Web-Based Elearning Information System Design

at SMA NEGERI 3 PATI

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Design of Information System E-Learning Web Based

in SMA NEGERI 3 PATI

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ABSTRACT

Given the growing technological progress, and lack of effectiveness of media campaigns and learning in high school N 3 PATI, so it would be nice if the means of promotion and learning of the SMA N 3 PATI done with the media to facilitate a campaign website and learning for students.

Based on the above, the authors design an Information System for Web-based E-Learning that can facilitate the SMA N 3 PATI in the means of promotion to the community, enabling students to obtain various materials, questions, answers easily, and can hones students' creativity by uploading a variety of results students' work on the website.

Results from the design of Web-Based Information System for eLearning which writers create a show that this Information System can help SMA N 3 PATI in doing promotional tools and facilitate students in learning activities

Keywords : website, e-learning, systems design, information systems, SMA N 3 PATI, technology, media campaigns.

1. preliminary

The learning information system and promotion process at SMA Negeri 3 PATI are still done manually so that it takes a lot of time and money, besides that students too often have difficulty in finding learning materials or information.

Seeing the various problems faced by SMA Negeri 3 PATI, we made Design of Web-based E-learning Information System at SMA Negeri 3 PATI as a solution to facilitate SMA Negeri 3 PATI in conveying information as well as in do a learning system

2. Theoretical basis

2.1. Basic Concepts of Elearning System

E-learning presents materials provided by students as material study and reference. The material provided is subject matter that has been divided by class. The e-learning process is based on the concept of upload and download download which can be used for free. .

2.2. Understanding E-learning

E-learning is a teaching and learning process where a teacher does not have to deal with it directly in the classroom but through an online website. E-learning process companion teaching and learning that is usually done as a means to enrich children's knowledge students in various subject matter they receive at school.

2.3. Application of Elearning

The application of E-Learning is an effective strategy to catch up the Indonesian nation with other nations who are already one step ahead in the field of science knowledge and technology (science and technology), especially information technology. As a solution, E-Learning has the advantage of cheaper, better, and faster development costs

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2.4. Elearning Goals

The quality of human resources is strong, superior, creative and highly competitive is a very important asset for life. Education is one of the means to improve the quality of human resources. The quality of human resources needs to be sought for alternative education systems at a low cost but can improve the quality of human resources. Efforts to improve quality education can be started by implementing a distance education system (e-learning).

The objectives of implementing this system are:

1) Improving the quality and quality of education in SMA Negeri 3 PATI.

2) Improving the human resources of teachers and students.

3) Provide meaningful learning alternatives in addition to conventional learning that is at school.

4) Encourage students to be active in increasing the rate of acceleration and absorption of knowledge knowledge and technology.

3. Benefits of E-learning

E-learning by using e-learning has various advantages over e-learning with conventional learning. With the advent of e-learning, giving a new color in the learning process.

Some of the advantages of the e-learning learning system are:

1) This e-learning learning system will reduce the operational costs of education, such as construction and maintenance costs of buildings, transportation, stationery, books and others.

2) Not limited by time. Students can determine at any time to study, according to with their respective time availability.

3) Students can choose topics or materials to suit their individual desires and needs. respectively. This is very good because it can support the achievement of learning objectives.

4) For students who have difficulty in understanding the learning material or solving problems can ask the instructor for help interactively.

5) Students can take online exams at any time with their own time

availability. This can be helpful for new admissions exams.

6) Supplements (Additional)

E-learning can serve as a supplement to learning materials in

schools, so that students can get material enrichment.

7) Flexibility to learn anytime and anywhere, as long as you are connected to the internet.

3. General review

3.1 Profile

6HNRODK- PHQHQJDK- LQL- PHQHUDSNDQ- SURILO- \DLWX- 0DQWDS-'DODP- .HSULEDGLDQ -

Grow and Develop in Science Technology, Sports, Arts and

%XGD\D³

3.2 Vision and mission

3.2.1 Vision

The school's vision as an insight that becomes a source of direction for schools must have

foresight. The picture of the future of the school must be reflected in the school's vision.

