



## Website Prototype Design Animation Study Program Based Content Management System Wordpress

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### ABSTRACT

The availability of information through information and communication technology (ICT) in the world of education is not only supported in operations but has become a necessity and an obligation that must be implemented. One of the application products on the internet that utilizes the development of communication and information technology is a website application. The problem of the lack of information from the main website for animation study program students, plus the Covid-19 pandemic which requires online lectures, causes direct communication and submission of data or documents from study program management to students will experience several problems. We need a website that can bridge the information needs. the most possible way, and can quickly be developed is to use a Web Content Management System. The website is developed in an initial form or often called a prototype, by submitting a questionnaire to prospective website users. The goal is to obtain an overview of what information should be on the website. The results of this study are in the form of a website prototype for an animation study program that is relevant to the needs of users, namely lecturers, students, and the general public.

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## 1. Introduction

The benefits of the development of communication and information technology have a very broad impact, one of which is in the field of education, namely gaining broad access to information spread across the internet. The availability of information through information and communication technology (ICT) in the world of education is not only supported in operations but has become a necessity and obligation that must be implemented (Wahyudi, 2010). One of the application products on the internet that take advantage of the development of communication and information technology is a website application, and it has been applied for quite a long time by many educational institutions or institutions that are useful for management to convey information to the public. Apart from being a provider of information, it can also be a fairly effective communication medium between educational institutions and students, parents, and the public using educational information (Kompasiana, 2019).

The problem is the lack of information from the <http://mmtc.ac.id> main website for students of the animation study program, plus the Covid-19 pandemic which requires online lectures, causing direct communication, and the submission of data or documents from study program management to students will experience problems. This will have implications for the process of decreasing the quality of service in the study program, especially information and data related to study program activities. So we need web-based information media as a solution to make it easier for the management of study programs to communicate and provide information to the public, and be able to bridge the need for information, and documents, quickly and precisely according to student needs.

The purpose of this research is to produce a prototype website design as a communication medium and information for the animation study program using the CMS Wordpress application. Provide information needs for the management of animation study programs, students, and the general public through the media website. The benefits provided are the availability of web-based communication and information media



prototypes in study programs that connect the information needs of students, as well as the wider community. Website applications based on the Content Management System have been widely used to make websites quickly but have quite professional results, and can be made for various fields. One of the most widely used web content management system applications is wordpress. Currently, the animation study program has not independently built and developed a website to provide and manage information for the public, in this case, students as the main stakeholders, parents, and the general public. Even so, there is the information submitted through the main website, but it is felt that it has not met the information needs needed by students. this provides an opportunity for research to make a prototype website as a medium of communication and information by utilizing information technology. On this occasion, using the wordpress content management system application to help the management of STMM "MMTC" Yogyakarta convey data and information on animation study programs to students and the wider community. (Sugihartono et al., 2018) The importance of making a website as a medium of communication and information for study programs is part of efforts to improve institutional services and study program management, not only for students as targets but also for prospective students who want to know more about the study program.

## 2. Method

Of developing the Prototype Design of communication and information media using the SDLC (System Development Life Cycle) system development with the RAD (Rapid Application Development) method. According to (Chien, 2020) Rapid Application Development is a methodology that focuses on developing applications quickly through iteration or continuous iteration and receiving continuous feedback. The prototype will be developed using a content management system (CMS). The stages in the RAD Method can be seen in Figure 1 below.

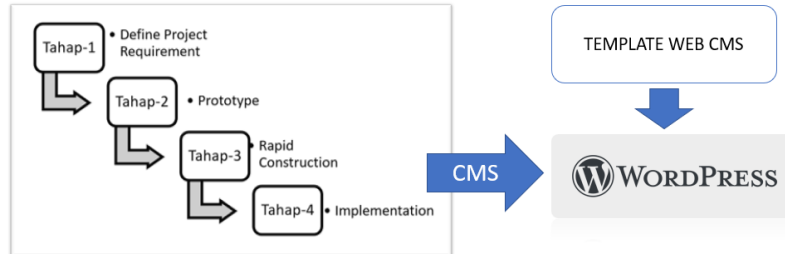


Figure 1. Prototype Development Method.

