

**THE RESULTS OF STUDENT MOBILITY REPORT**  
**IMPLEMENTATION OF LEARNING MYSQL DATABASE AT NJCIT FOR**  
**THE DEVELOPMENT OF ACADEMIC INFORMATION WEBSITE**  
**SYSTEM OF SMKN 2 BANDAR LAMPUNG**



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**BANDAR LAMPUNG**  
**2021**

**SIGNATURE APPROVALS**

**RESULTS OF REPORT  
PRACTICE WORK OF STUDENT MOBILITY  
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THE DEVELOPMENT OF ACADEMIC INFORMATION WEBSITE  
SYSTEM OF SMKN 2 BANDAR LAMPUNG**

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## CURRICULUM VITAE

### 1. Identity

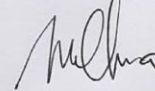
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Bandar lampung, Agustus 17<sup>th</sup> 2021



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## **SUMMARY**

The International Relations Office (KUIH) or commonly known as the International Office of IIB Darmajaya has one program, namely student mobility. Student mobility is a program that provides opportunities for Darmajaya students to study abroad for 1 semester and experience studying abroad with a different education system, new environment, and innovation in self-development. One of the benefits of participating in this student mobility program is that students can expand their international network and gain international perspectives related to insight and knowledge.

The final project that the author implements in this report is the design of a data collection web system about schools and others with the aim of helping students or the community to access the schools they want.

This project is a system created with a database model using PHP/MYSQL that records a school's data and can be accessed by the public. Of course the data is stored very securely by the admin.

## PREFACE

Praise the author, pray to god almighty who has betwined his gift so that the author can complete a report practice work of student mobility entitled “Implementation of learning MySQL database at NJCIT for the development of academic information website system of SMKN 2 Bandar Lampung”. 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 15th, 2021 to June 17th, 2021.

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

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2. Mr. Dr. RZ. Abdul Aziz, ST., MT., as the Vice Chancellor I IIB Darmajaya.
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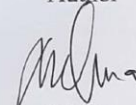
11. Yunika, Meliniah as my best friend and special person who motivates me, namely Galang. you as a support and entertainer while studying at IIB Darmajaya.

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

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

Bandar lampung, August 17th, 2021

Author



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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Background**

Learning media is an information medium for teaching and learning activities so that it can provide effectiveness and interactivity in learning. The existence of media in the teaching and learning process is expected to help lecturers and students in learning to be more visual, interactive interesting, easy, and quick to understand.

Institute informatics and business darmajaya has an office for international relations (KHUI) or commonly know as the international office which has many program activities, one of which is student mobility. Student mobility is an activity that provides opportunities for students to experience being a student abroad for 1 semester. This program is an activity for students who want to do study abroad and experience studying abroad with different education system in a new environment as well as being creative and innovating in self-development.

One of the universities that is the goal of the student mobility program is Nanjing Vocational College Of Information and Technology(NJCIT) , china. NJCIT also has the best competence in the field of computers and one of the courses is in the field of IoT on data collection in the database technology course.

The development of science and technology today has had a significant impact on aspects of the teaching and learning process between students and lecturers. So that in this learning, students and lecturers are virtual or use video calls because of the constraints caused by Covid-19 which makes students and lecturers unable to meet in person there. There are 6 subjects that are taken, namely, broadband access technology, computer networks, programming, database technology, object-oriented programming, and digital signals.

From some of these subjects make the final project of the subject database technology, so the author makes the title “ Implementation of learning MySQL database at NJCIT for the development of academic information website system of SMKN 2 Bandar Lampung”.

## **1.2 Formulation of the Problem**

How students enrolled in this school can easily register or get information of this school.

## **1.3 The Scope of Research**

In this research, based on the existing problems, the problem is limited as follows:

1. To make it easier for students or teachers to access information at SMKN 2 Bandar Lampung.
2. The data in this information system includes: admin data, student data, and student data.
3. The existing processes used are the process of saving, editing, downloading schedules, and web user profiles.

## **1.4 Benefits and research objectives**

### **1.4.1 Benefits of Research**

This research of following benefits :

1. Can be a learning tool for students to implement the knowledge gained from partner campuses.
2. Can help students or teachers who are already registered in this school to access information.
3. Adding experience and insight in conducting research abroad.

### **1.4.2 Research Purposes**

#### **Research objectives, among others:**

1. Produce an information system that can make it easier to process school data at SMKN 2 Bandar Lampung.
2. Provide solutions to overcome data management problems when needed.
3. To avoid mistakes in learning and teaching activities both information and other things.

## **1.5 Time and Place of Implementations**

### **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 “**Implementation of learning MySQL database at NJCIT for the development of academic information website system of SMKN 2 Bandar Lampung**”.

### **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**

#### **2.1 School Information System Database**

Information systems are a combination of information technology and the activities of people who use that technology to support operations and management. In a very broad sense, the term information system is often used to refer to the interactions between people, algorithmic processes, data, and technology. This system stores, retrieves, converts, processes and communicates information received by using information systems or other system equipment. This system also functions as a medium to provide useful information for management and support strategic plans within the organization. While the purpose of the information system is to collect data, store and inform the users who need it.

According to (Supriyanto: 2005) it is known that information is very important for management in decision making. Information can be obtained from information systems or also called system processes or information system processes.

Database or database is a collection of data that is managed in such a way based on certain conditions that are interconnected so that it is easy to manage. Through this management, users can find it easy to find information, store information and dispose of information.

A school is an institution for students teaching students under the supervision of a teacher. Most countries have formal education systems that are generally mandatory. In this system, students progress through a series of teaching and learning activities in schools. School is an important education for parents for their children, so many people are looking for school information through any media. In modern times, people want practical information, online information

systems such as information systems via the web are what people need today. The information system used can input student data very easily and there are features that inform about the school.

## **2.2 PHPMyadmin (Hypertext Preprocessor)**

Hypertext Preprocessor (PHP) is a serverside scripting language that integrates with HTML to create dynamic web pages. According to M. Rudyanto Arief (in Nugroho: 2004) PHP is widely used for programming dynamic WEB sites. Because PHP is server-side scripting, the PHP syntax and commands will be executed on the server and the results are sent to the browser in HTML format. Thus the program code written in PHP will not be seen by the user so that the security of the web page is guaranteed. PHP is designed to create a view based on recent requests, such as displaying database content to a web page. Some of the advantages of PHP from web programming languages, among others: The PHP programming language is a scripting language that does not compile in its users. PHP has a faster access rate. PHP has a fast lifecycle so it always follows the development of internet technology. PHP also supports access to several existing databases, both free and commercial. The databases include: MySQL, PostgreSQL, Infomix, and Microsoft SQL Server. Web servers that support PHP can be found everywhere from Apache, IIS, AOServer, phttp. In terms of development, it is easier, because there are many mailing lists and developers who are ready to help in development. PHP is free or free.

## **2.3 MYSQL**

Mysql according to (nugroho: 2004) mysql is a sql database management system software (english: database management system) or DBMS that is multithreaded, multi-user, with about 6 million installations worldwide. Mysql ab makes Mysql available as free software under the gnu general public license (GPL), but they also sell under a commercial license for cases where its use is incompatible with the use of the gpl. Mysql is an implementation of a relational database

management system (RDBMS). Which is distributed free of charge under the GPL (general public license). Every user can freely use mysql, but with limitations the software may not be used as a commercial derivative product. Mysql is actually a derivative of one of the main concepts in a pre-existing database; SQL (structured query language). SQL is a database operation concept, especially for selecting or selecting and entering data, which allows data operations to be done easily automatically. The reliability of a database system (DBMS) can be seen from how the optimization works in processing sql commands made by users and application programs that use them. As a database server, mysql supports transactional database operations as well as non-transactional database operations. In the non-transactional mode of operation, Mysql can be said to be superior in terms of performance compared to other competitor database server software.

#### **2.4 Xampp**

Xampp according to puspitasari (2011:1) argues that "xampp is an apache webserver software in which the mysql database server is available and supports php programming. Xampp is a free easy-to-use software that supports installation on linux and windows. Another advantage is that it only installs 1 time already available apache web server, mysql database server, PHP support (php4 and php5) and several other modules only the difference is that the windows version is always in the form of a graphical installation and the linux one is in the form of a compressed tar.gz file. Another advantage that is different from the version for windows is that it has a feature to activate a server graphically, while linux is still in the form of commands in the console. Therefore the version for linux is difficult to operate”.

## **2.5 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). A website is usually placed on at least a web server that can be accessed via a network such as the Internet, or a local area network (LAN) via an Internet address known as a URL. The combination of all publicly accessible sites on the Internet is also known as the World Wide Web or better known by the abbreviation WWW. A web page is a file that is written as a plain text file that is arranged and combined in such a way with HTML or XHTML-based instructions, sometimes also embedded with a few scripting languages.

## CHAPTER III RESEARCH METHODS

### 3.1 Problem solving framework

The authors use a problem-solving framework in research with the following system development methods. The author uses a waterfall method in the development system in this research, because in that method the system cannot run, when a problem occurs the process stops, because it cannot go to the next stage. In system development can be seen in the flowchart below:

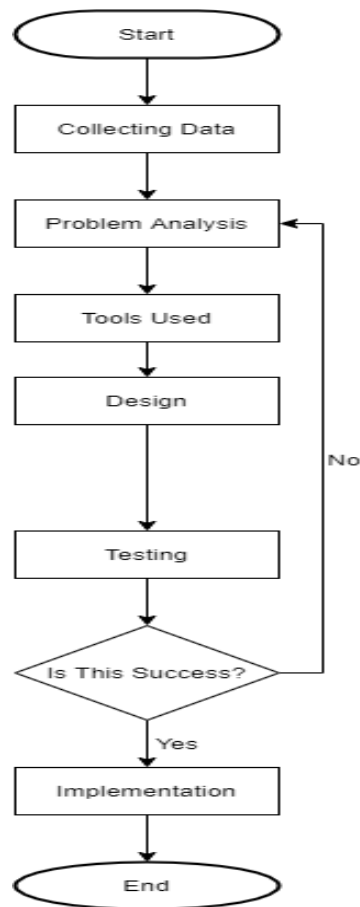


Figure 3.1 Research Stage

### **3.2 Method Of Collecting Data**

The method used by the author as the basis for determining website creation based on software development methods is to use the waterfall model. This model provides a sequential software flow approach starting from the analysis, coding design, testing and support stages.

In this study the authors used various methods, namely as follows :

1. Literature review namely data collection by studying and analyzing materials in the form of books, reports and journals that support and relate to the title of this report.
2. Observation namely the collection of data by making direct observations and systematically recording the object under study.

### **3.3 Problem Analysis**

Based on the activities carried out, the problems are as follows “How to create a school information system for SMKN 2 Bandar Lampung so that students, teachers or others can easily get information that they can access on the website”.

And students understand the importance of an information system database website that manages school information at SMKN2 Bandar Lampung and also its output can help students easily get information on grades, schedules and others.

### **3.4 Tools Used**

The tools needed to create a data management website The school information system uses the PHP and MYSQL programming languages as its database is to create a database design on the website that contains what tables will be used and what columns are needed. After that, determine the web server used and the framework needed, this time the author uses the XAMPP Control Panel as a web server, the next step is to create a website design and coding. the coding used for user security such as eating passwords using Md5 which can be searched on google. For coding, software is needed, for the software needed is Visual Studio

Code or Notepad. If everything is complete and made as desired, computer specifications are also needed to support website creation, the specifications are:

<b>Device</b>	<b>Information</b>
Operating System	Windows 10
Processor	Intel® Core™ i3-5005U CPU @2.00GHz 2.00GHz
Memory (RAM)	2GB or higher
System Type	64-bit OS ,x64-based processor

**Table 3.1 Computer Device Specification**

For this reason, software is needed to create a website-based school information system, namely:

<b>Software</b>	<b>Information</b>
Web Server	Xampp Control Panel
Database	MySQL Workbench 8.0 CE
Programming	Visual Studio Code or Notepad
Design	Draw.IO
Website	Md5

**Table 3.2 Software requirements**

### 3.5 Design

The design of the information system at SMKN 2 Bandar Lampung applies the problem solving solutions that have been proposed in the system analysis. 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





### 3.5.2 Logical Model Design

In this logical phase design, transaction processing is carried out from the conceptual schema that has been created in the previous phase. The results of this phase are referred to as logical schemas and are expressed in 48 logical data models that are described using the relational model. In this phase, several optimizations must be carried out on the operations to be carried out on the existing data. Techniques commonly used to perform normalization initiation optimization. The design of this information system can be made using Logical Model Design, can be seen in the following diagram :

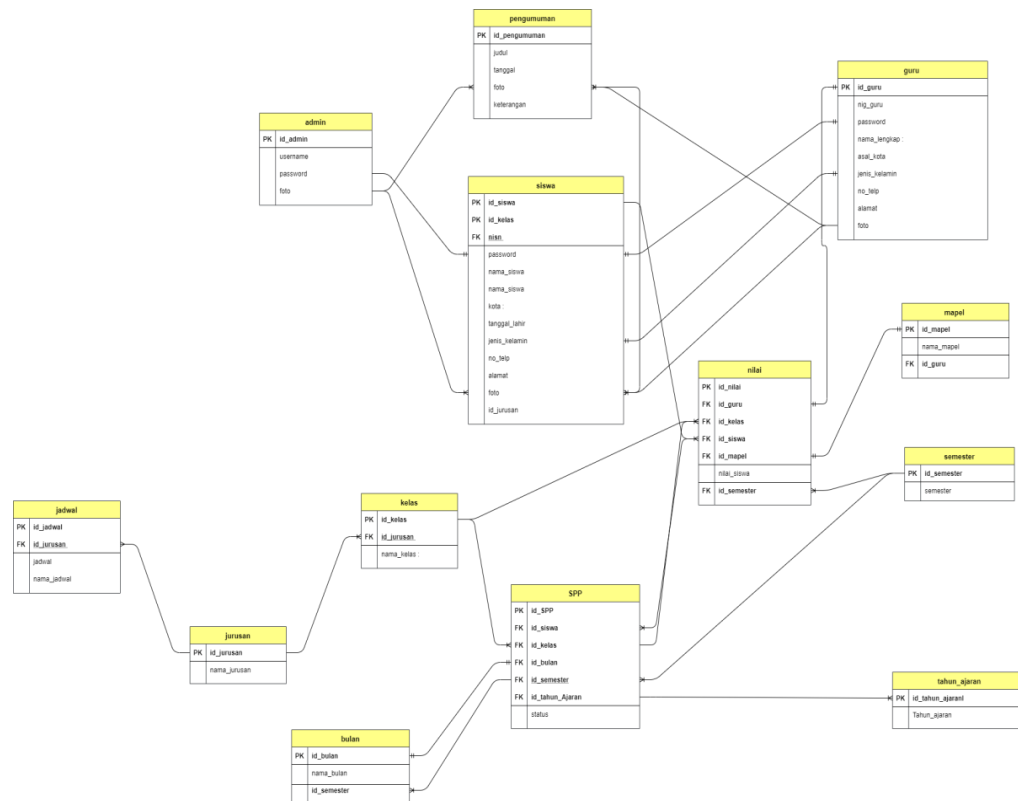


Figure 3.3 Logical Model Design

### 3.5.3 Physical Model Design

Meanwhile, for the physical design phase, it must be ensured that the logical schema that was created in the previous phase is equipped with the necessary details for the physical implementation of the Database Management System DBMS that will be used. The result of this phase is referred to as the physical schema. This stage is more focused on the structural database in detail. Data storage and relationships in the database will be created at this stage. Not only structural and data relationships, but also pay attention to the integrity of the data that will be stored in the database. The design of this information system can be made using Physical Model Design, can be seen in the following diagram:

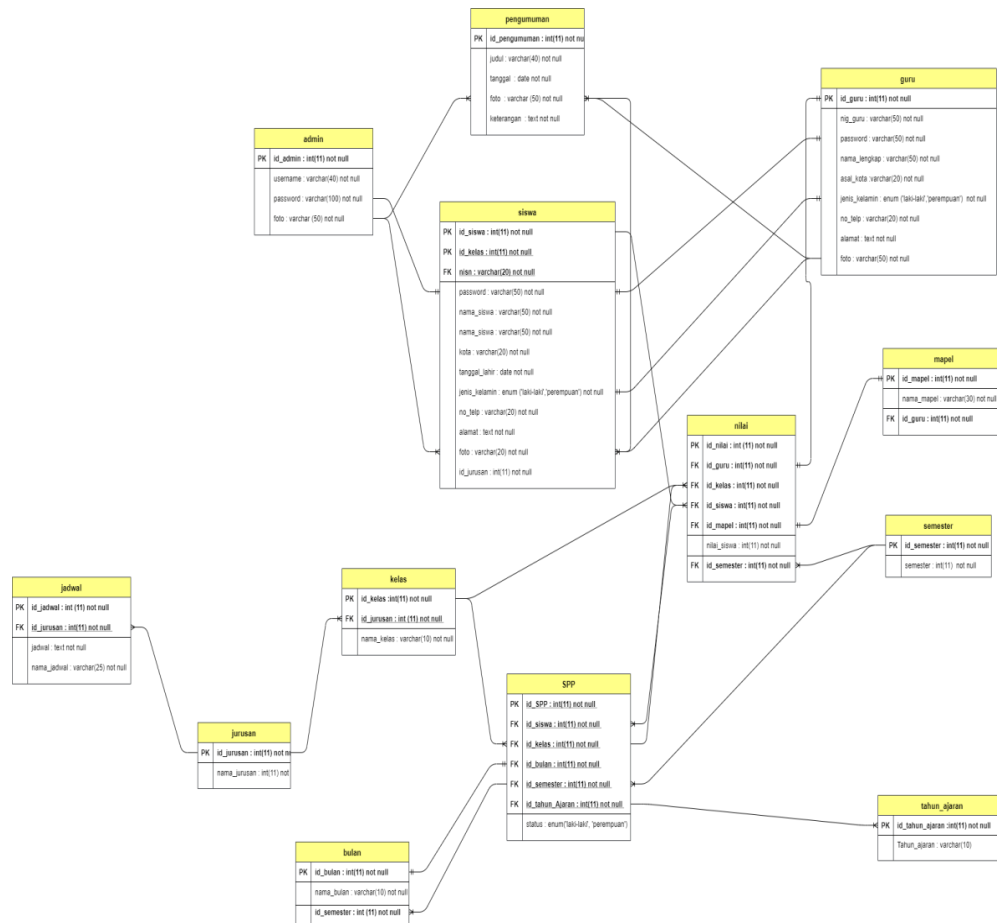


Figure 3.4 Physical Model Design

### 3.6 Access System Interface For Library Members

#### 3.6.1 Admin Interface

**ADMINISTRATOR**

admin@gmail.com

Password

Login

🏠 Dashboard

**Figure 3.5 Login Page Interface Design**

/ Dashboard

Siswa TKJ   Siswa TKR   Siswa TGB   Siswa TL

Siswa TSP   Guru   admin

Search ▾

Tanggal	Judul	Keterangan	Menu

**Figure 3.6 Admin Menu Design**

### 3.6.2 Teacher Interface

**LOGIN GURU**

**Figure 3.7 Login Page Interface Design**

LOGO			
MENU	<a href="#">Menu</a>	<a href="#">Menu / Home</a>	
Home	SELAMAT DATANG GURU		
Upload <a href="#">nilai</a>			
<a href="#">Biodata guru</a>			
Download <a href="#">jadwal</a>	<a href="#">Pengumuman</a>		
<b>Logout</b>	<a href="#">Tanggal</a>	<a href="#">Judul</a>	<a href="#">Keterangan</a>
			Action

**Figure 3.8 Teacher Menu Design**

### 3.6.3 Students Interface

The image shows a login page interface for students. It features a central box titled "LOGIN SISWA". Inside this box, there are three input fields: "NISN", "Password", and "Login". Below the input fields, there are two links: "Login Guru" (with a person icon) and "Dashboard" (with a star icon).

Figure 3.9 Login Page Interface Design

LOGO													
Menu	Menu <span style="float: right;">Dashboard / Home</span>												
Home	SELAMAT DATANG SISWA												
<a href="#">Biodata Siswa</a>													
<a href="#">Nilai Siswa</a>	<table border="1"> <thead> <tr> <th colspan="4"><a href="#">Pengumuman</a></th> </tr> <tr> <th><a href="#">Tanggal</a></th> <th><a href="#">Judul</a></th> <th><a href="#">Keterangan</a></th> <th><a href="#">Action</a></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	<a href="#">Pengumuman</a>				<a href="#">Tanggal</a>	<a href="#">Judul</a>	<a href="#">Keterangan</a>	<a href="#">Action</a>				
<a href="#">Pengumuman</a>													
<a href="#">Tanggal</a>		<a href="#">Judul</a>	<a href="#">Keterangan</a>	<a href="#">Action</a>									
<a href="#">Jadwal Siswa</a>													
<a href="#">Pengumuman</a>													
<a href="#">Status Pembayaran SPP</a>													
<b>Logout</b>													

Figure 3.10 Student Menu Design

### 3.7 Testing

After making a design with various diagrams and display interfaces that will be made on the website, testing will be carried out. This test requires a run that shows whether the program that we run or create can be connected or used successfully. and running is done using localhost/PHPMYadmin as shown in the image below :

#### 3.7.1 User Access Test Running

In this view the user will see the results of the test running at the time of accessing the user to login on the website. Of course when logging in the user requires a username and password. so that the password is not easily known, the admin uses the Md5 website as an alternative to password security. after filling in the data in PHPMYadmin, then the password is created in Md5, then login. Then it can be seen successfully accessing or not. and in this trial it was successful, which can be seen in the following image.

An example of this view is creating a column in the form of data in the admin table.

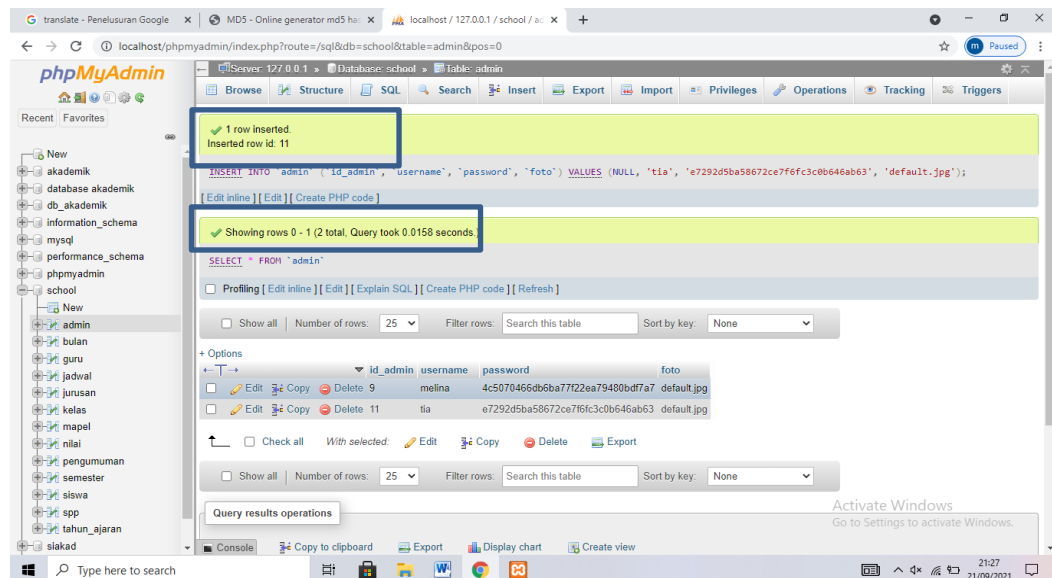


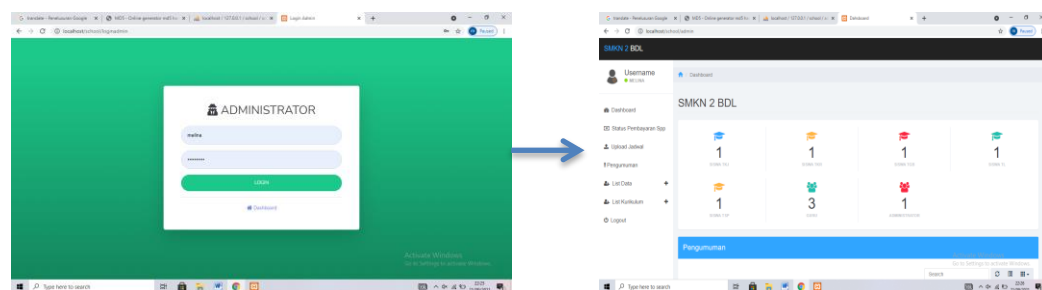
Figure 3.11 Admin Table View

Next, after filling in the data above, the password is created. an example of this displaying creating a password in Md5.



**Figure 3.12 Md5 Website View**

Once done, users, whether admins, students, or teachers, can access their respective websites. type the username and password then if successful the user will be taken to the old website. Below is an example of a successful admin access display:



**Figure 3.13 Admin Access View To Website**

### 3.7.2 Testing Upload Photos To Users

In this view we can change, edit and add photos. After the admin uploads the photo, PHPmyadmin will automatically display the .jpg type used. Then the result is as follows :

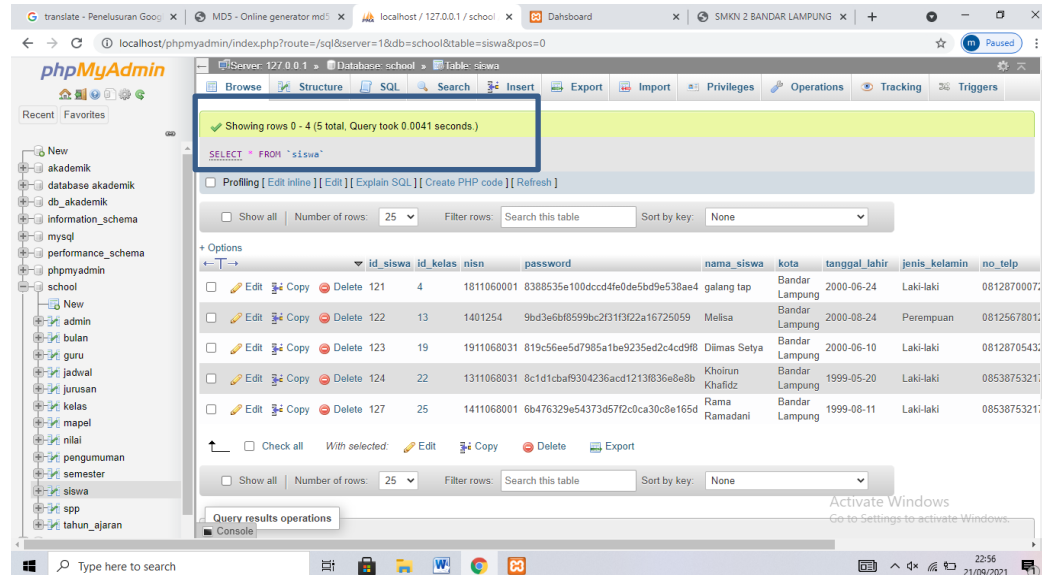


Figure 3.14 Student Table View

The display on the student's website shows that it was successful in uploading the photo.

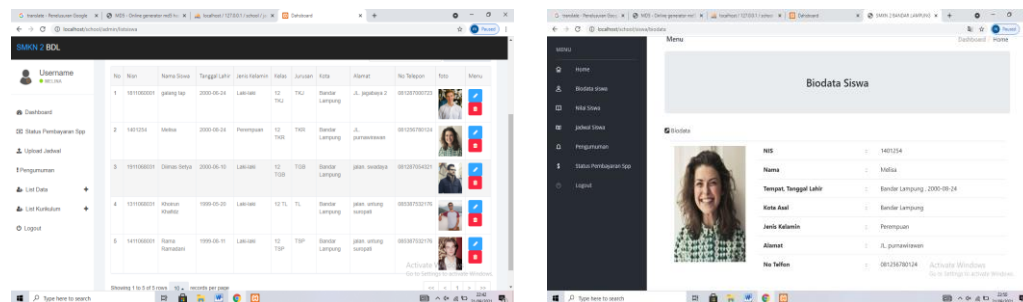


Figure 3.15 Display The Results Of Uploading Photos



### 3.7.3 Test Download Schedule

In this view is an example of testing to download the schedule from each user and the following is a download display of the teacher's schedule.

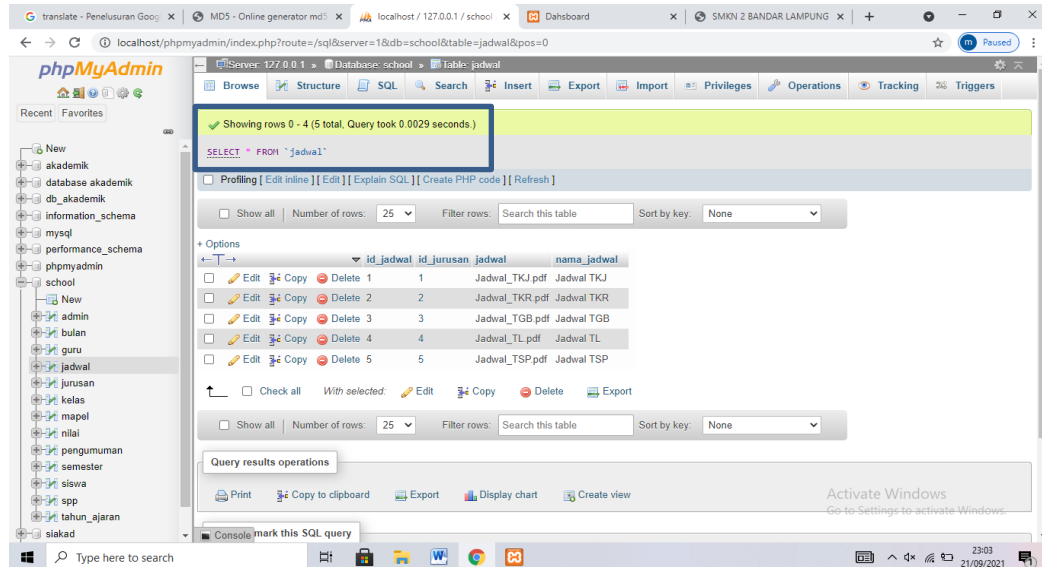


Figure 3.16 Schedule Table View

The display on the teacher's website shows that in the download the schedule has been successfully downloaded.