By analyzing all strengths and weaknesses and paying attention to various aspects,

Vision SMA Negeri 3 Pati is determined as follows:

0DQWDS- 'DODP- .HSULEDGLDQ - 7XPEXK- GDQ- %HUNHPEDQJ- 'DODP- ,OPX- 3HQJHWDKXDQ- 7HNQRORJL --

2ODKUDJD -6HQL-GDQ-%XGD\D³

3.3.1 Mission

An idealistic vision must be translated into concrete steps so that the vision can be achieved

realized, To realize this vision, the school has set a mission which is

efforts to fulfill the interests as stated in the school's vision. Mission

that determined at SMA Negeri 3 Pati are:

1. Prioritizing and upholding values, attitudes, ethics, religious norms and

Positive culture that exists in the Indonesian nation.

2. Implement the learning process effectively and efficiently in

achieving optimal mastery of science and technology.

3. Developing talents and achievements in academics, sports, arts and culture

3.3. School Goals

1. Implement and realize the vision and mission of SMA Negeri 3 Pati.

2. Implement the pilot program for Independent Category Schools / National Standard Schools.

3. Implementing the Information Communication and Technology-Based Learning process

(ICT) or based on Information and Communication Technology.

4. Want to realize a high graduation rate by achieving 100% with a score of

a minimum average of 70.

5. Accommodating various interested parties including school committees

and decided by a meeting of the board of educators chaired by the principal.

6. Socialized to the school community and all interested parties.

4. Discussion

4.1. Web Application Structure Used

A website consists of links that provide various information. So as with the SMA N 3 Pati website, which consists of links that can display data or information that matches the name of the link. The following is the page that is indexed first accessed by the user and linking pages with each other

1) Home

is the first page accessed by the user or user

2) Overview of SMA N 3 Pati

This page displays information about the institution's profile. This page consists of History, Vision and Mission of SMA N 3 Pati

3) News

This page contains some information that is in the school, for example: there is a ceremony today great news, important news concerning SMA N 3 Pati.

4) Agenda

This page contains several events or agendas that will be planned by the

parties SMA N 3 Pati

5) Achievements

This page displays the results of achievements that have been achieved by students or teachers of SMA N 3

Starch.

6) Contact

This page displays a form that contains visitors' criticisms and suggestions for

SMA N 3 Pati website to be better.