## 3. Results and Discussion

### 3.1 Website Development Planning

The planning stage in the RAD method is the stage of identifying the scope of the website project and understanding user needs. In planning, they also approach direct or indirect meetings, to obtain as much information as possible. So what is needed now is how to get input from users, about what information should be on the study program website, which is useful for the academic community and the general public. To obtain this information, a user needs questionnaire was distributed, in this case, the questionnaire was given to students as users of website information and online lecturers using the google form.

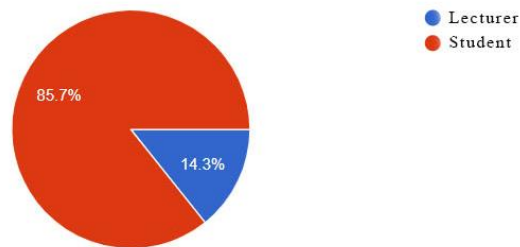


Figure 2. User Information.

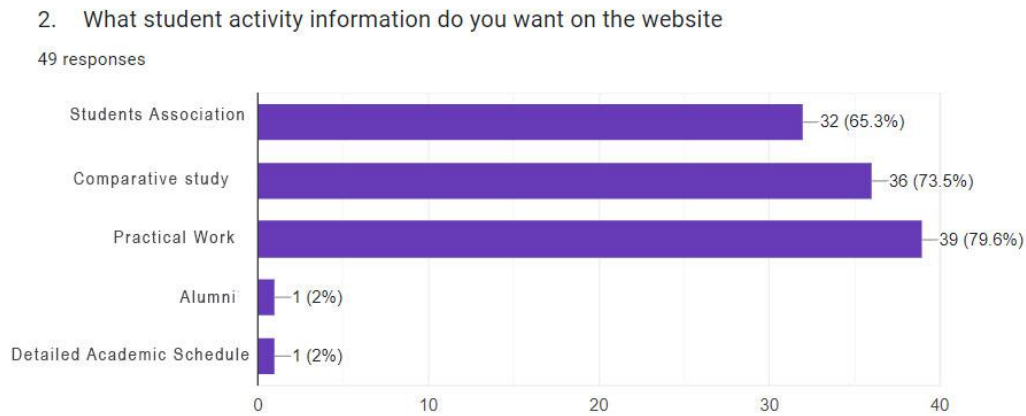
Figure 4.1 shows that the number of respondents to the analysis of user needs is 49 people, consisting of 14.3% of lecturers and 85.7% of students.

To get information on any study program activities, which can be displayed on the website. It can be seen that users choose lecture information and study program profiles, respectively 73.5% for practical lectures, 71.4% for theory and 79.6% users want Study Program Profile information. In addition to the information, there is some desired information that they write or fill in alternatively, an average of 2%.



Figure 3. Information on Study Program Activities selected by the user.

The second question submitted in the questionnaire is about what student activities you want to display on the website. The most chosen information is about Student Practical Work activities, which is 79.6% like it. Practical work information can be in the form of information from study programs about institutions that organize practical work, or internships for students. However, two other pieces of information are equally important, such as animation student associations and comparative studies.

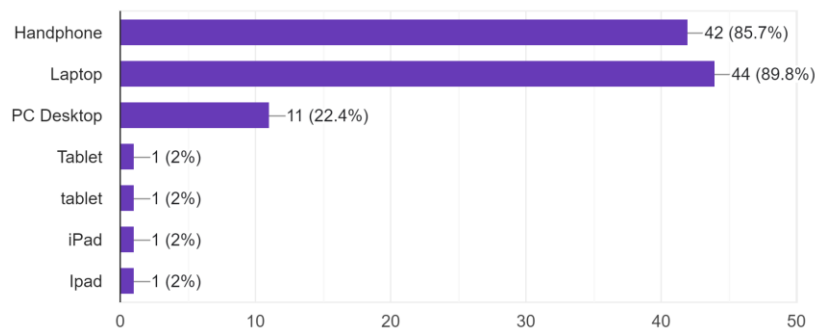


**Figure 4.** Information on Selected Student Activities

Apart from study programs and student activities, information about what devices users use when accessing information from the web is also important. This is important so that web designers determine and provide designs that are responsive and flexible for use on certain digital devices, such as laptops, cellphones, or personal computers. The type of mobile phone device was chosen by 85.7% of users, maybe because it was simple in the hand and more flexible to use, while the laptop was chosen by 89.8%, of course, the information display was bigger so that the information would be easy to read and access.

