

Tracer Study of Alumni from the Department of Dakwah and Islamic Communication, STAIN Bengkalis

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ABSTRACT: The Department of Da'wah and Islamic Communication at STAIN Bengkalis requires a program that can assist in managing alumni data. Currently, the system used in the Department of Da'wah and Islamic Communication is still conventional, meaning data is typed manually one by one using commonly used software such as Microsoft Word and Microsoft Excel. This process takes a considerable amount of time and is prone to errors. Additionally, there is no dedicated data storage, which means that previously entered data can be lost and must be retyped as needed.

This research develops a web-based application using the PHP (Hypertext Preprocessor) programming language and MySQL as the database for data storage. The application includes three types of users: the administrator of the Department of Da'wah and Islamic Communication, alumni, and companies. The admin can input alumni data, job vacancies, agendas, and articles, and also provide alumni data recap information. Alumni who have not yet logged in must first register by filling out a registration form, after which they can log in, post job vacancies, and view job openings posted by fellow alumni, the department, and companies. Likewise, companies must fill out a registration form before they can log in and share job vacancy information.

KEYWORDS: Database, entry, PHP, and MySQL

1. INTRODUCTION

Alumni are individuals who have completed their studies at a higher education institution. Alumni data collection is part of the policy set by the Ministry of Education and Culture (Kemdikbud), which must be carried out annually. Alumni data also form part of the accreditation standards. In the Department of Da'wah and Islamic Communication, alumni data management is still conventional, meaning that most of the data is processed manually, and only partially computerized. However, the existing computerized system still lacks a proper data storage facility, namely a database.

Currently, the Department of Da'wah and Islamic Communication at STAIN Bengkalis has produced graduates whose numbers continue to grow each year. These alumni have taken up various professional roles across different regions. Therefore, there is a need for a platform that allows alumni to communicate with each other as well as with the department. Through such a platform, alumni can interact and share information with one another.

With the establishment of this communication platform, it is expected that alumni can share information such as job vacancies, employment updates, and other useful activities that benefit both the Department of Da'wah and Islamic Communication at STAIN Bengkalis and the alumni themselves. Furthermore, having alumni data becomes critically important during accreditation assessments at both the departmental and program level, as it contributes to achieving an excellent accreditation score.

In today's digital era, where technological advancements are accelerating rapidly and information can be produced and disseminated quickly, a key issue is how information can be easily accessed and utilized by users—as seamlessly as face-to-face communication. For this reason, a system is needed that is developed using web-based programming languages, specifically PHP (Hypertext Preprocessor), with MySQL as the database server.

It is hoped that the application being developed

can serve as a platform that provides tangible benefits for the Department of Da'wah and Islamic Communication at STAIN Bengkalis, companies, and especially the alumni. This initiative emerges from the current disconnect in communication between the alumni and the Department of Da'wah and Islamic Communication, as well as the lack of comprehensive data regarding alumni employment status—whether employed or unemployed.

Based on this background, the researcher is interested in conducting a study entitled "Tracer Study of Alumni of the Department of Da'wah and Islamic Communication, STAIN Bengkalis."

2. SYSTEM ANALYSIS

A. Analysis of the Current System

At present, the existing system reveals several shortcomings, notably the limited availability of alumni information. There has not yet been a formal **Alumni Tracer Study** implemented for the Department of Da'wah and Islamic Communication at STAIN Bengkalis. Moreover, alumni data collection is still conducted conventionally and lacks an integrated database system.

The academic program manages data using Microsoft Office Excel, with complete student data obtained from the academic affairs unit. When the Head of the Study Program requests alumni data, the program staff prints the data and submits it to the Head of the Department.

In cases where a company wishes to share job vacancy information, the company typically contacts either the General Affairs Division or the Department at STAIN Bengkalis directly. If the vacancy is submitted to the General Affairs Division, they will forward the information to the Department, which will then pass it on to the Study Program. Alternatively, if the job information is submitted directly to the Study Program, the program will immediately disseminate it through the alumni communication group.

In instances where job vacancy information is received via telephone, the General Affairs Division will type up the information, print it out, and deliver it to the Department for further distribution.