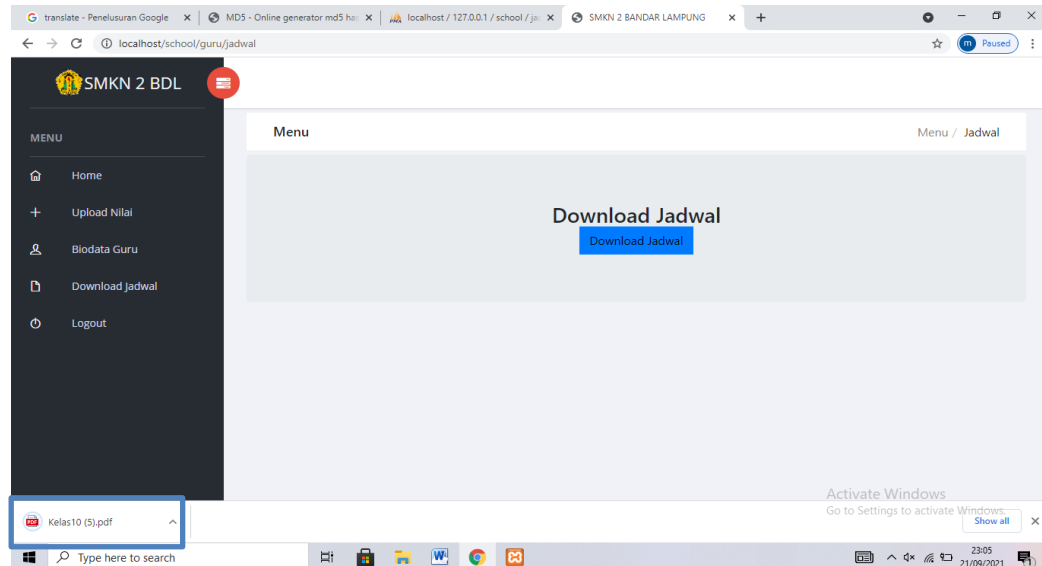
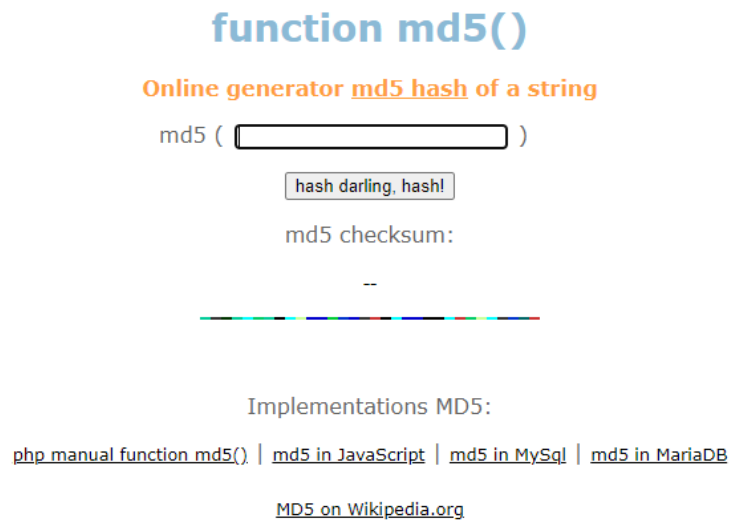


Figure 3.17 Teacher Webiste View Download Schedule

### 3.8 Implementation

This implementation was made after testing, which I use md5 security for this implementation. Md5 is to create a hidden password that can directly connect to localhost. By typing the desired password, then clicking hash darling, a code will appear, the code is entered into localhost PHPMyadmin. From this statement, it can be seen in the following figure:



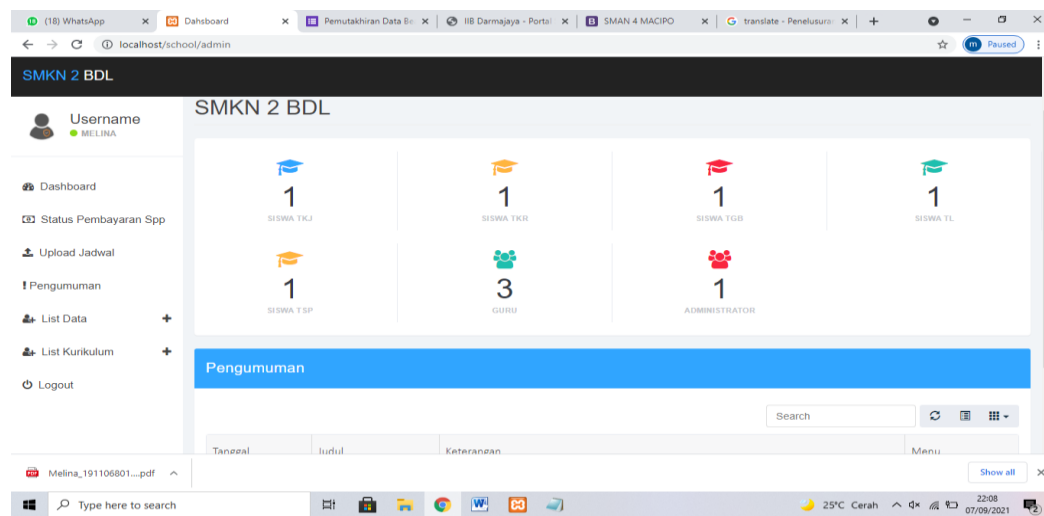
**Figure 3.18 Md5 Website Interface Display**

## CHAPTER IV

### RESULT AND DISCUSSION

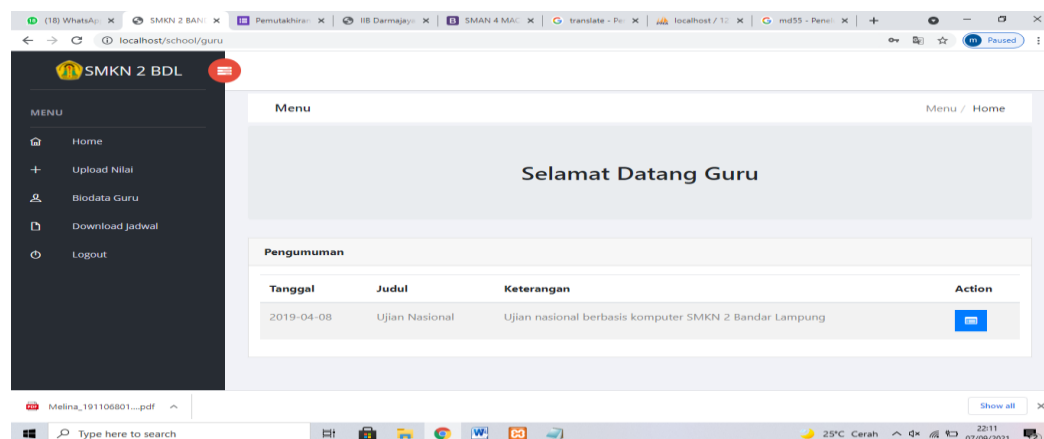
#### 4.1 Result

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 can be seen in the following figure:



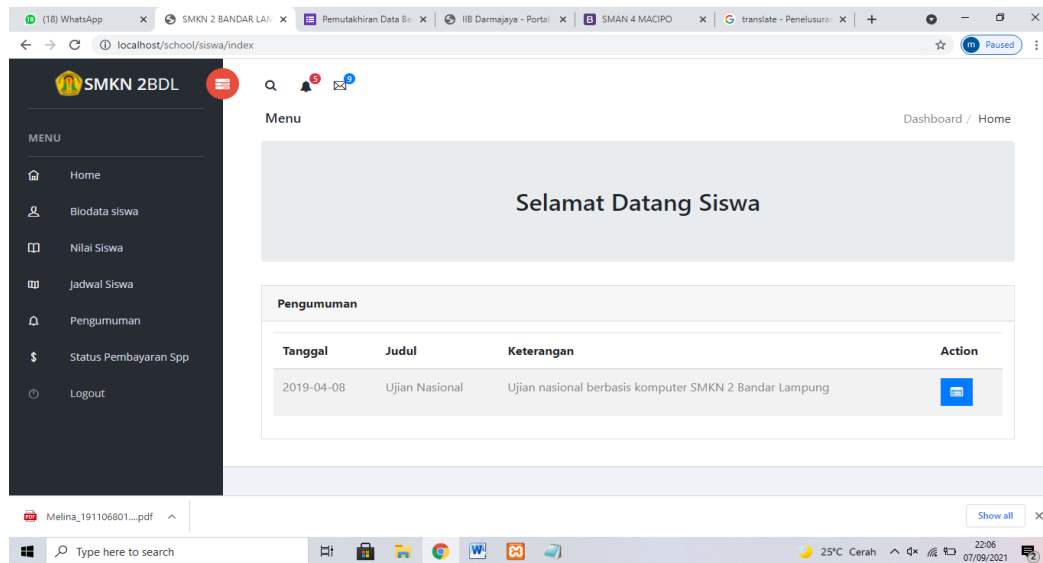
**Figure 4.1 Admin Menu View**

The results of the school information system website above are the main admin page display.



**Figure 4.2 Teacher Menu View**

The results of the school information system website above are the teacher's main page display.



**Figure 4.3 Student Menu View**

The results of the school information system website above are the student's main page display.

## 4.2 Discussion

Information systems are a combination of information technology and the activities of people who use that technology to support operations and management. In a very broad sense, the term information system is often used to refer to the interactions between people, algorithmic processes, data, and technology.

This school information system uses a website which can be accessed by admins, teachers and students. From the results of the discussion, the display menu on the three accesses can be used :

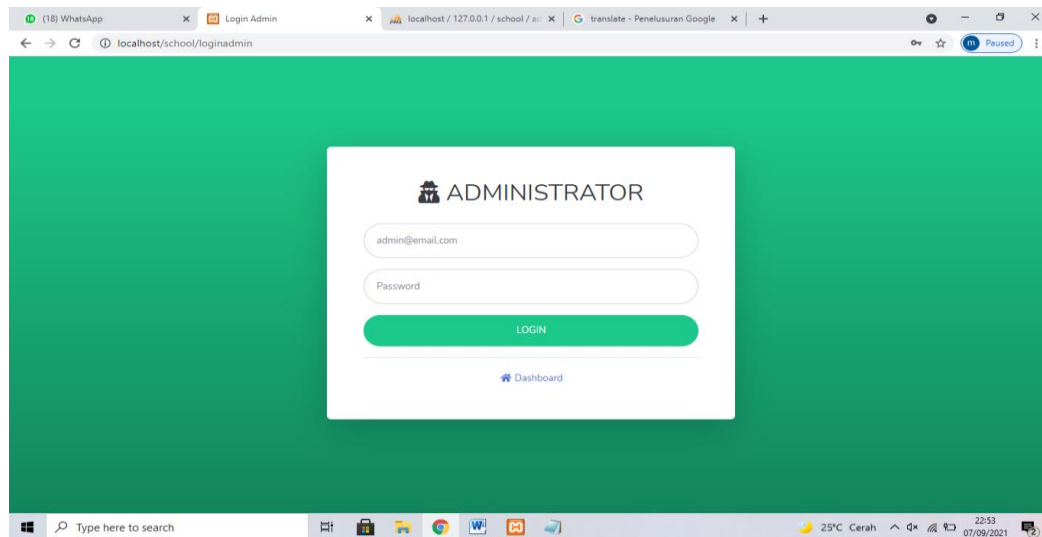
Figure 4.4 This is the main page of the school information system website for SMKN 2 Bandar Lampung. Login in this view can only be accessed by students and teachers while for admin it is separate by adding ( /admin ) when typing localhost in google.



**Figure 4.4 Main Page View**

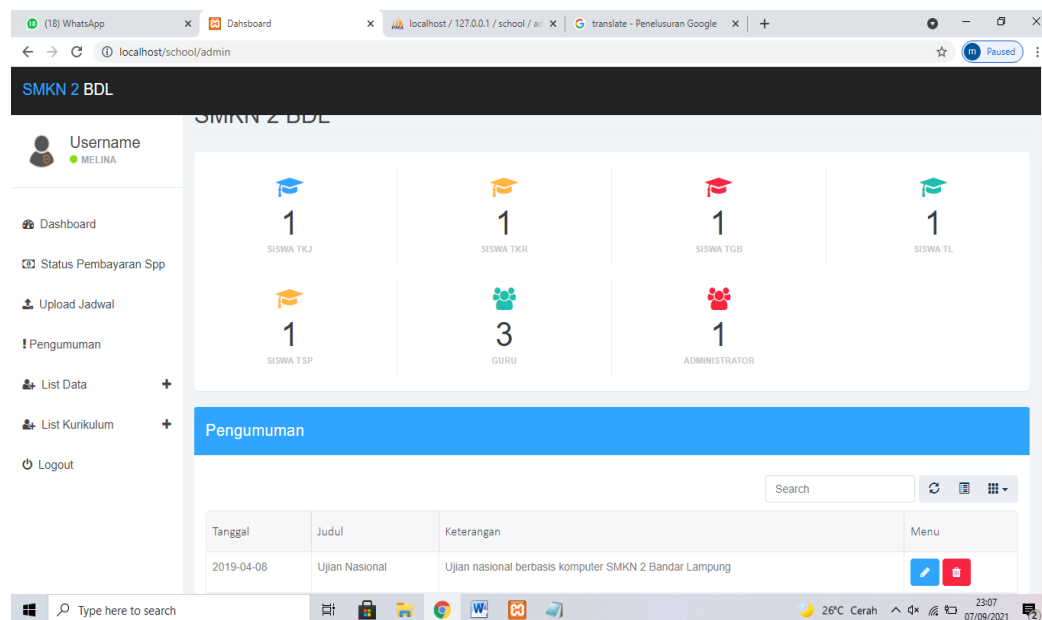
#### **4.2.1 Admin Interface**

Figure 4.5 is the first intro display that appears on the screen with the admin login menu which then the user will be redirected automatically with a waiting time of seconds to go to the next page, this display only displays the username or email and password login menu.



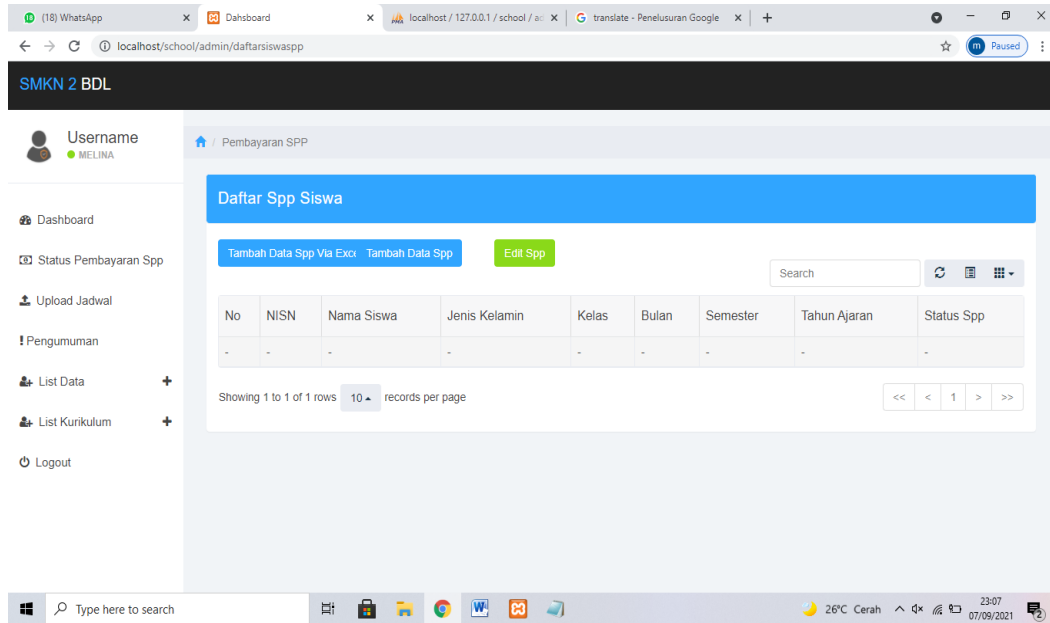
**Figure 4.5 Menu Login Admin**

Figure 4.6 In this view, the admin can see a dashboard that contains : The number of TKJ students, TGB students, TKR students, TL students, and TSP students. Then at the bottom there is an announcement entered by the admin.