1. What types of devices do you usually use and often use to access information from the internet

49 responses



**Figure 5.** Types of Web Access Devices.

Types of documents on the website are quite important because determining the types of documents that are easy, and flexible on the website will make users comfortable when they need certain types of documents. There are 3 types of documents that users choose the most, namely 85.7% PDF format documents, possibly because of documents that are often or widely used by people. The image format was chosen at 57.1%, maybe because pictures or photos are types of documents that are usually found on websites and have their charm. Then the third, 46.9% video document type was chosen because it is very interesting, but what the developer or developer needs to pay attention to, is to provide video documents that are not too long in duration, besides consuming data quota, it will also slow down the connection.

2. What kind of document format do you prefer to read or download

49 responses

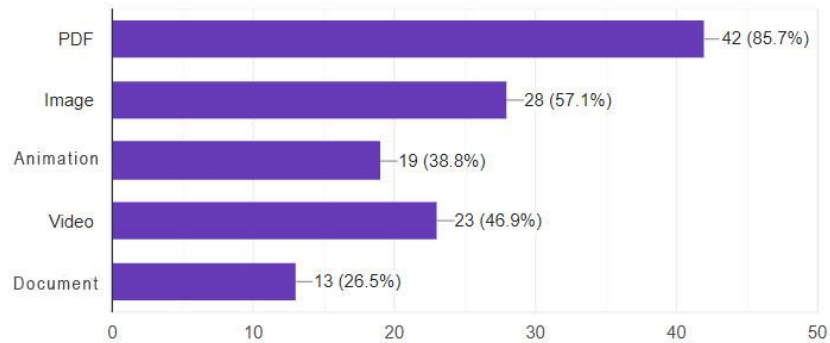


Figure 6. Preferred Document Type.

Another thing that must be considered by developers related to web access devices is that the website design must be developed to be able to perform well for various display sizes.

It is undeniable that the interface of a website is very important to attract users to access the information in it. At least you can enjoy the look of the website on the home page. The convenience of the website interface can be felt comfortable when the layout design is informative, the menu is clearly visible, and the images or photos are proportional in size. It is also important to the type and size of the text used on the website. Answering questions in the questionnaire regarding a comfortable website interface, users prefer a design that is a combination of image and text.

1. What kind of user interface or web interface is comfortable for you to see.

49 responses

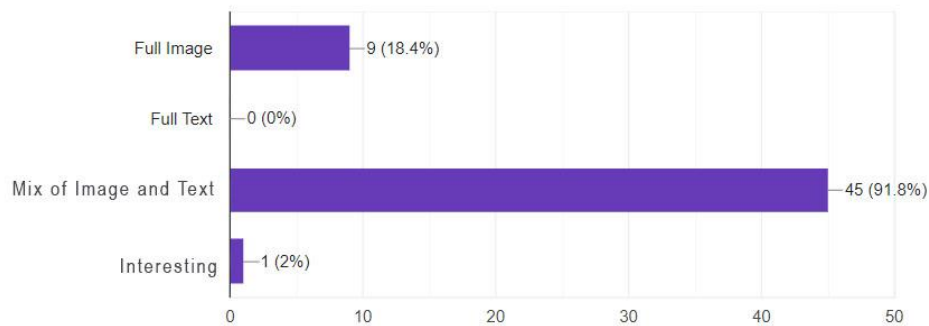
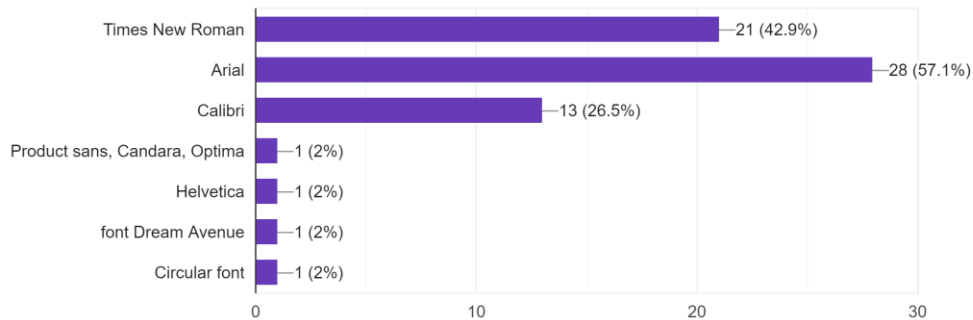


Figure 7. Convenient Data Interface.