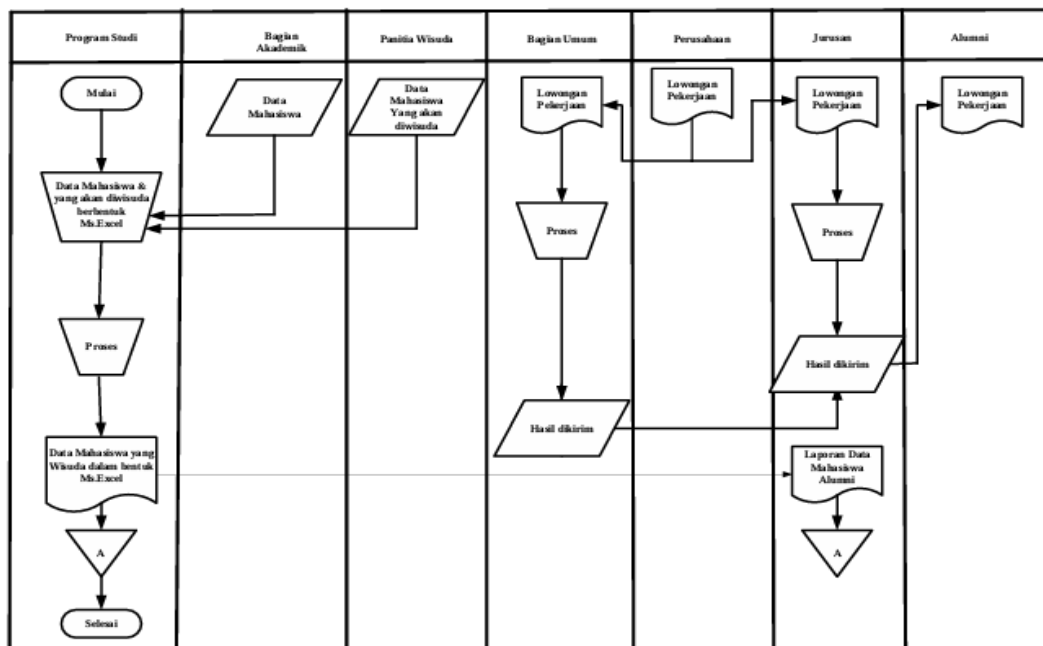


Figure 3.1 The Current System in Operation

B. Proposed System

The system proposed for the Department of Da'wah and Islamic Communication is an Alumni Tracer Study System, which is capable of managing alumni data and job vacancies.