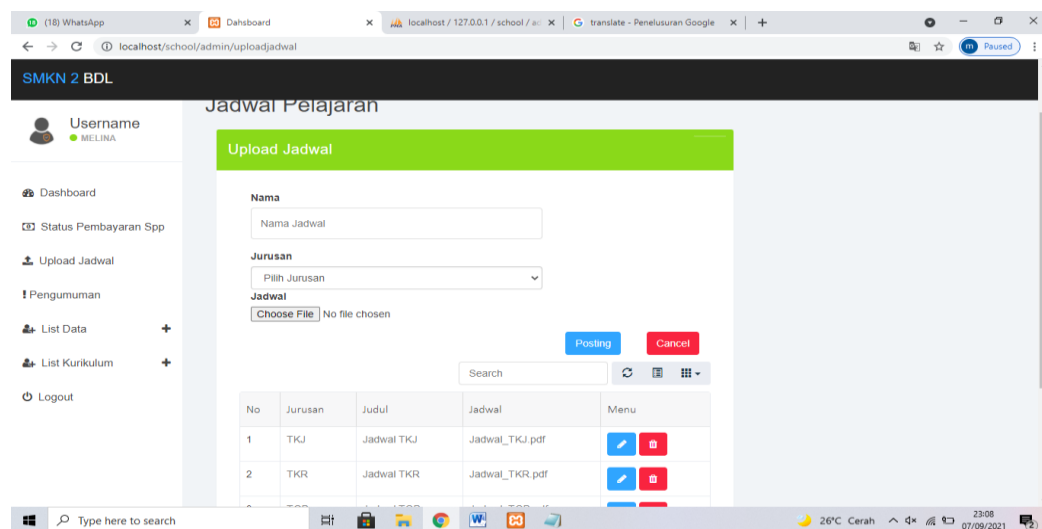
**Figure 4.6 Website Dashboard Interface For Admin**

Figure 4.7 In this view, the admin can view, edit, delete, and add the SPP List consisting of students.



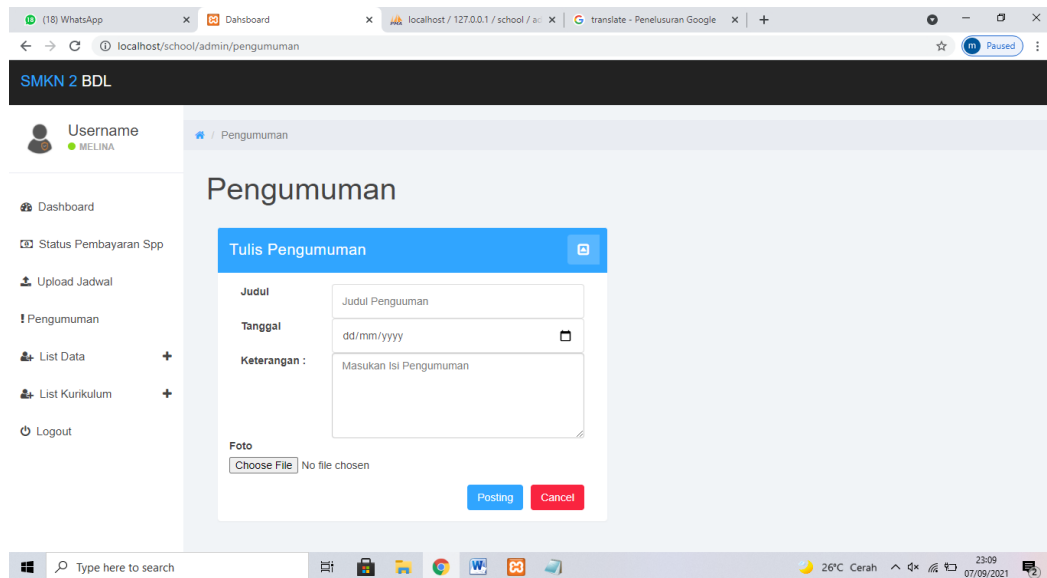
**Figure 4.7 Website List SPP of Students Interface For Admin**

Figure 4.8 In this view, admins can view, edit, delete, and add schedule names, select majors, and then input schedule data files available at every department. The menu display below shows the input results above.



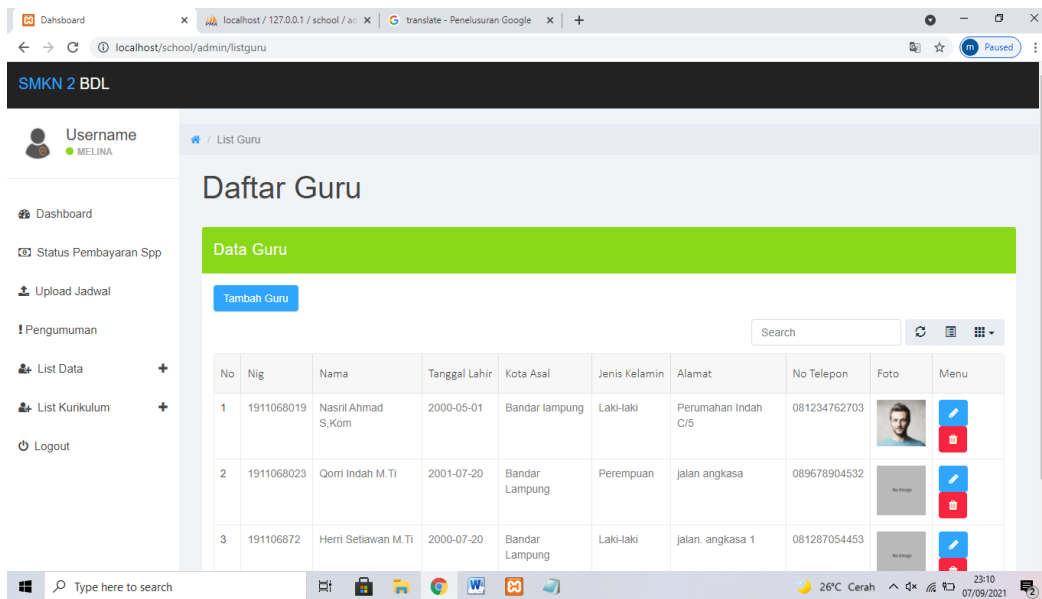
**Figure 4.8 Website Lesson Timetable Interface For Admin**

Figure 4.9 In this view the admin can add announcements available on dashboards.



**Figure 4.9 Website Announcement Interface For Admin**

Figure 4.10 In this view, admins can view, delete, edit and add teacher data.



**Figure 4.10 Website Teacher Data Interface For Admin**



Figure 4.11 In this view, admins can view, delete, edit and add students data.

The screenshot shows the 'Data Siswa' (Student Data) interface. The left sidebar contains navigation options: Dashboard, Status Pembayaran, Spp, Upload Jadwal, Pengumuman, List Data (with sub-options for List Data Guru, List Data Siswa, and List Data Pegawai), List Kurikulum, and Logout. The main content area features a 'Tambah Siswa' button, a search bar, and a table with the following data:

No	Nisn	Nama Siswa	Tanggal Lahir	Jenis Kelamin	Kelas	Jurusan	Kota	Alamat	No Telepon	foto	Menu
1	1811060001	gatang tap	2000-06-24	Laki-laki	12 TKJ	TKJ	Bandar Lampung	JL. jagabaya 2	081287000723		
2	1401254	Melisa	2000-08-24	Perempuan	12 TKR	TKR	Bandar Lampung	JL. pumawirawan	081256780124		
3	1911068031	Dilimas Setya	2000-06-10	Laki-laki	12 TGB	TGB	Bandar Lampung	jalan. swadaya	081287054321		
4	1311068031	Khoirun Khalidz	1999-05-20	Laki-laki	12 TL	TL	Bandar Lampung	jalan. untung suropati	085387532176		

Figure 4.11 Website Students Data Interface For Admin

Figure 4.12 In this view, admins can view, delete, edit and add employee list.

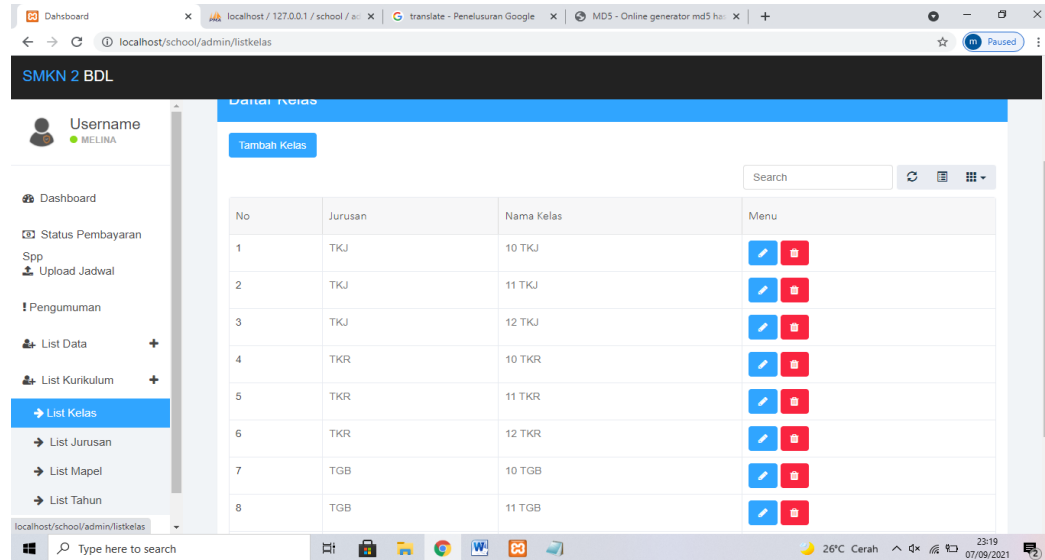
The screenshot shows the 'Daftar Pegawai' (Employee List) interface. The left sidebar is identical to the previous screenshot. The main content area features a 'Tambah Pegawai' button, a search bar, and a table with the following data:

No	Username	Foto	Menu
1	Qorri Indah M.Ti		

Below the table, it indicates 'Showing 1 to 1 of 1 rows' and '10 records per page'.

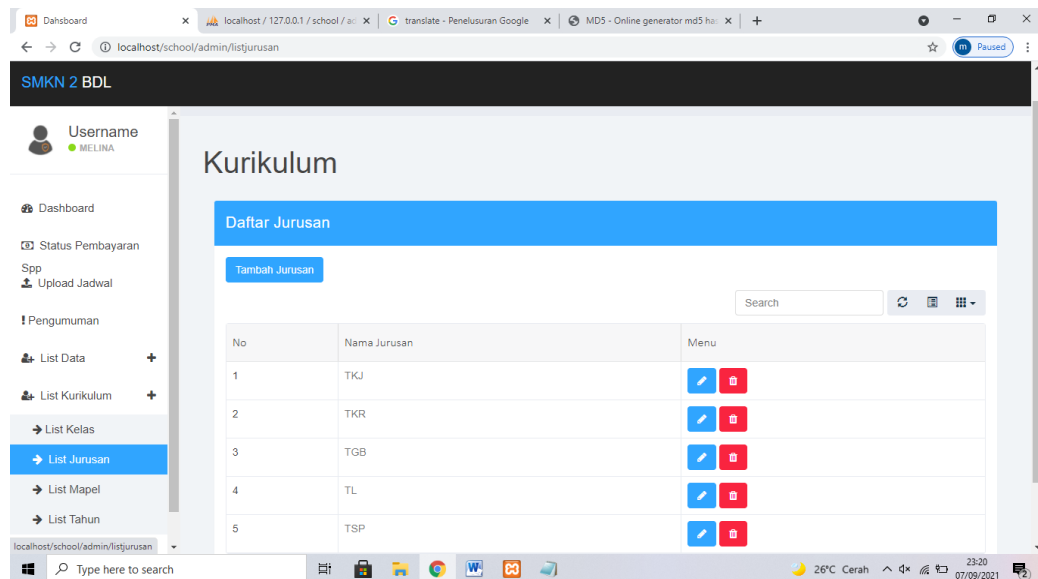
Figure 4.12 Website List Employee Interface For Admin

Figure 4.13 In this view the admin can view, delete , edit and add to the list of classes available in the curriculum list.



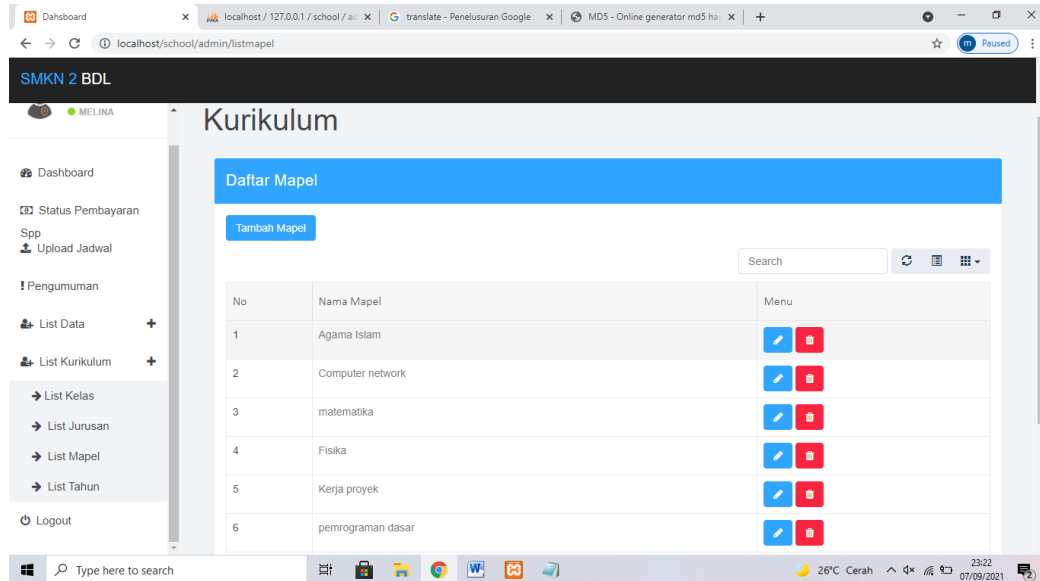
**Figure 4.13 Website List Class Interface For Admin**

Figure 4.14 In this view the admin can view, delete, edit and add to the list of majors available in the curriculum list.