7) Documentation

This page contains photos of activities and facilities at SMA N 3 Pati.
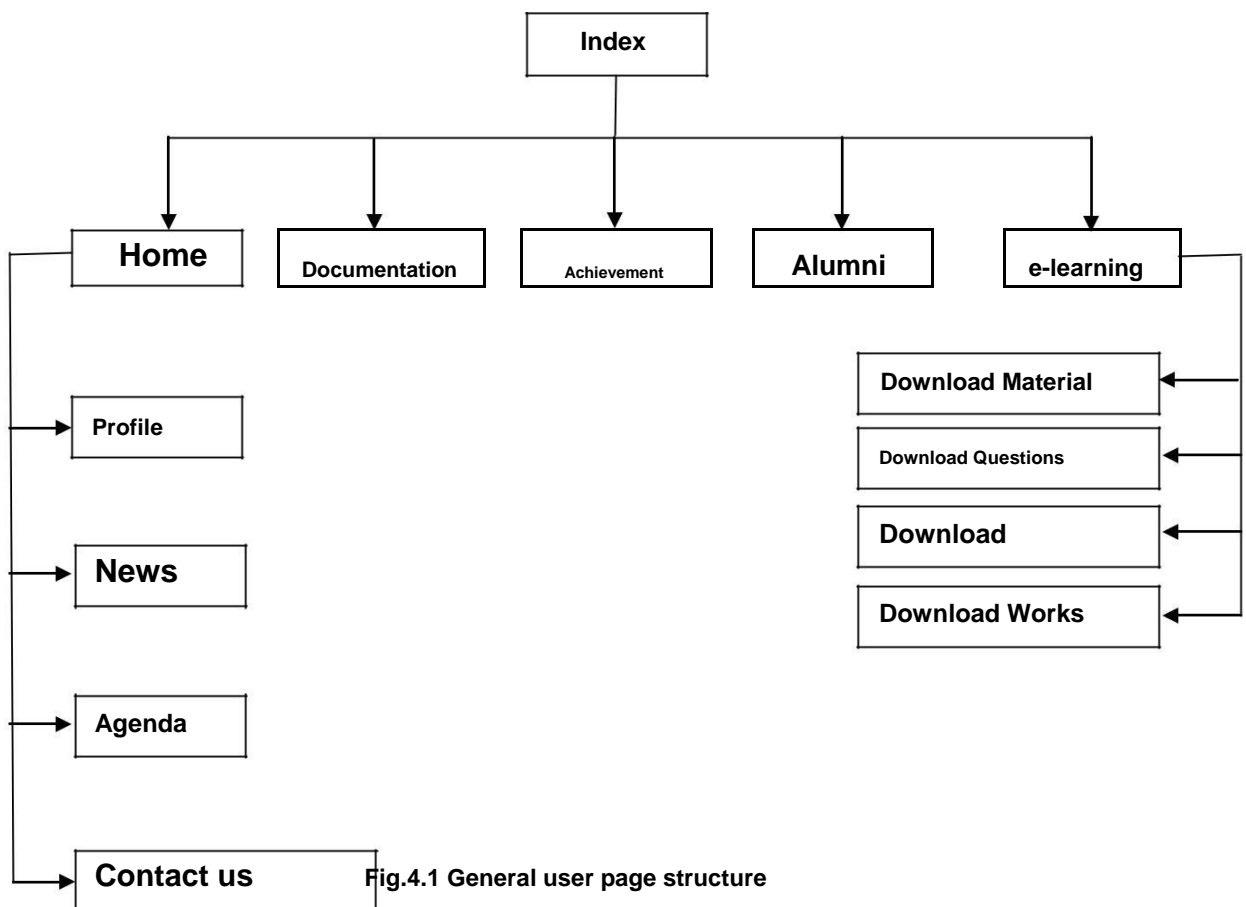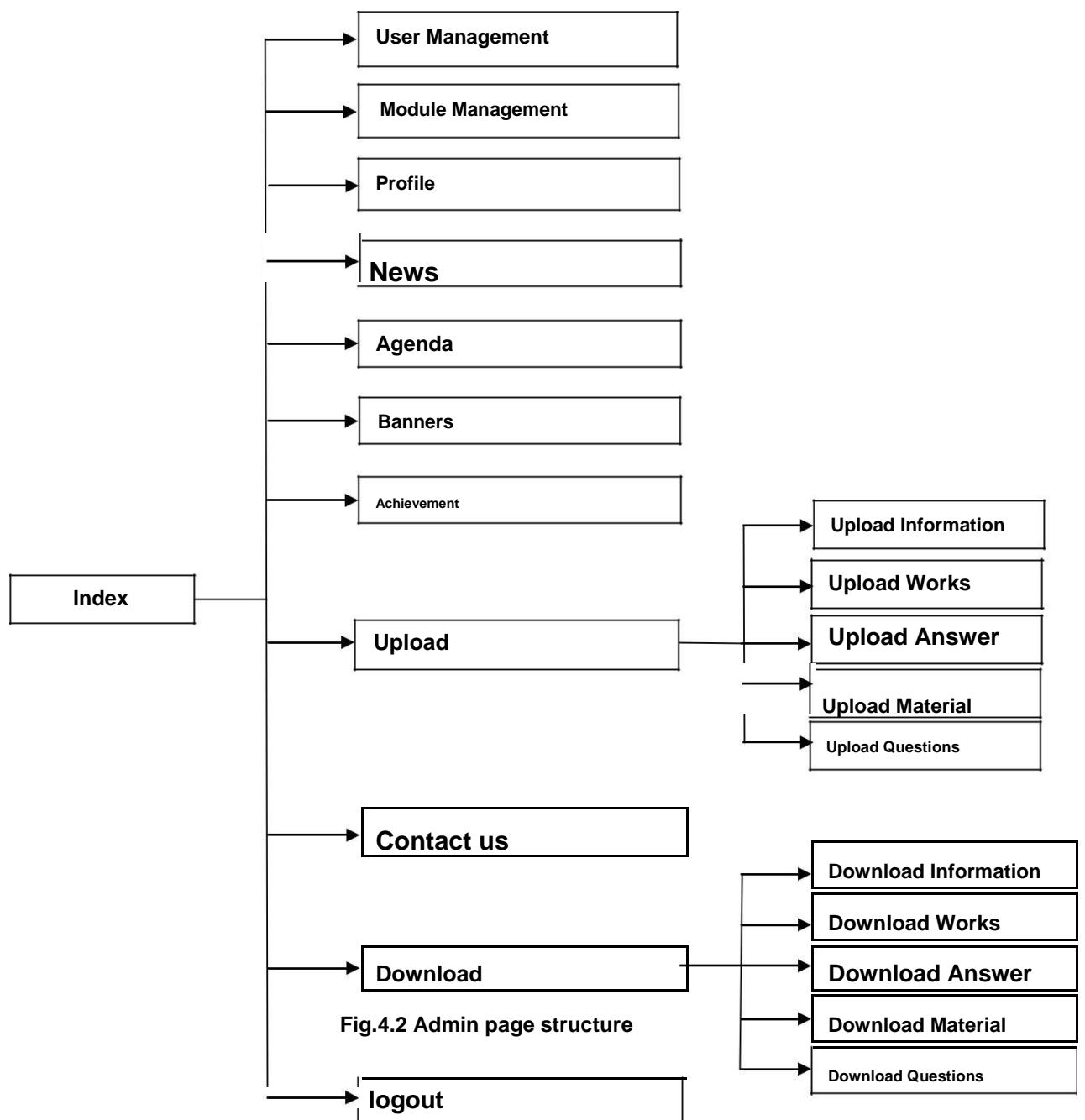
4.1.1. User Page Structure