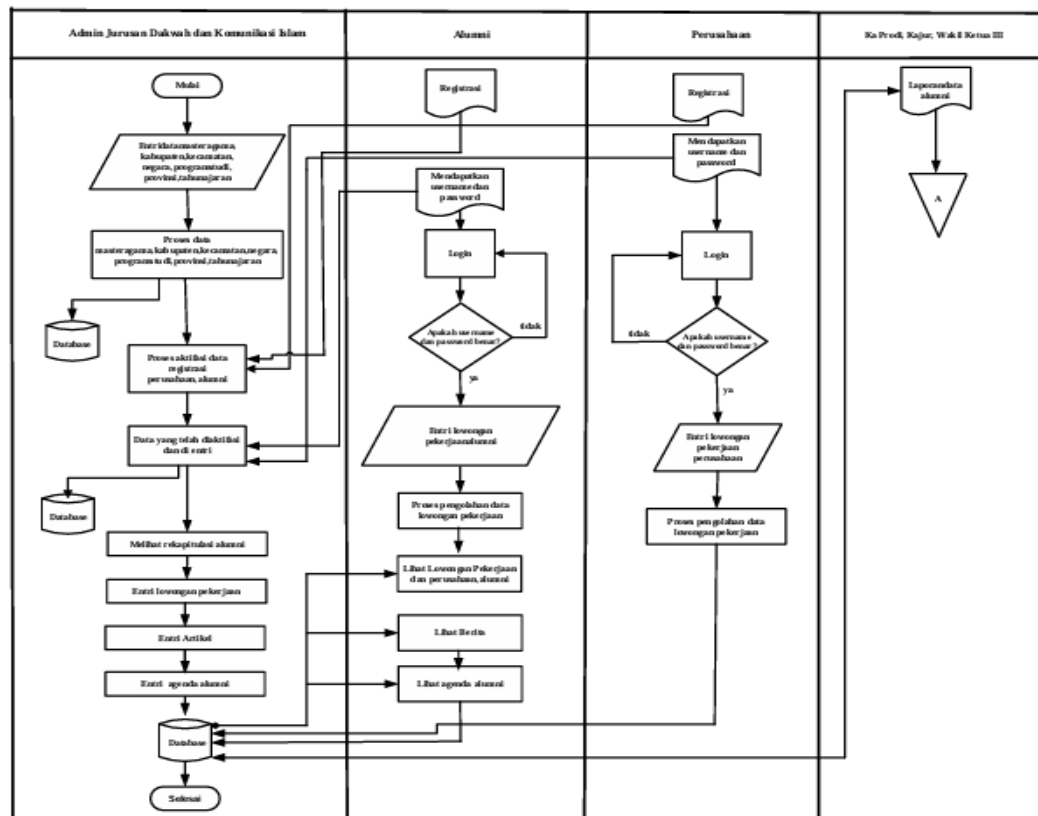


Figure 3.2 Proposed System Flow

C. System Design

1. Global Design

In the proposed system, there are three parties involved: the Administrator of the Department of Da'wah and Islamic Communication, alumni, and companies. The Administrator of the Department of Da'wah and Islamic Communication can input articles, manage agendas, post job vacancies, and view information about alumni and companies. For companies with authorized access, they are allowed to enter company profile data and post job vacancies. Alumni, on the other hand, can register themselves as alumni, share job vacancy information, view agendas, and read articles.

2. Context Diagram

A context diagram illustrates the system for processing alumni data and job vacancies, also referred to as career management. This diagram shows the data and entities involved in the alumni tracer study system. The key parties involved in this system include the Administrator of the Department of Dakwah and Islamic Communication, Alumni of the Department of Dakwah and Islamic Communication, and Companies.

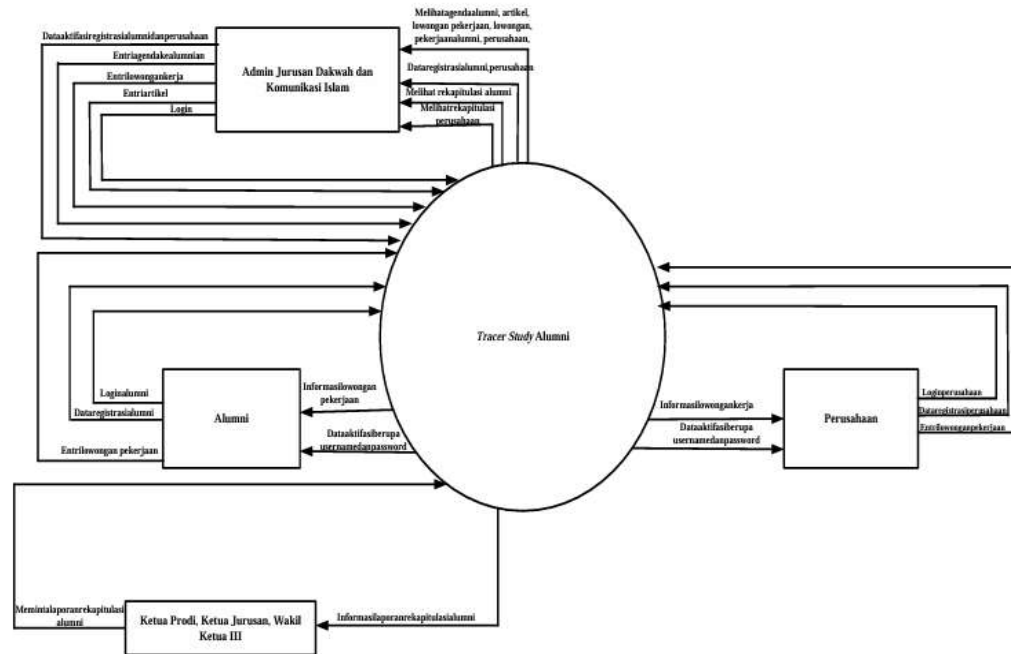


Figure 3.3 Context Diagram

3. Data Flow Diagram

The design of the DFD or Data Flow Diagram in this alumni tracer study is carried out to ensure that the system being developed aligns with the intended objectives. Therefore, preliminary data collection is conducted first. The DFD is created after performing a system analysis, which includes both the current system and the proposed system. The Level 0 DFD shows that this alumni tracer study is divided into two main processes: alumni data processing and job vacancy management.