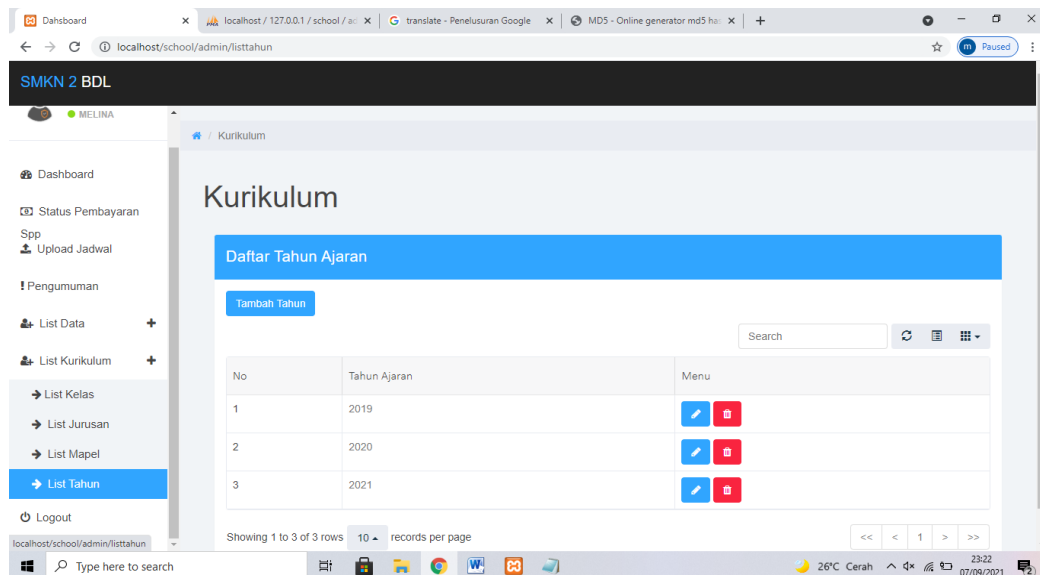
**Figure 4.14 Website List Majors Interface For Admin**

Figure 4.15 In this view the admin can view, delete, edit and add to the list of mapels available in the curriculum list.



**Figure 4.15 Website List Mapels Interface For Admin**

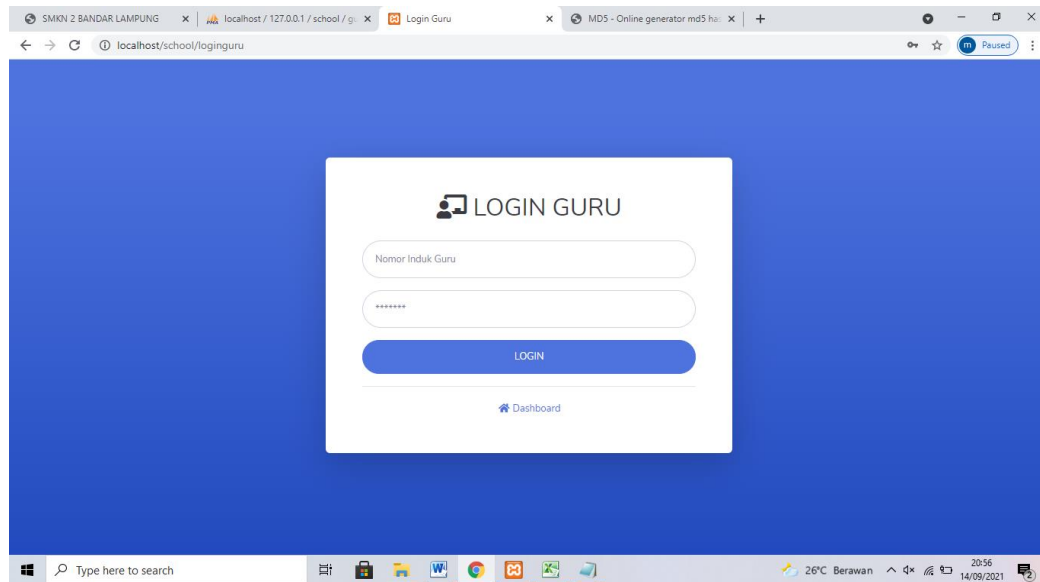
Figure 4.16 In this view the admin can view, delete, edit and add to the school year list available in the curriculum list.



**Figure 4.16 Website School Year List Interface For Admin**

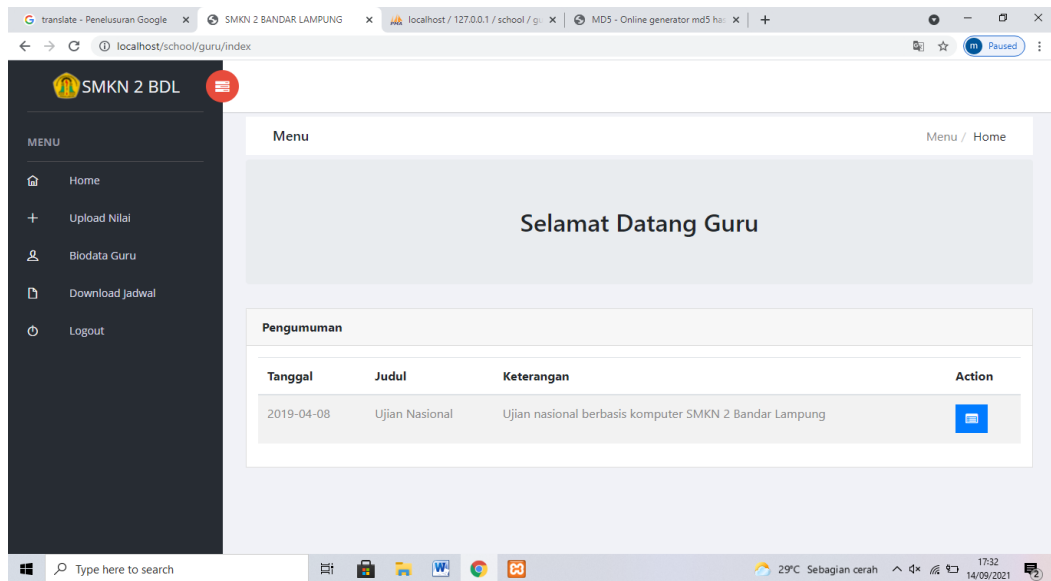
### 4.2.2 Teacher Interface

Figure 4.17 This is the first intro display that appears on the screen with the teacher login menu, then the user will be directed automatically with a second waiting time to enter the next page, this display only displays the master number and password for the login menu.



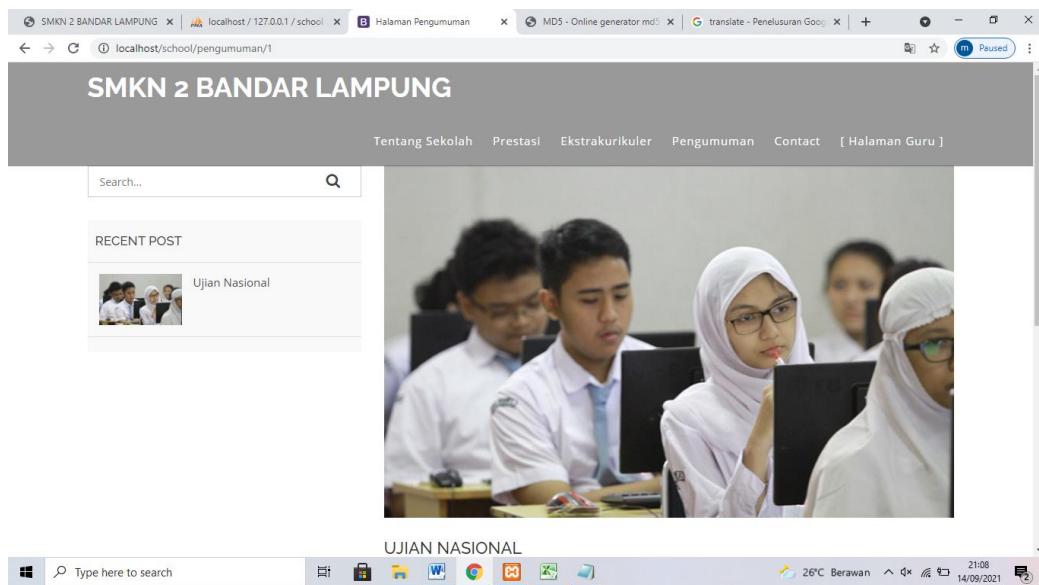
**Figure 4.17 Website Login Interface For Teacher**

Figure 4.18 In this view, the teacher can see the dashboard display and announcements that can be clicked on the blue box menu so that it displays the display section on the initial menu of this website.



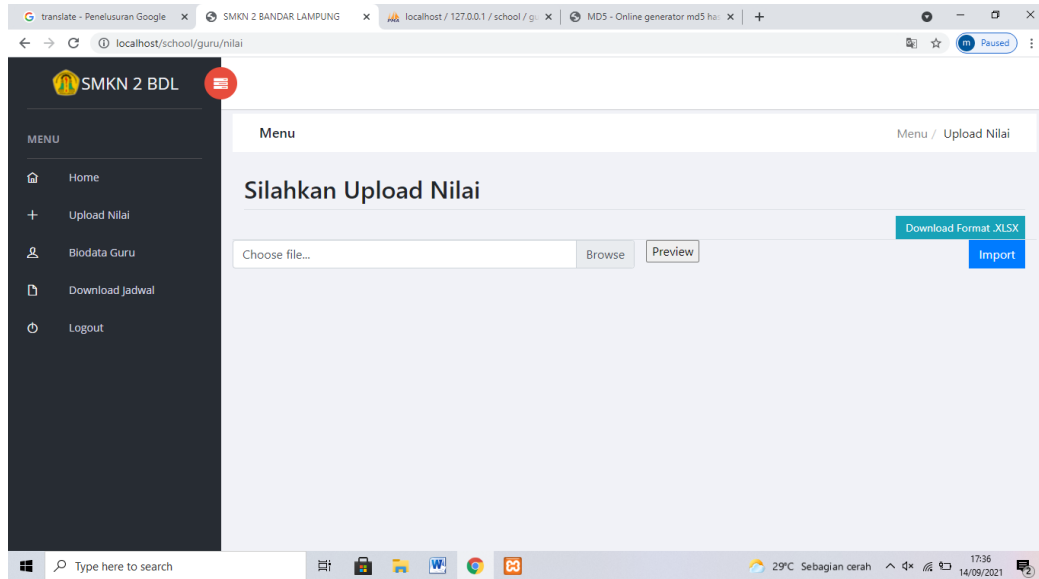
**Figure 4.18 Website Dashboard Interface For Teacher**

This view is the display after clicking on the menu on the dashboard menu.



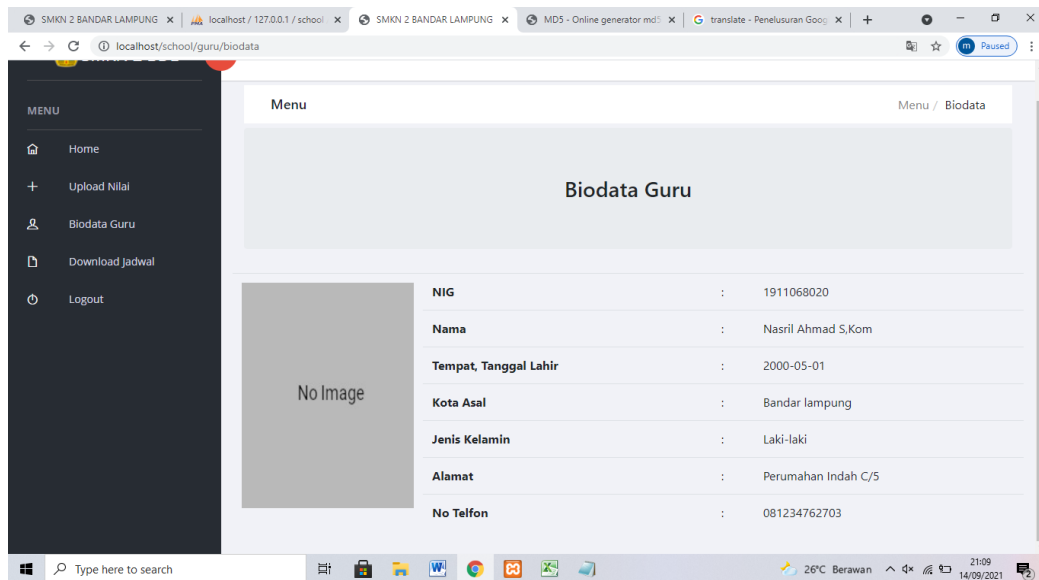
**Figure 4.19 Website Announcement Interface For Teacher**

Figure 4.20 In this view, teachers can search, view, and add grades for their students.



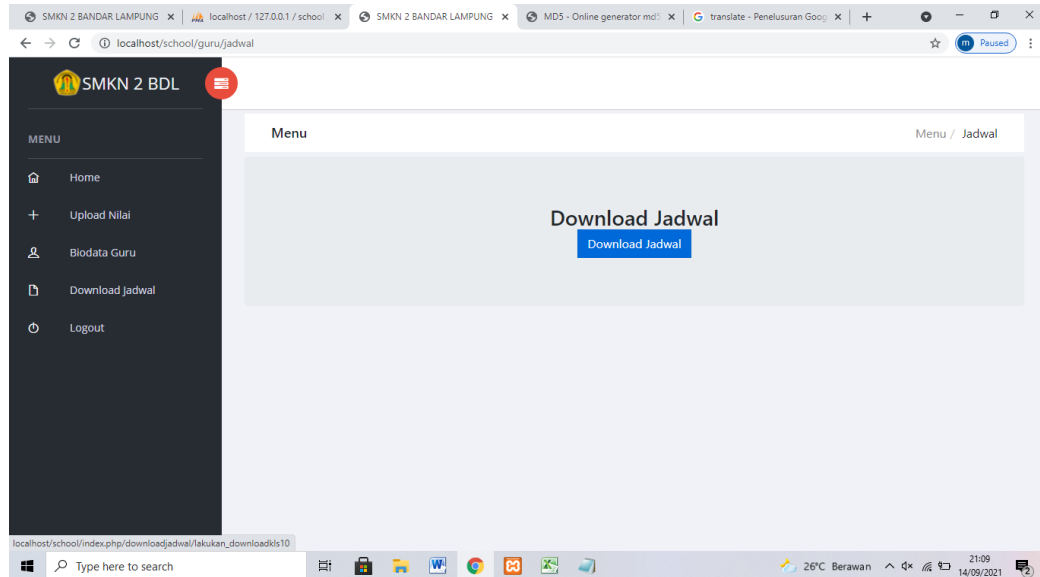
**Figure 4.20 Website Uploading Value Interface For Teacher**

Figure 4.21 In this view the teacher can see the teacher's biodata.



**Figure 4.21 Website Teacher Bio Interface For Teacher**

Figure 4.22 In this view, the teacher can view and download the teacher's schedule.