Fig.4.1 General user page structure

4.1.2. Admin Page Structure

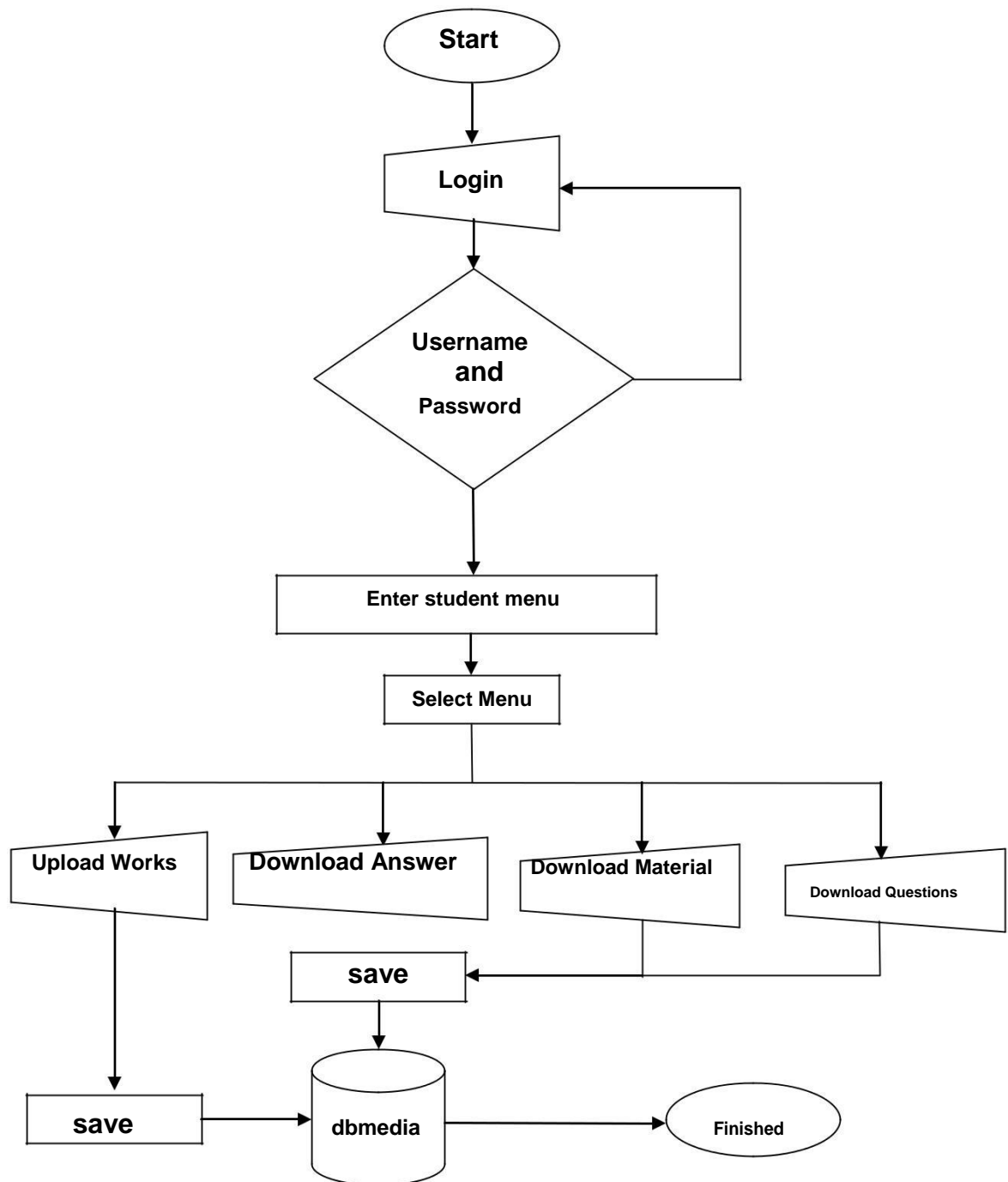Fig.4.2 Admin page structure

4.1.3. Flow chart

Fig.4.3 Flowchart of website access by students

```
                        ┌─────────────┐
                        │    Start    │
                        └──────┬──────┘
                               │
                        ┌──────▼──────┐
                        │    Login    │◄──────────────┐
                        └──────┬──────┘               │
                               │                      │
                               │                    F │
                        ┌──────▼──────┐               │
                       ╱               ╲              │
                      ╱   Username      ╲─────────────┘
                      ╲ and Password    ╱
                       ╲    Right      ╱
                        ╲─────┬───────╱
                              │ T
                   ┌──────────▼───────────┐
                   │ Enter the teacher menu│
                   └──────────┬───────────┘
                              │
                   ┌──────────▼───────────┐
                   │     Select Menu       │
                   └──────────┬───────────┘
```