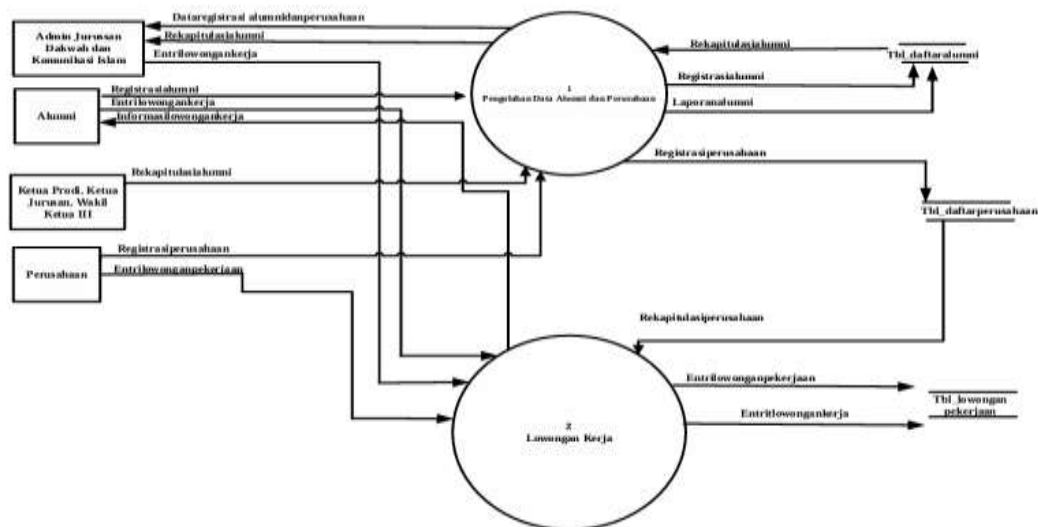


Figure 3.4 DFD Level 0

In the Level I DFD for the alumni and company data processing, the processes are further detailed into activation and recapitulation processes, while the job vacancy process is further broken down into job vacancy entry.