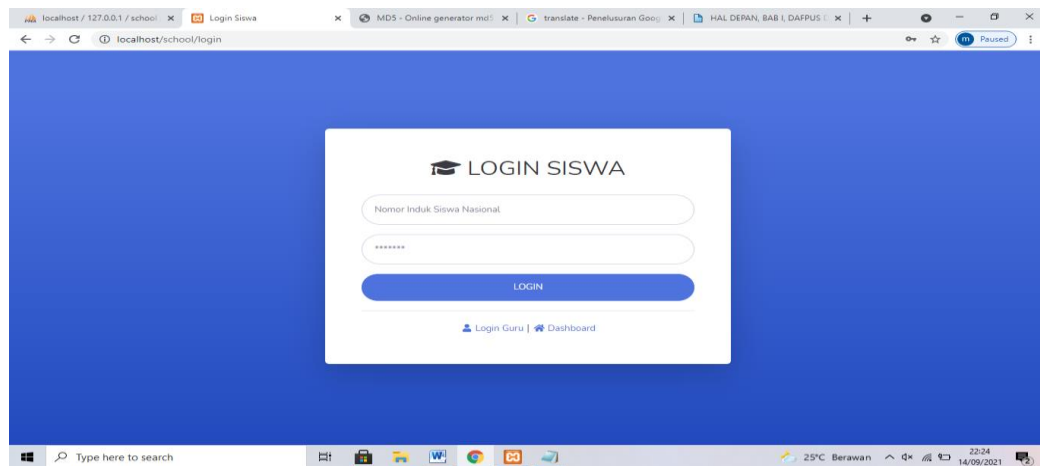


**Figure 4.22 Website Download Schedule Interface For Teacher**

### 4.2.3 Students Interface

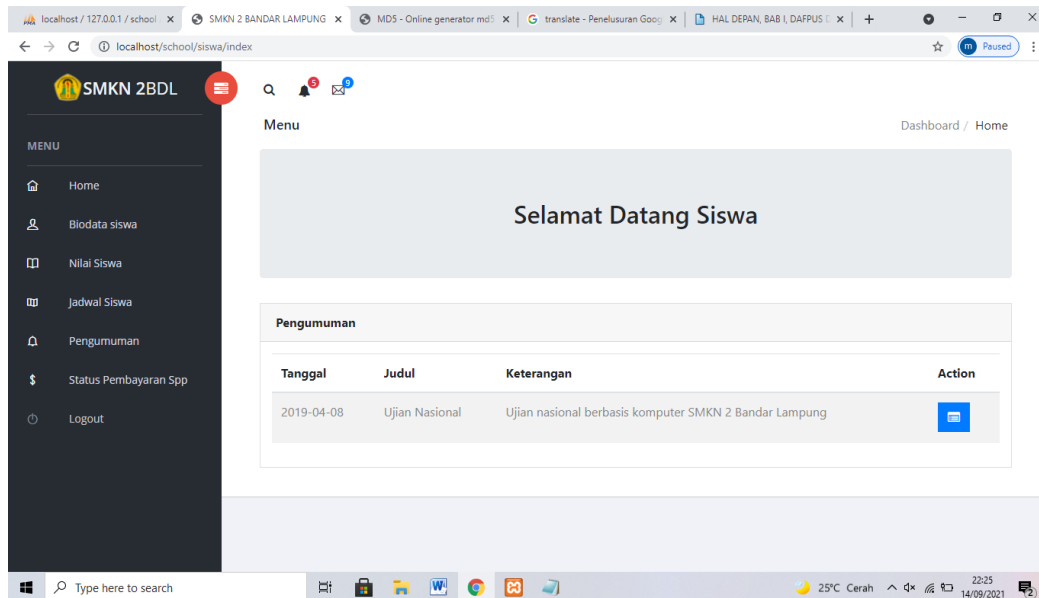
This is an example of a student website display from several students at SMKN 2 Bandar Lampung, so the following is an example.

Figure 4.23 In this view, members can input their NISN and password to login to the website.



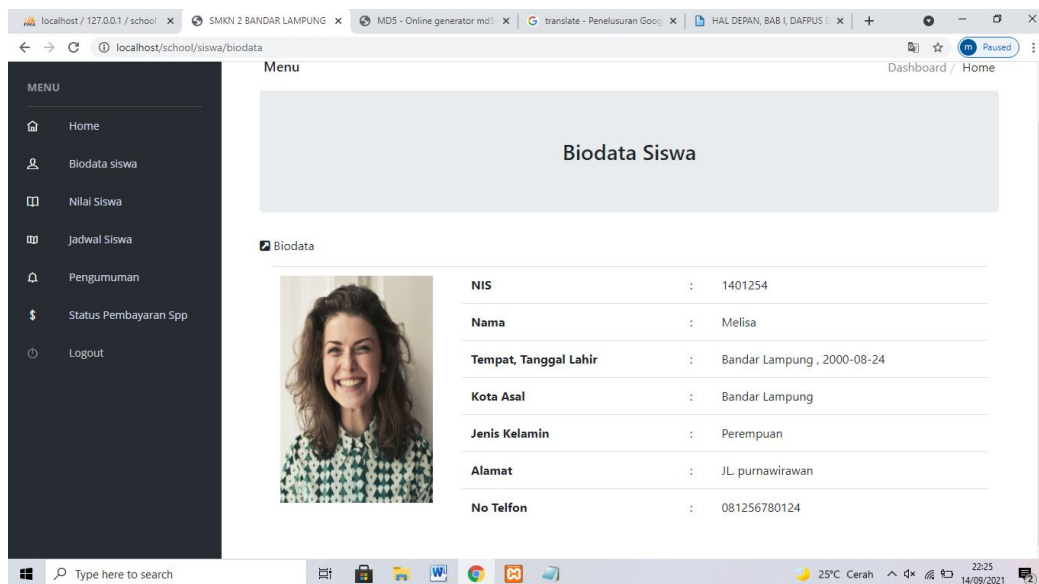
**Picture 4.23 Website Login Interface For Students**

Figure 4.24 In this view, namely the dashboard display of the student website which looks the same as the teacher dashboard display at the bottom is the announcement.



**Figure 4.24 Website Dashboard Interface For Students**

Figure 4.25 In this view the students can see the students biodata.



**Picture 4.25 Website Student Bio Interface For Students**



Figure 4.26 In this display students can see the value entered by the teacher.

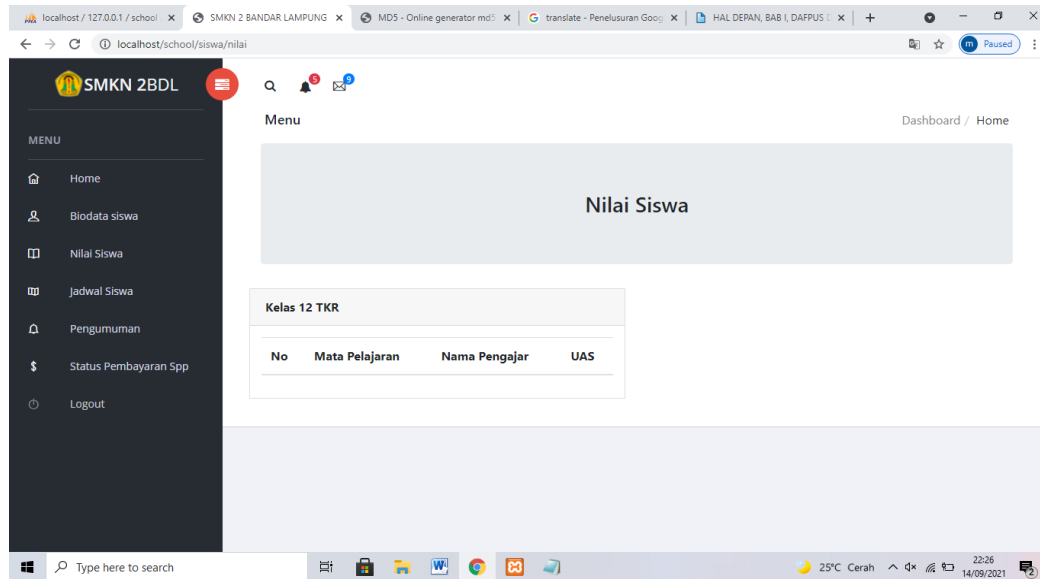


Figure 4.26 Website Student Scores Interface For Students

Figure 4.27 In this view students can see the schedule of each student.

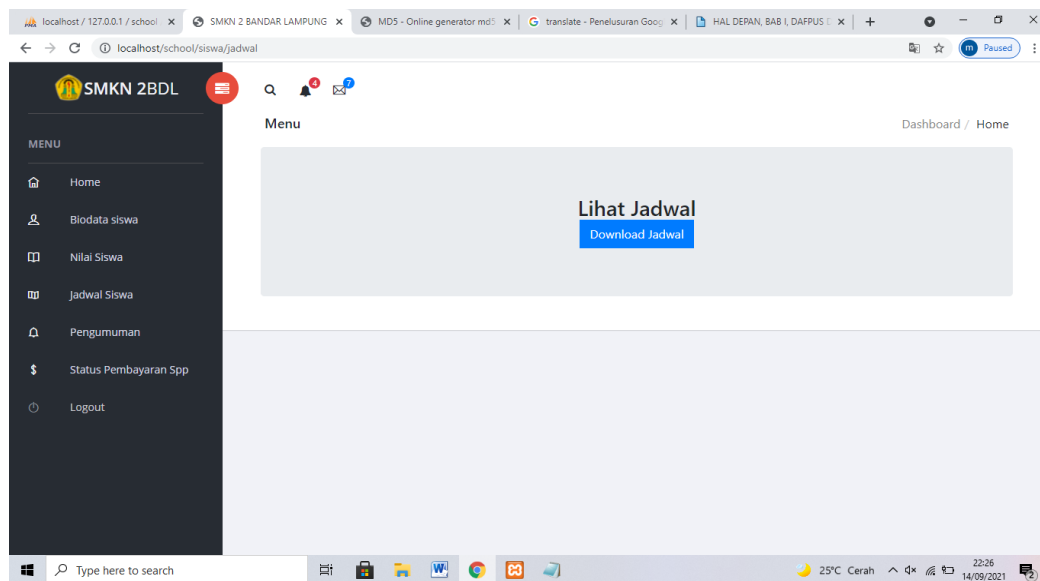
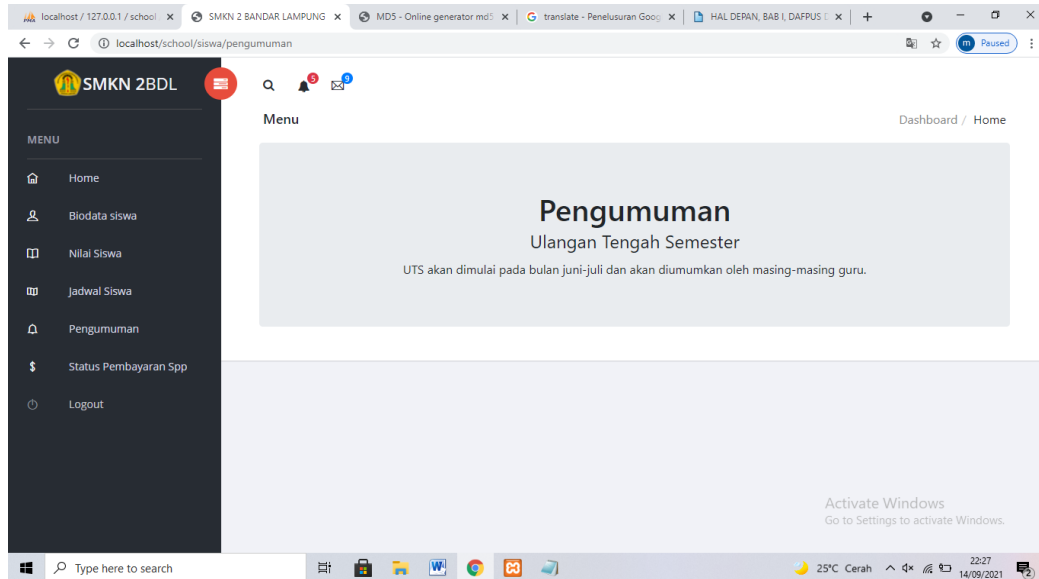


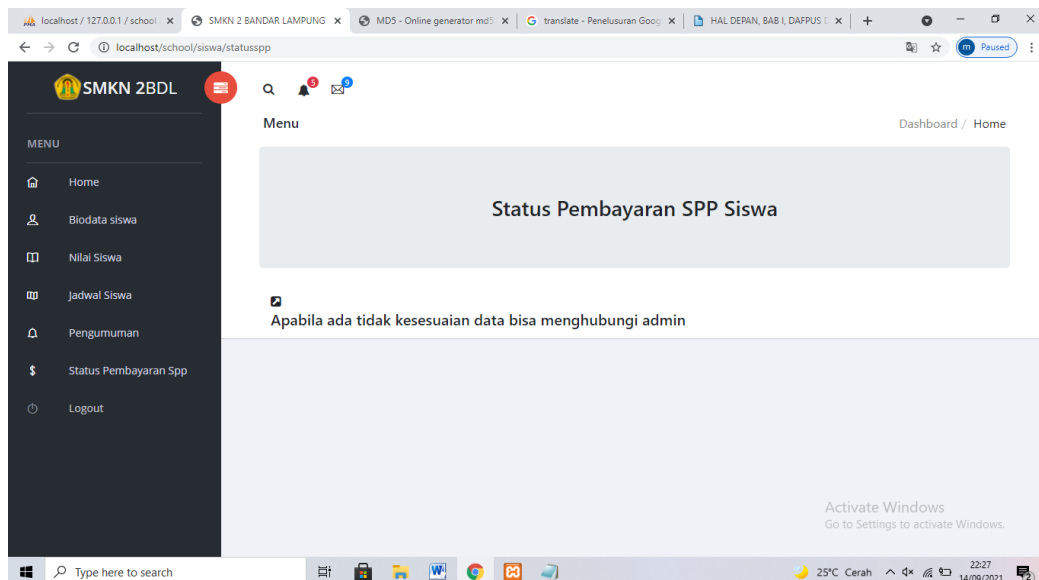
Figure 4.27 Website Student Schedule Interface For Students

Figure 4.28 In this view, students can see the announcements announced by the admin.



**Figure 4.28 Website Announcements Interface For Students**

Figure 4.29 In this view, students can see the status of each student's tuition payment.



**Figure 4.29 Website SPP Payment Status Interface For Students**

## **CHAPTER V**

### **CLOSINGS**

#### **5.1 Conclusion**

Based on the results of research conducted on the school information system database using the web, it can be said:

1. Information systems are a combination of information technology and the activities of people who use that technology to support operations and management. A school is an institution for students teaching students under the supervision of a teacher.
2. School is an important education for parents for their children, so many people are looking for school information through any media. In modern times, people want practical information, online information systems such as information systems via the web are what people need today.
3. This project is a system created with a database model using PHP/MYSQL that records a school's data and can be accessed by the public. Of course the data is stored very securely by the admin.

#### **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.

## REFERENCES

- Araújo F. (2013). *No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析*Title.
- Habiby, A. I., & Yamasari, Y. (2017). SISTEM INFORMASI SEKOLAH BERBASIS WEB (Studi Kasus : TK Kusuma Putra Kota Mojokerto). *Jurnal Manajemen Informatika*, 7(2), 94–100.
- Luthfi Suryawan, P. (2011). *SISTEM INFORMASI AKADEMIK BERBASIS WEBSITE DI MTs NEGERI MODEL PARAKAN*. 100. [http://eprints.uny.ac.id/31538/1/Pradana Luthfi Suryawan 07520244039.pdf](http://eprints.uny.ac.id/31538/1/Pradana%20Luthfi%20Suryawan%2007520244039.pdf)
- SUCI, W. (2020). Pengaruh Media Pembelajaran Terhadap Hasil Belajar Al- Islam Di Sma Muhammadiyah 1 Gisting Kabupaten Tanggamus. *Pendidikan Agama Islam*, Hlm 13-1

## ATTACHMENT

## 1. Database Technology Course

The screenshot shows a video conference window with a presentation slide. The slide content is as follows:

One-to-many:  
1. E-R diagram:

```

    graph LR
      instructor[instructor] ---|advisor| student[student]
      instructor --- salary[salary]
      student --- name[name]
      student --- tot_cred[tot_cred]
  
```

2. Relational database design:  
Instructor (ID, name, salary, ...)  
Student (ID, name, tot\_cred, instructorid)

The video conference interface includes a toolbar at the bottom with options like Unmute, Camera On, Share Screen, Hang up, Invite, Mute All, and Record. The right side shows a list of participants with their video thumbnails.

Figure 1. Documentation while learning Database Technology

The screenshot shows a video conference window with a presentation slide. The slide content is as follows:

The schema of a database and an instance of a database are similarly defined. The schema of a relation include its attributes, and optionally the types of the attributes and constraints on the relation such as primary and foreign key constraints.