Start

Login

Username and Password Right

F

T

Enter the teacher menu

Select Menu

Upload Works

Upload Questions

Upload Answer

Upload Material

save

dbmedia

Finished
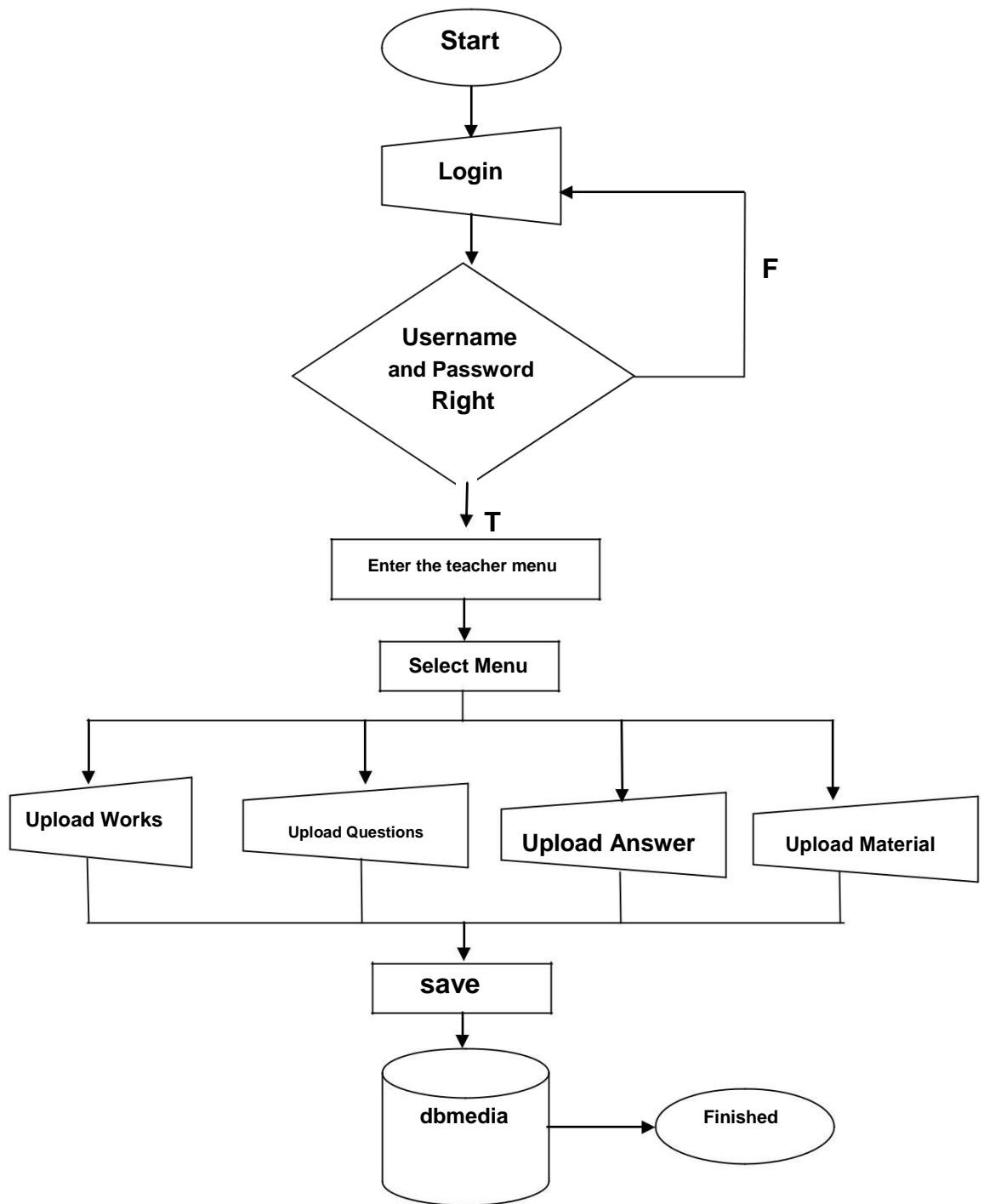
Fig.4.4 Flowchart Teacher
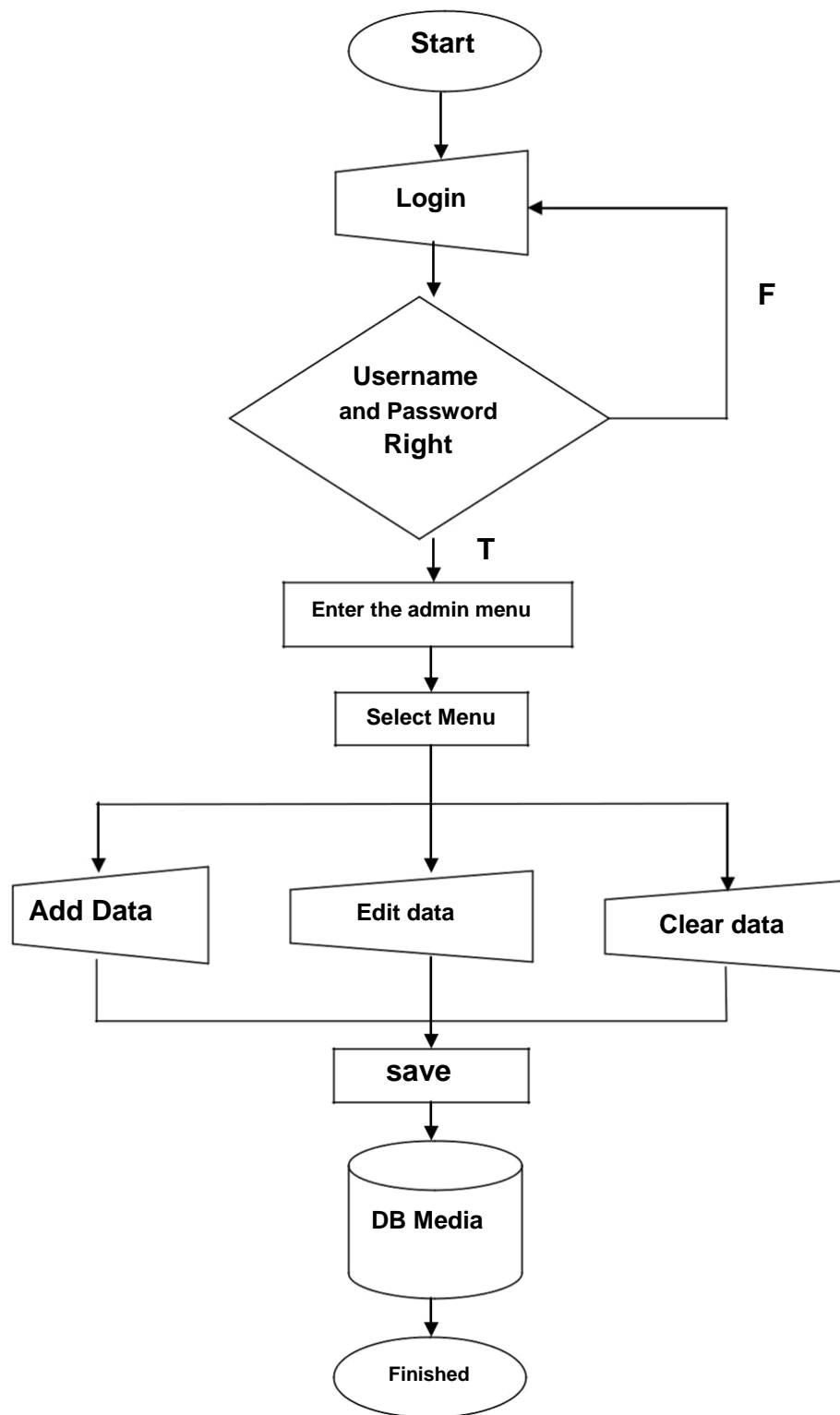
Fig.4.5 Admin Flowchart