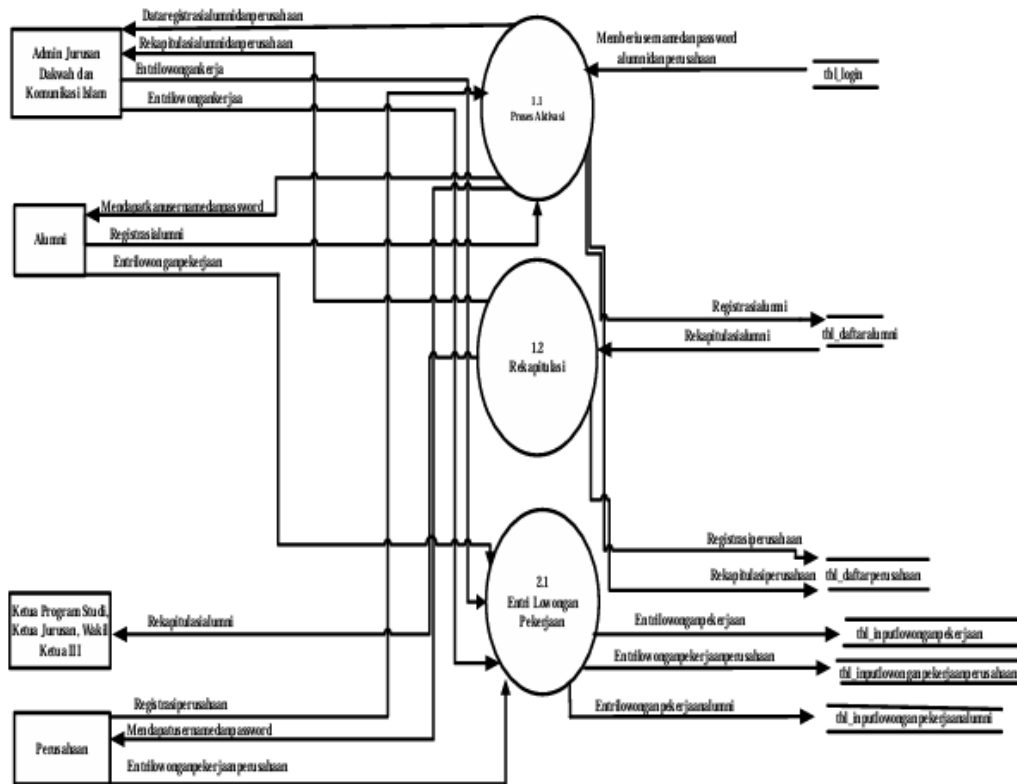


Figure 3.5 Data Flow Diagram (Level 1) of the Alumni Tracer Study

4. Entity Relationship Diagram (ERD)

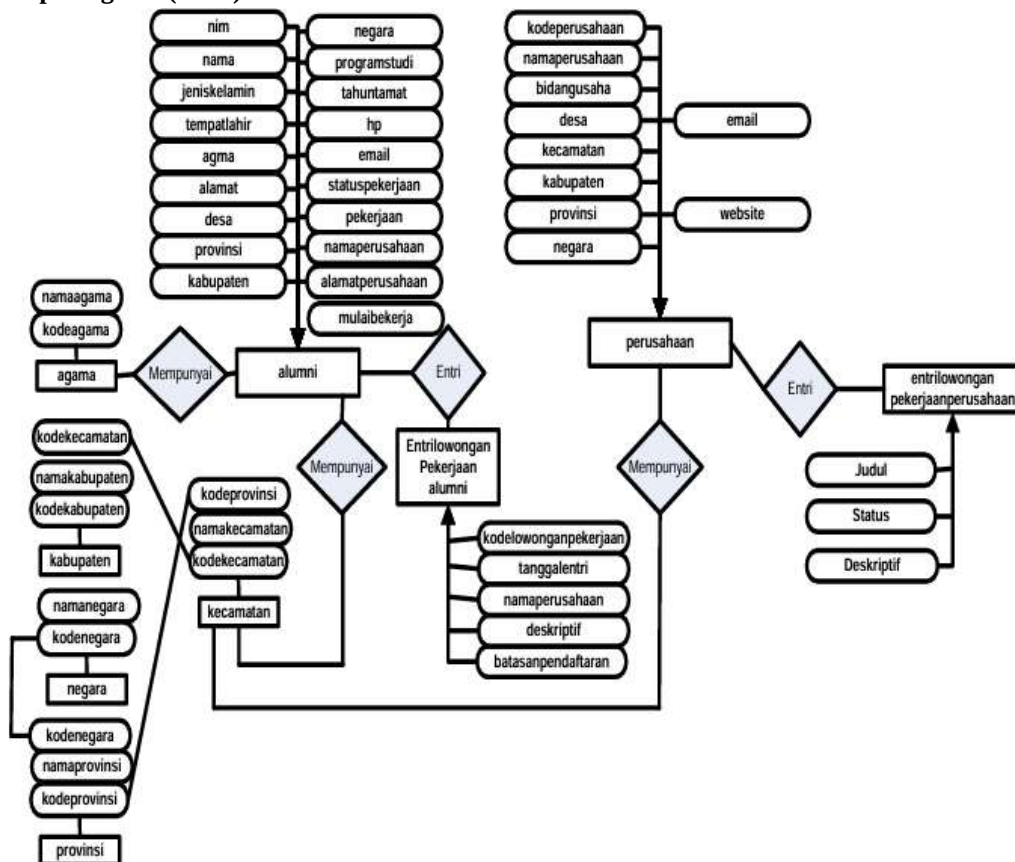
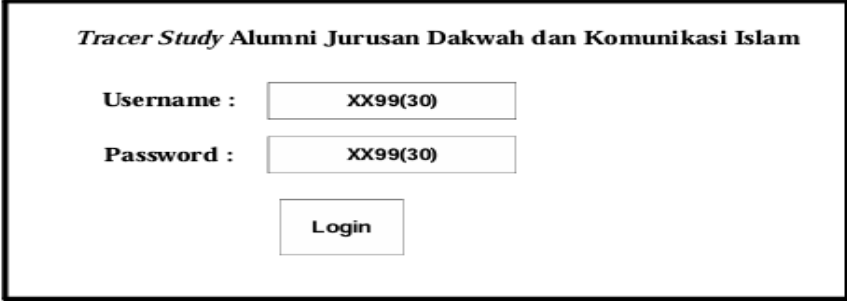


Figure 3.6 Entity Relationship Diagram (ERD) of the Alumni Tracer Study System

5. System Design

A. Input Design

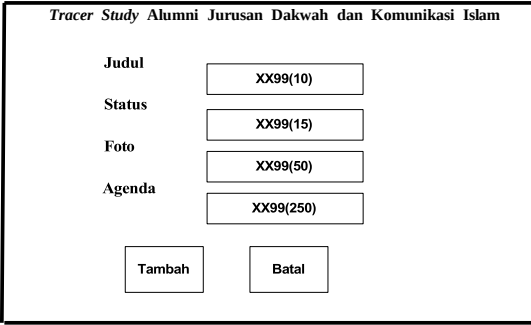
Input design for login, including Department Admin of Dakwah and Islamic Communication, Alumni, and Companies.



The form is titled "Tracer Study Alumni Jurusan Dakwah dan Komunikasi Islam". It contains two input fields: "Username :" with the value "XX99(30)" and "Password :" with the value "XX99(30)". Below these fields is a "Login" button.

