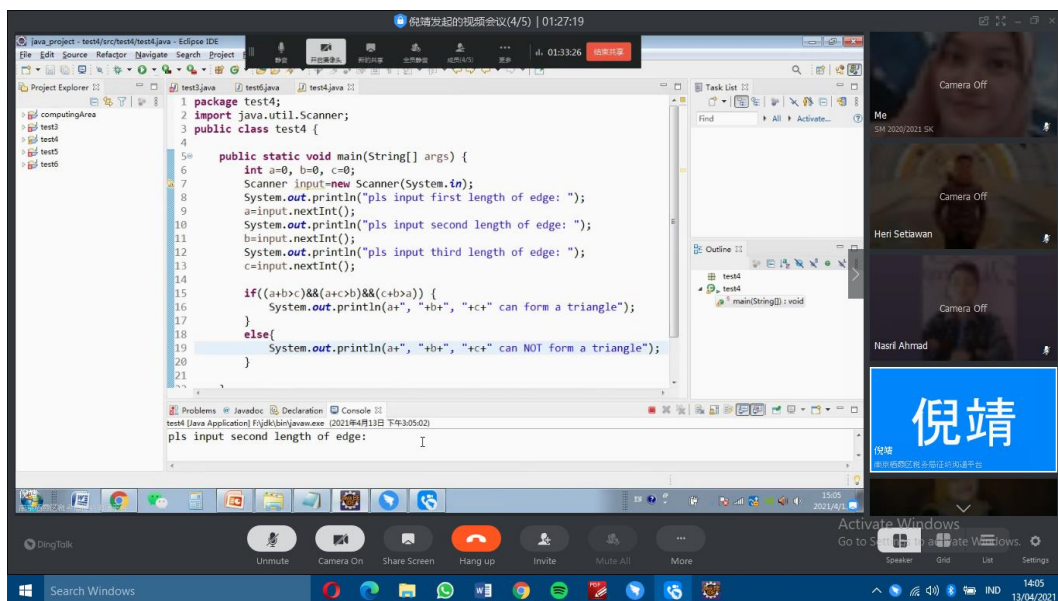


Figure 18. Documentation while learning Object Oriented Programming