- A **superkey** of a relation is a set of one or more attributes whose values are guaranteed to identify tuples in the relation uniquely.
- A **candidate key** in a minimal superkey, that is, a set of attributes that forms a superkey, but none of whose subsets is a superkey.
- One of the candidate key of a relation is chosen as its **primary key**.
- A **foreign key** is a set of attributes in a referencing relation, such that for each tuple in the **referencing relation**, the values of the foreign key attributes are guaranteed to occur as the primary key

Relations are Unordered

Order of tuples is irrelevant (tuples may be stored in an arbitrary order)  
Example: instructor relation with unordered tuples

ID	name	dept_name	salary
2012	Fordyce	Physics	90000
1212	Wu	Finance	90000
3242	El-Saad	History	60000
4550	Kate	Comp. Sci.	70000
6045	Kate	Elec. Eng.	60000
7076	Crick	Biology	70000
1810	Stearns	Comp. Sci.	60000
3083	Callen	History	60000
4823	Brewster	Comp. Sci.	90000
1151	Musant	Music	80000
2366	Candl	Physics	80000
7043	Singh	Finance	80000

The video conference interface includes a toolbar at the bottom with options like Unmute, Camera On, Share Screen, Hang up, Invite, Mute All, and Record. The right side shows a list of participants with their video thumbnails.

Figure 2. Documentation while learning Database Technology

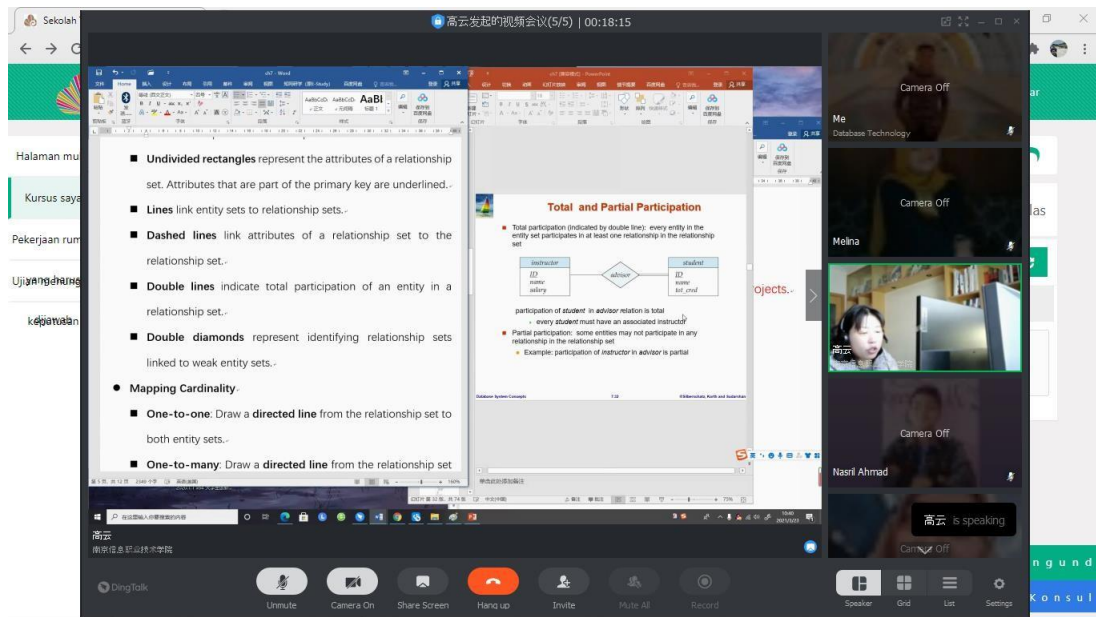


Figure 3. Documentation while learning Database Technology

## 2. Computer Network Course

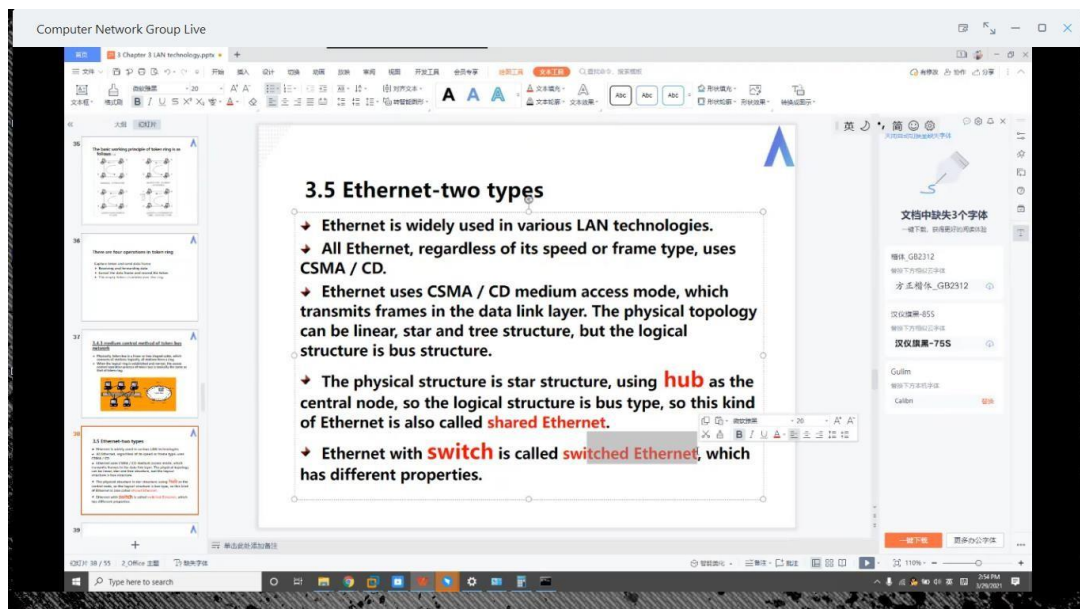


Figure 4. Documentation while learning Computer Network

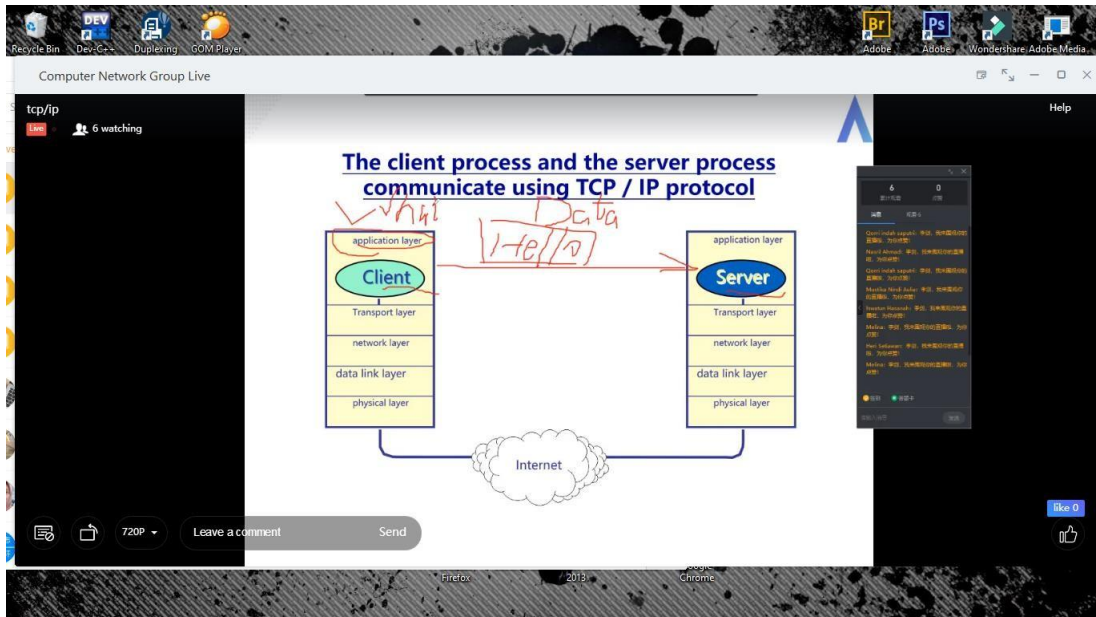


Figure 5. Documentation while learning Computer Network

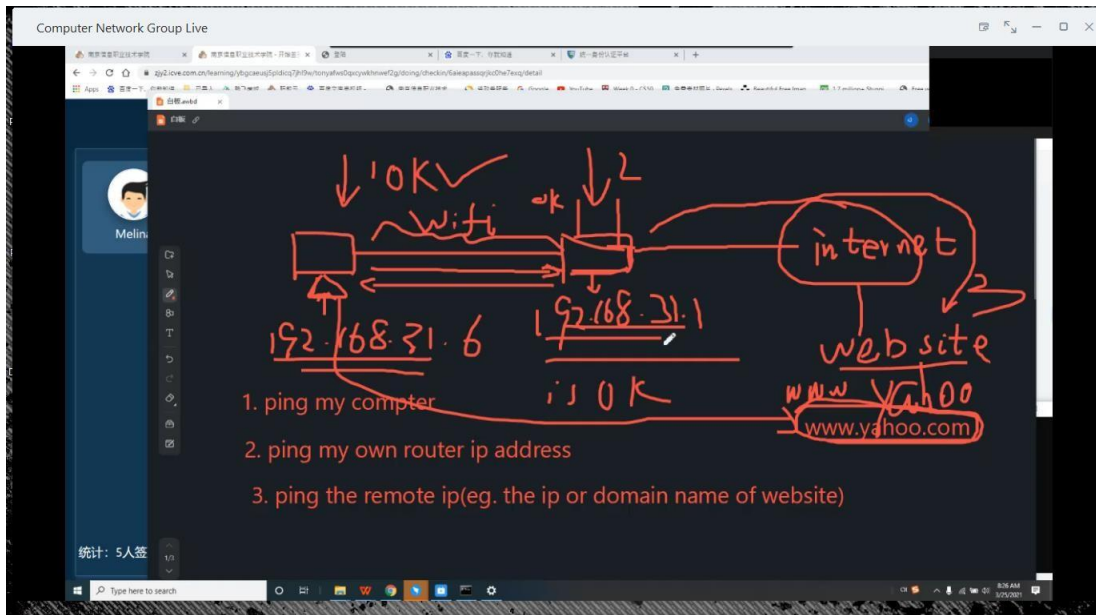


Figure 6. Documentation while learning Computer Network

### 3. Digital Signal Course

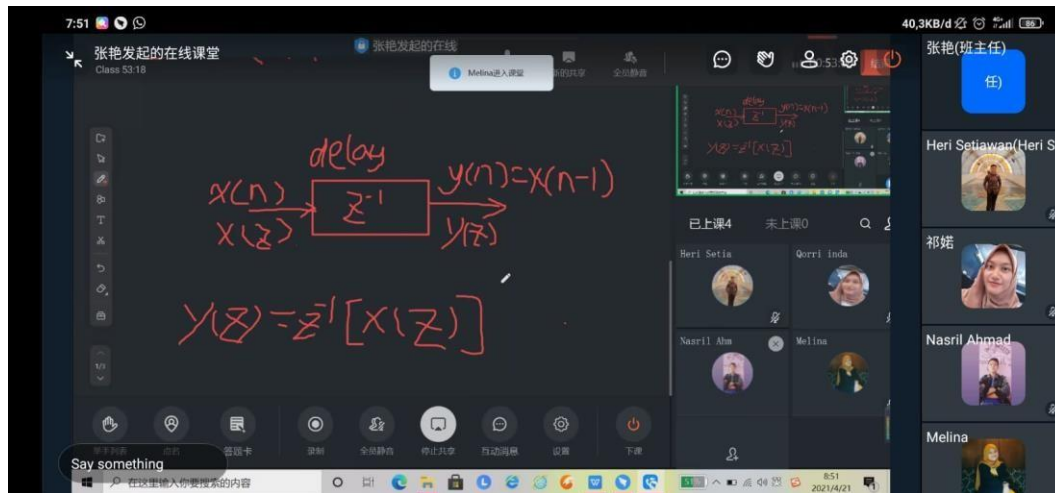


Figure 7. Documentation while learning Digital Signal

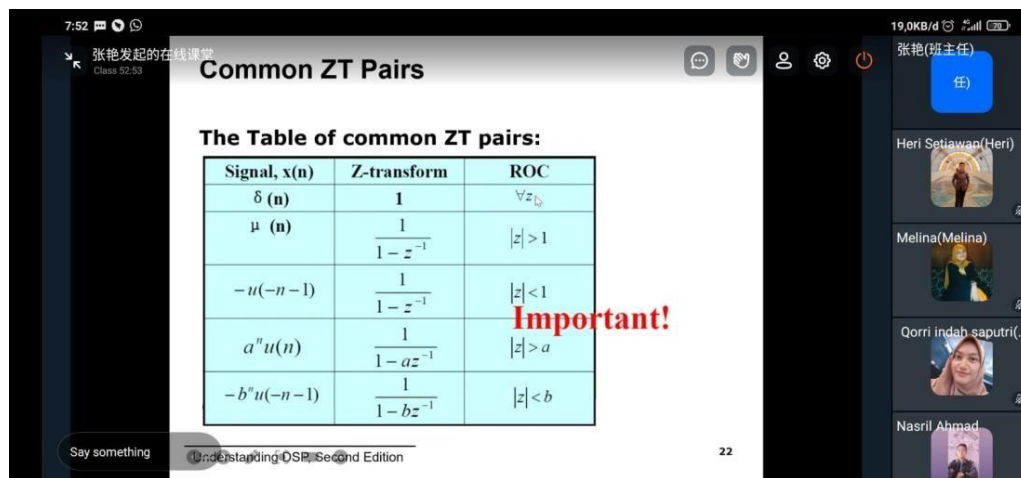


Figure 8. Documentation while learning Digital Signal



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

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

Shifted:

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

The slide also features two stem plots: the first shows a single impulse at  $n=0$  labeled  $\delta(n)$ , and the second shows an impulse at  $n=2$  labeled  $\delta(n-2)$ . The source is cited as "Understanding DSP, Second Edition".

On the right side of the Zoom window, there is a list of fonts under the heading "用好字体, 写好文档". The fonts listed include: 方正小标宋\_GBK, 方正仿宋\_GB2312, 方正仿宋\_GBK, 方正公文小标宋, 方正小标宋简体, 方正清仿宋\_简 Bold, and 方正粗黑宋简体.

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 features a frequency spectrum diagram with five channels labeled 1 through 5. The frequency axis is marked with values: 5725, 5735, 5755, 5775, 5795, 5815, 5835, and 5850. Handwritten red annotations show that each channel has a 20 MHz bandwidth, with the first channel spanning from 5735 to 5755 MHz, the second from 5755 to 5775 MHz, and the fifth from 5815 to 5835 MHz. A dashed line indicates the continuation of the pattern.

Below the diagram, the text reads: "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."

On the right side of the Zoom window, there is a list of participants including: 张艳(班主任), Heri Setiawan(Heri), Melina(Melina), Qorri indah saputri(...), and Nasril Ahmad.