Figure 3.7 Login Input Design

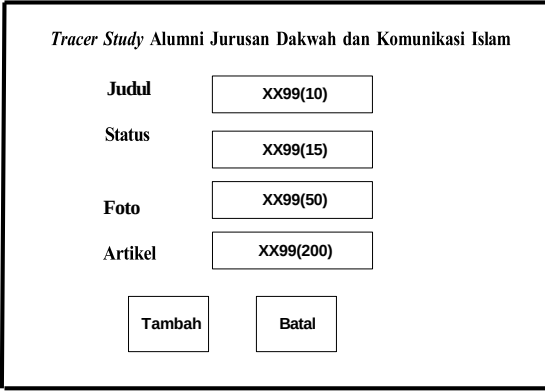
1. Agenda Input Design



The form is titled "Tracer Study Alumni Jurusan Dakwah dan Komunikasi Islam". It contains four input fields: "Judul" with value "XX99(10)", "Status" with value "XX99(15)", "Foto" with value "XX99(50)", and "Agenda" with value "XX99(250)". Below these fields are two buttons: "Tambah" and "Batal".

Figure 3.8 Agenda Input Design

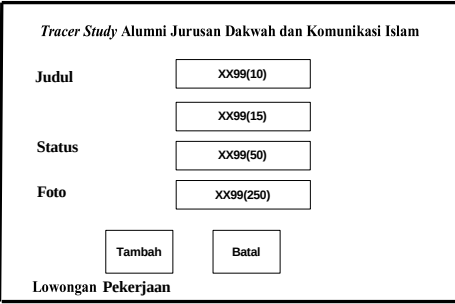
2. Article Input Design



The form is titled "Tracer Study Alumni Jurusan Dakwah dan Komunikasi Islam". It contains four input fields: "Judul" with value "XX99(10)", "Status" with value "XX99(15)", "Foto" with value "XX99(50)", and "Artikel" with value "XX99(200)". Below these fields are two buttons: "Tambah" and "Batal".

Figure 3.9 Article Input Design

3. Job Vacancy Input Design



The form is titled "Tracer Study Alumni Jurusan Dakwah dan Komunikasi Islam". It contains four input fields: "Judul" with value "XX99(10)", "Status" with value "XX99(15)", "Foto" with value "XX99(50)", and "Lowongan Pekerjaan" with value "XX99(250)". Below these fields are two buttons: "Tambah" and "Batal".

Figure 3.10 Alumni Input Design

Tracer Study of Alumni from the Department of Dakwah and Islamic Communication, STAIN Bengkalis

B. File Design

A database is formed from a collection of files. File design serves as the storage medium for the data that is input as required to obtain information or reports. The file structure design of the *Tracer Study Alumni Database* of the Department of Da'wah and Islamic Communication is as follows:

Database Name: db_traceralumni

Table Name: tbl_agenda Primary Key: kodeagenda

Table 3.1 Agenda File Design

Field Name	Type	size
kodeagenda	VARCHAR	10
judul	VARCHAR	10
status	VARCHAR	15
foto	VARCHAR	50
agenda	VARCHAR	250

Database Name: db_traceralumni

Table Name: tbl_login

Primary Key: password

Table 3.2 Password File Design

Field name	Type	Size	Null/Not Null
username	VARCHAR	30	not null
password	VARCHAR	30	not null

Database Name: db_traceralumni

Table Name: tbl_agenda

Primary Key: kodelowonganpekerjaanadmin

Table 3.3 Job Vacancy File Design

Field name	Type	Size	Null/notnull
Judul	VARCHAR	50	notnull
Status	VARCHAR	15	notnull
Foto	VARCHAR	50	notnull
Lowongan Pekerjaan	VARCHAR	250	notnull

Database Name: db_traceralumni

Table Name: tbl_alumni

Primary Key: nim

Table 3.4 Alumni File Design

Field name	Type	Size	Null/Not null
nim	VARCHAR	10	not null
nama	VARCHAR	50	not null
tempatlahir	VARCHAR	25	not null
tanggallahir	VARCHAR	15	not null
jeniskelamin	VARCHAR	15	not null
alamatsekarang	VARCHAR	10	not null
kecamatan	VARCHAR	10	not null
kabupaten	VARCHAR	10	not null
provinsi	VARCHAR	10	not null
negara	VARCHAR	10	notnull
nomorhandphone	VARCHAR	25	not null
Prodi	VARCHAR	50	not null
tahunmasuk	VARCHAR	20	null
tahuntamat	VARCHAR	15	not null
hp	VARCHAR	50	null
email	VARCHAR	50	null