4.2   Design Design

1.   Index

HEADER

MAIN COURSE

Main course	**latest news**	**Search News**
Calendar Academic		**Random School Info**
		On line
Top Links University		**Shoutmix**
	Previous News	**Text 1**
Banners	**Figure 4.6 Index page design**	**Text 2**
	Agenda	

Information:

Footer

This page uses the main menu1, header, image menu, main menu2, links, banners and

footer that will always fill every main worksheet of the website. The right side of the website consists of from

looking for the news section, school info, shoumix, online, text 1, and text 2 in addition to order

make it easier for users to find information. Text 1 contains rss and visitor list

while text 2 contains information on the address of SMA N 3 Pati. In the middle contains the latest news and

agenda

2.   e-learning

Main course		
header		
7 Latest Materials	7 Latest Questions	Login
5 Previous Material	5 Previous Questions	Download Menu
		On line
New information		Text 1
Latest Works		Banners
Footer		

Figure 4.7 Design of elearning page

Information:

This page contains material and questions provided for users that can be accessed

downloads for free. On the bottom page provides information about

the latest learning and the work of students and teachers who have been given

as a student reference. In the Information section there is a link for

explain the title and can be downloaded.

4.3.   User Manual

The SMA N 3 PATI website contains several link processes between one page and another. index page

is the main page and other pages contain sub-sub information to be

submitted in outline.