Figure 10. Documentation while learning Broadband Access Technology

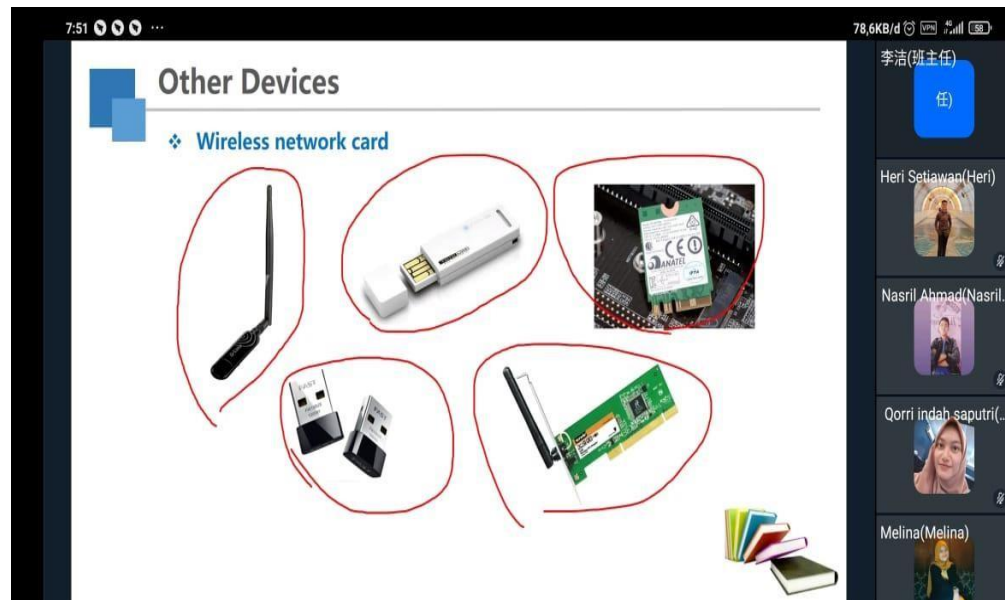


Figure 11. Documentation while learning Broadband Access Technology

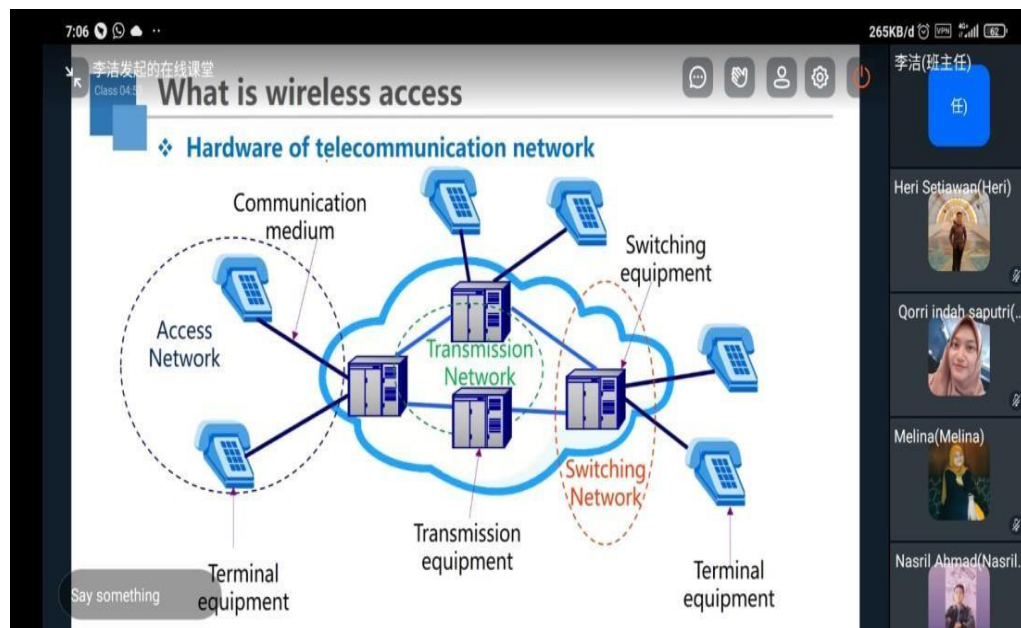


Figure 12. Documentation while learning Broadband Access Technology

## 5. Programming Course

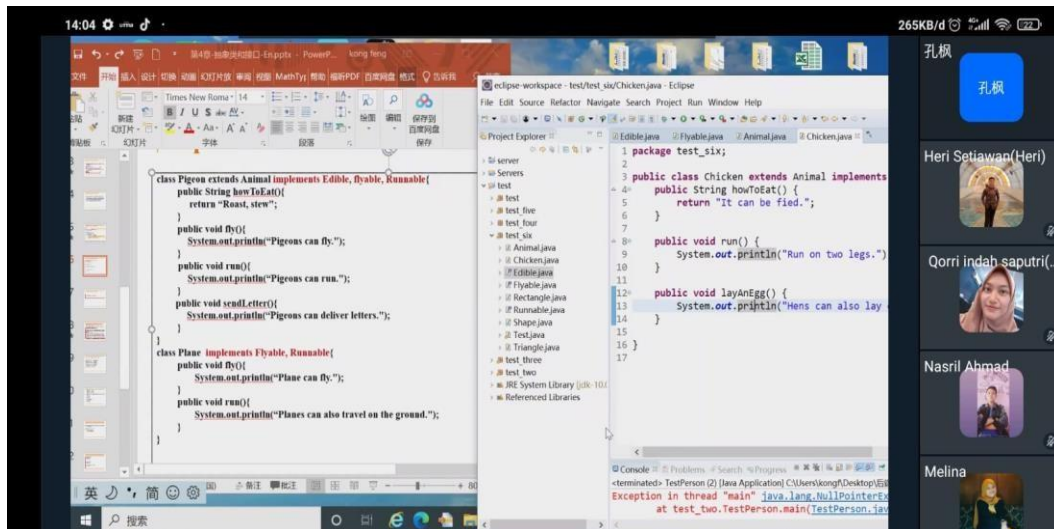


Figure 13. Documentation while learning Programming

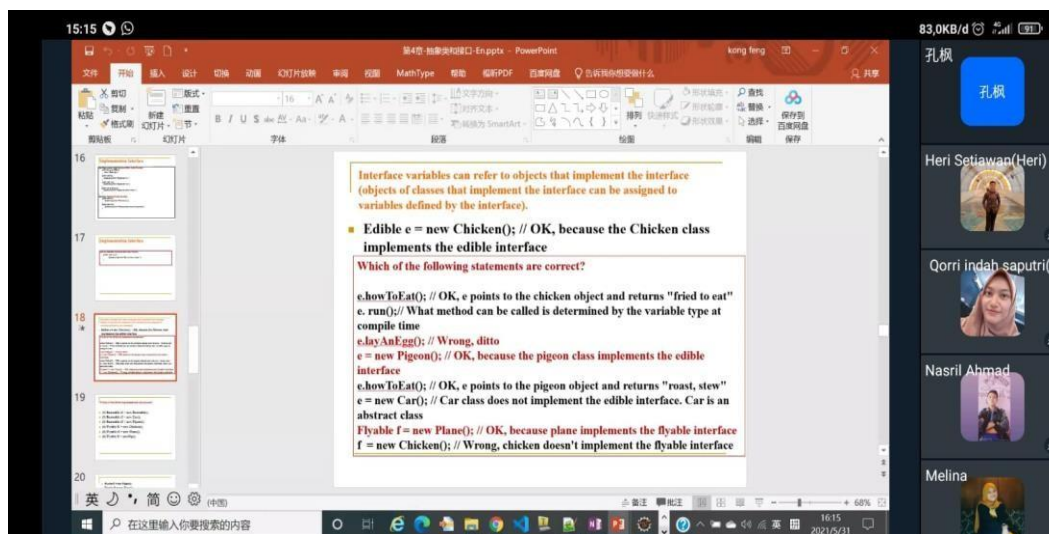


Figure 14. Documentation while learning Programming

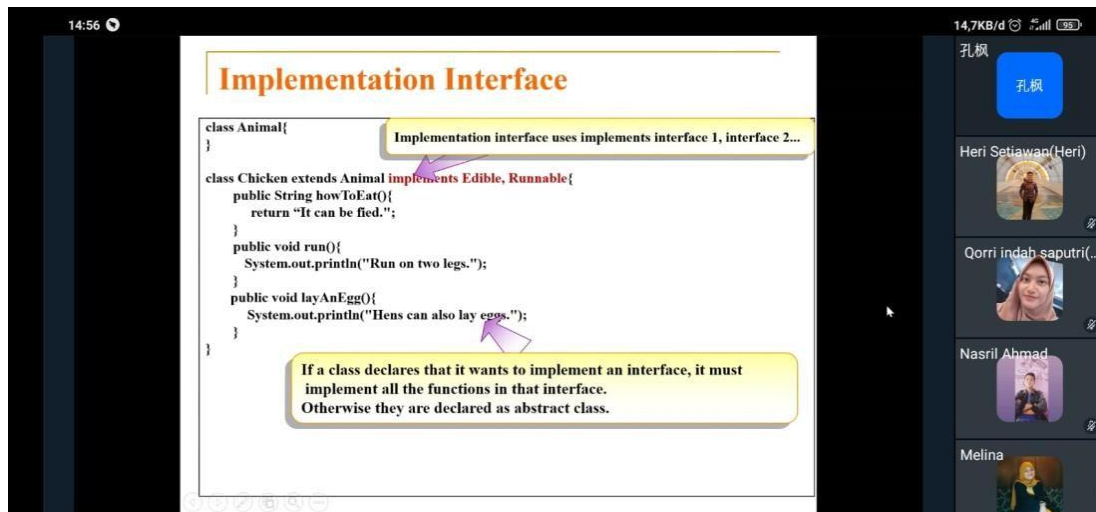


Figure 15. Documentation while learning Programming

## 6. Object Oriented Programming Course

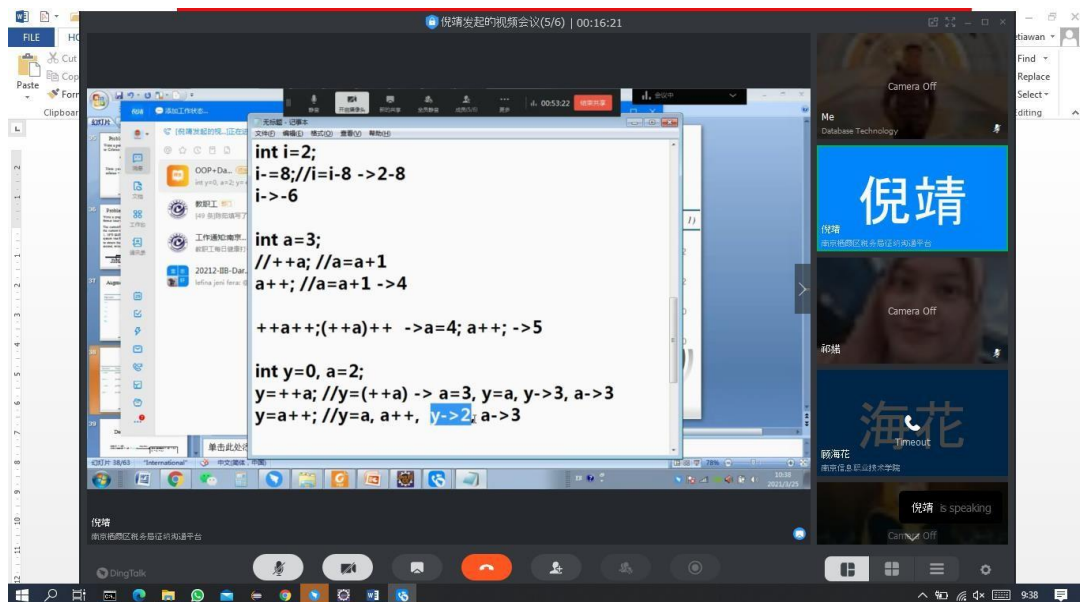


Figure 16. Documentation while learning Object Oriented Programming

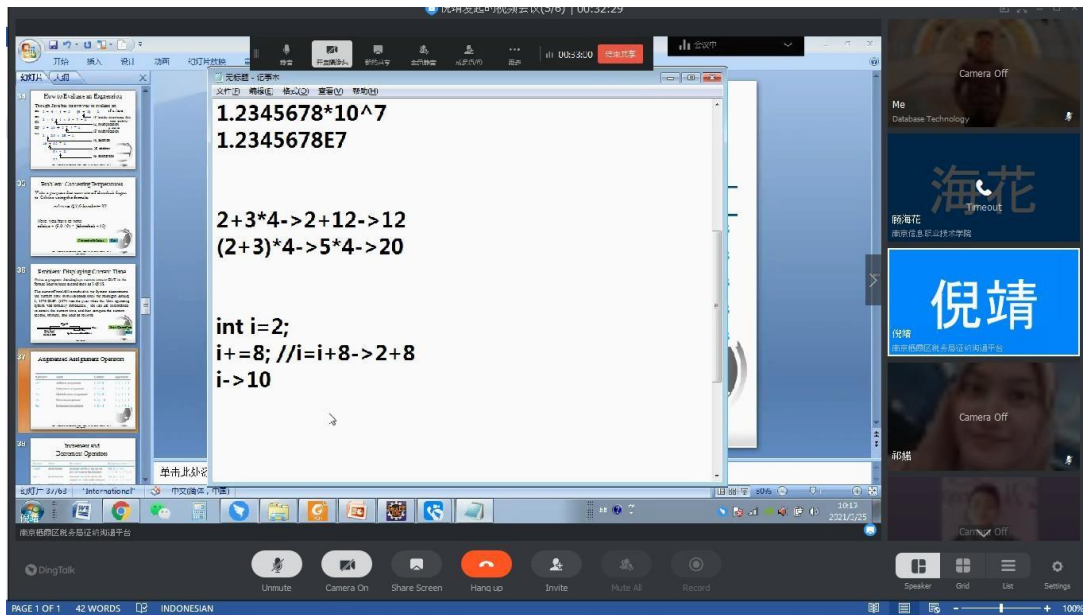


Figure 17. Documentation while learning Object Oriented Programming

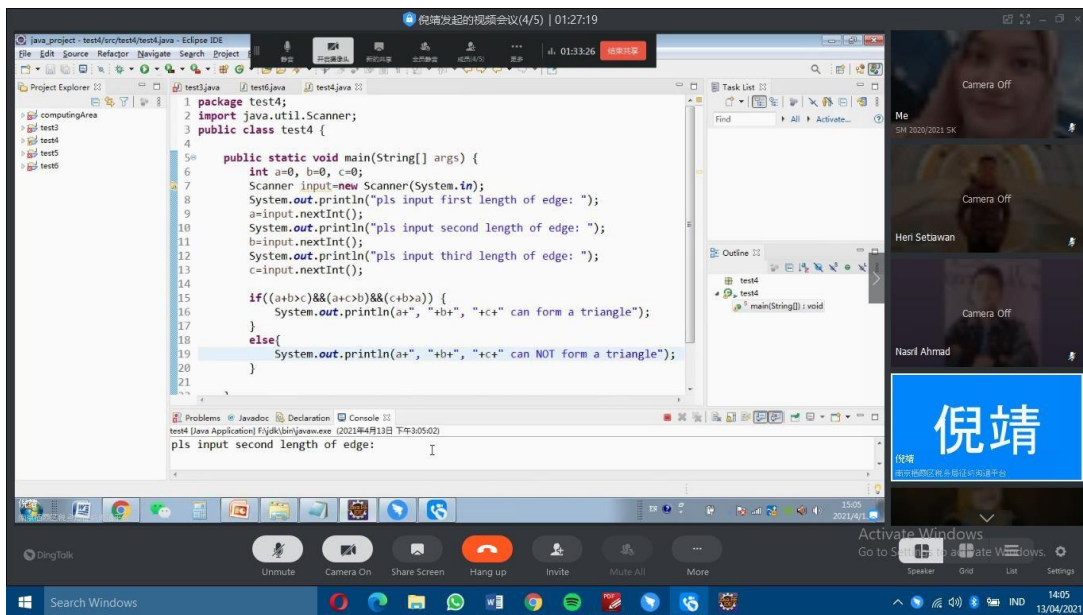


Figure 18. Documentation while learning Object Oriented Programming