Database Name: db_traceralumni

Table Name: tbl_lowongankerjaalumni

Table 3.5 Alumni Job Vacancy File Design

Field name	Type	Size	Null/notnull
Judul	VARCHAR	50	notnull
Status	VARCHAR	15	notnull
Foto	VARCHAR	50	notnull
Lowongan Pekerjaan	VARCHAR	250	notnull

Database Name: db_traceralumni

Table Name: tbl_perusahaan

Primary Key: kodeperusahaan

Table 3.6 Company File Design

Field name	Type	Size	null/notnull
kodeperusahaan	VARCHAR	10	notnull
namaperusahaan	VARCHAR	50	notnull
bidangperusahaan	VARCHAR	50	notnull
alamatperusahaan	VARCHAR	50	notnull
desa	VARCHAR	10	notnull
kecamatan	VARCHAR	10	notnull
kabupaten	VARCHAR	10	notnull
provinsi	VARCHAR	10	notnull
negara	VARCHAR	250	notnull
email	VARCHAR	10	notnull
website	VARCHAR	50	notnull
namakaryawan	VARCHAR	50	notnull
jeniskelamin	VARCHAR	15	notnull
alamatkaryawan	VARCHAR	50	notnull
jabatan	VARCHAR	50	notnull
nomorhandpone	VARCHAR	20	notnull

4. Program Implementation

The alumni tracer study program of the Department of Da'wah and Islamic Communication can be accessed at the following address: alumnidki.kampusmelayu.ac.id.
low is the display when accessing the website.



Figure 3.1 Main Display of the Alumni Tracer Study

If the alumni or company do not have an account yet, they can select the **register** menu to create a username and password to access the system. If you are an alumnus, please select the **alumni** radio button; otherwise, if you are a company, select the **company** radio button.



Figure 3.2 Alumni Registration Display

After completing the alumni registration process, alumni can log in using the account they created, and the following display will appear.



Figure 3.3 Alumni Homepage Display

After accessing the alumni display, alumni can enter their data as needed, as shown in the display below.



Figure 3.4 Alumni Profile Display

In the alumni menu, users can also upload and change their profile photo as desired, as shown in the display below.



Figure 3.5 Alumni Registration Display

In the alumni interface, there is an article menu where alumni can view information shared by fellow alumni, as shown in the display below.



Figure 3.6 Article Menu

If alumni wish to share information or the latest updates, they can select "Add Data," and a display like the one below will appear, allowing them to enter the desired information, which can also include a photo.



Figure 3.7 Add Article Display

In the agenda menu, several sample agendas are already displayed, and if you wish to add a new agenda, you can select "Add Data" as shown in the image below.



Figure 3.8 Agenda Menu

In the "Add Data" display for entering a new agenda schedule, the interface appears as shown in the image below.



Figure 3.9 Agenda Entry Interface

In the following image, the job vacancy menu entered by alumni is displayed. If alumni wish to share new job vacancy information, they can select the "Add Data" menu and enter the job vacancy details.



Figure 3.10 Job Vacancy Menu

Once the "Add Data" menu is selected, a display like the one below will appear, allowing you to directly enter the job vacancy to be published.



Figure 3.11 Job Vacancy Entry Menu

After completing the process of adding article data, agenda, or updating alumni user data, you can end the session by selecting the logout menu.



Figure 3.12 Logout Menu



Figure 3.13 Alumni Tracer Study Homepage Menu

If logged in as an administrator of the Department of Da'wah and Islamic Communication, the admin can view alumni data, companies, articles, agendas, and job vacancies. In addition, the admin can also add, modify, and delete data.



Figure 3.14 Admin Page Display

The display on the admin profile menu allows input of data about the Department of Da'wah and Islamic Communication, as shown below. The display on the admin profile menu allows input of data about the Department of Da'wah and Islamic Communication, as shown below.



Figure 3.15 Admin Profile Menu

Tracer Study of Alumni from the Department of Dakwah and Islamic Communication, STAIN Bengkalis

The admin interface also provides an option to change the password by selecting 'Edit Password', which will display a screen as shown below.