1. Index

Figure 4.8 Index Pages
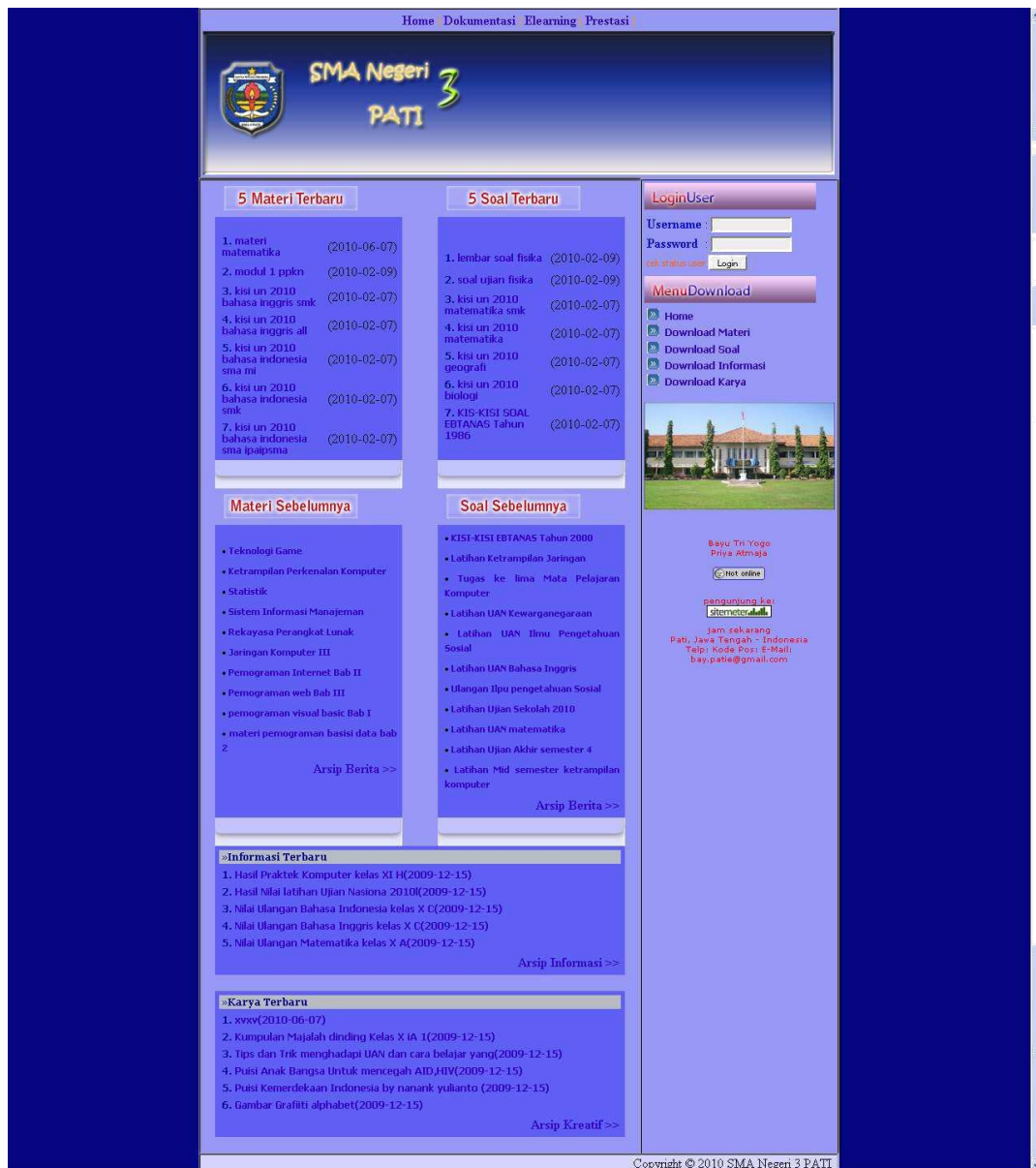
2. E-Learning

Figure 4.8 E-Learning Pages

5.   **Conclusion**

How to design a website at SMA Negeri 3 PATI as a means of promotion and as a

learning facilities are as follows:

1. **Create a user page structure**

2. **Create an admin page**

3. Create flowcharts for students, teachers, admins

4. **Making DFD level 0 and DFD level 1**

5. Make first, second, third normalization

6. Create relationships between tables

7. Create a table structure

8. Create table data

9. Design interface design

10. System creation

11. Registration and purchase of hosting

12. Searching for a domain name

13. Uploading files to hosting

How to develop and implement a website at SMA Negeri 3 PATI can be done offline or online.

1. By way of Offline For example by including the website address of SMA N 3 PATI

on brochures, advertisements, stickers or banners

2. By online method, for example by registering the website address of SMA N 3 PATI on

blog directories, webmaster tools, or by placing advertisements on websites

great websites.

How to develop the SMA N 3 PATI website can be done by updating news, information, agenda, and add various forms that are needed later.

From the discussion and explanation of all the material, the authors draw conclusions on the subject matter of the previous chapters:

1. Website as the right communication medium for SMA N 3 Pati so that it supports

the creation of a highly effective information sharing process.

2. The website is the right solution for SMA N 3 Pati because it provides one

value add to the quality and accuracy of an information. Information storage

capability which is more and faster than the previous system, namely by

using brochures and banners. By using the website the error can be carried

out with regular updates and a one-month system inspection can

prevent misinformation from occurring.

3. Because the website is a learning medium, it is hoped that it can maximize

   quality education by providing an effective learning system compared to

   The former was face to face. The system used to run and was added

   with new system so that the learning process becomes more improved.

4. With learning media, the problem of the learning process through face-to-face in class

   can be reduced to half or more because the website can provide data

   communication quickly and unlimited time. With website media

   is expected to reduce the costs of students and teachers for a more efficient learning process

   using print media such as books and paper which are large and

   expensive price.

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