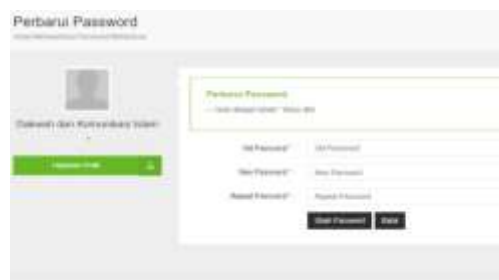


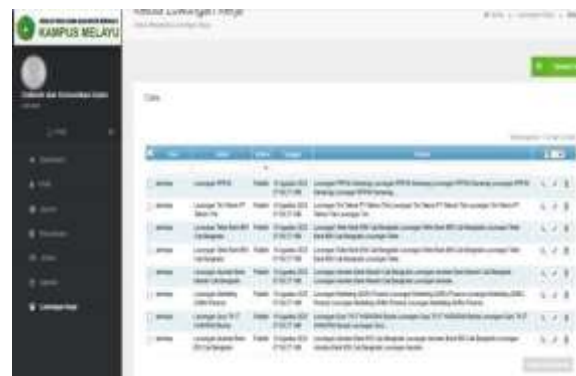
Figure 3.16 Change Password Display

In the following display, the admin can view alumni data that has been entered by the alumni of the Department of Da'wah and Islamic Communication.



No	Nama	NIM	Email	Password
1	Alumni 1	123456789	alumni1@gmail.com	123456789
2	Alumni 2	987654321	alumni2@gmail.com	987654321
3	Alumni 3	567890123	alumni3@gmail.com	567890123
4	Alumni 4	345678901	alumni4@gmail.com	345678901
5	Alumni 5	210987654	alumni5@gmail.com	210987654
6	Alumni 6	876543210	alumni6@gmail.com	876543210
7	Alumni 7	654321098	alumni7@gmail.com	654321098
8	Alumni 8	432109876	alumni8@gmail.com	432109876
9	Alumni 9	210987654	alumni9@gmail.com	210987654
10	Alumni 10	098765432	alumni10@gmail.com	098765432

Figure 3.17 Alumni Data Displ



No	Nama	Alamat	Kontak
1	Perusahaan 1	Jl. Merdeka No. 1	08123456789
2	Perusahaan 2	Jl. Sudirman No. 2	08198765432
3	Perusahaan 3	Jl. Diponegoro No. 3	08156789012
4	Perusahaan 4	Jl. Soekarno No. 4	08134567890
5	Perusahaan 5	Jl. Kartasura No. 5	08121098765
6	Perusahaan 6	Jl. Klaten No. 6	08187654321
7	Perusahaan 7	Jl. Sukoharjo No. 7	08165432109
8	Perusahaan 8	Jl. Boyolali No. 8	08143210987
9	Perusahaan 9	Jl. Karanganyar No. 9	08121098765
10	Perusahaan 10	Jl. Sukoharjo No. 10	08109876543

Gambar 3.18 Tampilan Data Perusahaan



Figure 3.19. Interface for Adding a New Article



Figure 3.22 Job Listings Interface



Figure 3.24 Company Registration

Figure 3.25 Company Data Display

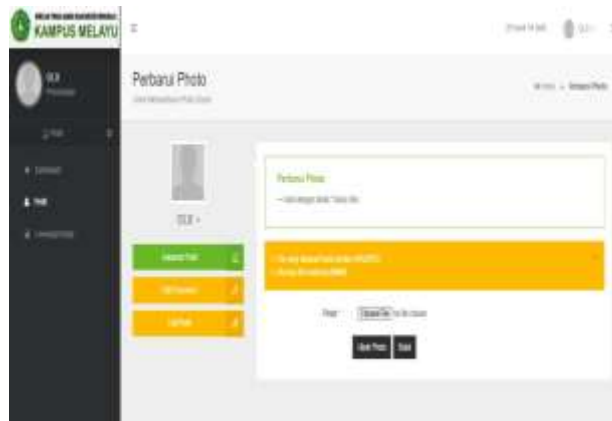


Figure 3.26 Change Profile Photo Display



Figure 3.27 Change Password Display



Figure 3.28 Company Data Editing Interface



Figure 3.29 Company Job Posting Form



Figure 3.30 Job Vacancy Viewing Interface

3. CONCLUSION

Based on the explanation in the previous chapters, several conclusions can be drawn:

1. The Alumni Tracer Study of the Department of Da'wah and Islamic Communication was developed using the PHP programming language and MySQL database, and is accessible at <https://alumnidki.kampusmelayu.ac.id>.
2. The Alumni Tracer Study of the Department of Da'wah and Islamic Communication can display alumni information and job vacancy listings, thereby facilitating the accreditation documentation process for the Department of Da'wah and Islamic Communication at STAIN Bengkalis.

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