Some considerations for the website interface in addition to design using images and text, also need to consider the type of font and size. This relates to how the information will be displayed, readability and proportional image size will help facilitate quick access to information.

2. What font type is good and comfortable for you to see and read

49 responses



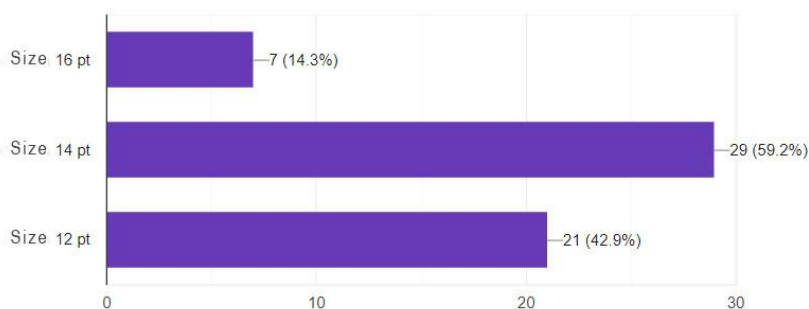
**Figure 8.** Website Font Type.

No matter how good the information presented, if it is not good to read it will make web users frustrated. Therefore, to fulfill the purpose of the website being created and the information from the website to be readable, the developer needs to also pay attention to the type of font and its size. This is simply so that the information on the website can be useful for its users. In Figure 10, users prefer Arial 57.1%, while Times New Roman is 42.9% and Calibri is 26.5%. Other types of fonts will be input for web developers to consider using.

The use of fonts is inseparable from the accompanying size, the common size for article writing is usually 12pt and for titles, it is usually 14pt. when asked to users, 59.2% of users prefer 14pt size. maybe based on their experience when surfing the internet 14pt text size is easier to read. This is also a concern when designing later this size will be taken into consideration to be used as a size in the body of the article, or just the title.

3. What is the font size in the article writing on the website that is good and easy for you to read?

49 responses



**Figure 9.** Web Article Font Size.

The final part of the question in the questionnaire is about the features or facilities that the user might want to include in the web design.

1. In your opinion, what features might be on the website, and needed by study programs, lecturers and students.

49 responses

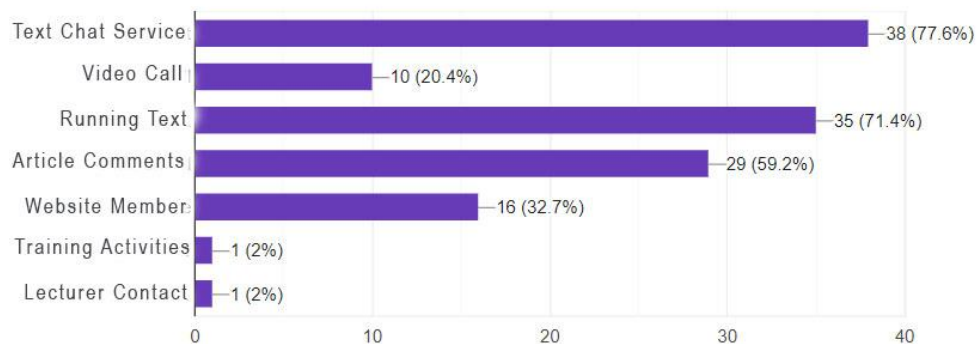


Figure 10. Graphics of Website Feature Data.

Of several options provided in the questionnaire, the most choice is text chat service at 77.6%. The text chat service does look simple, fast, and easy to access. So that this feature is the most popular choice, users certainly have daily experience using well-known applications such as WhatsApp, Telegram, and WeChat. This short message model is indeed very easy to use and fast to interact with.

Another feature that ranks as the 2nd choice of users is running text, which is 71.4%. Running Text is usually in the form of running text which is widely used to convey short and new information or current information. This facility deserves to be provided as a major complement to the website. Its usefulness is very important, for example, to provide the latest information from the website that website users need to know. Video Call options, article comments, website members, and others should be a special consideration because not all wishes can be fulfilled by developers. Of course, the priority scale and available budget will be seen. Because it could be a facility that will be made on a paid website, and not free.

### 3.2 Website Information Content Structure

The structure referred to in the website development process is the building of information that will be provided to website users. The information content structure is developed from the results of collecting information from users and seeing the needs of the organization, in this case, the study program. The basic information structure developed for the animation study program can be seen in Figure 11.

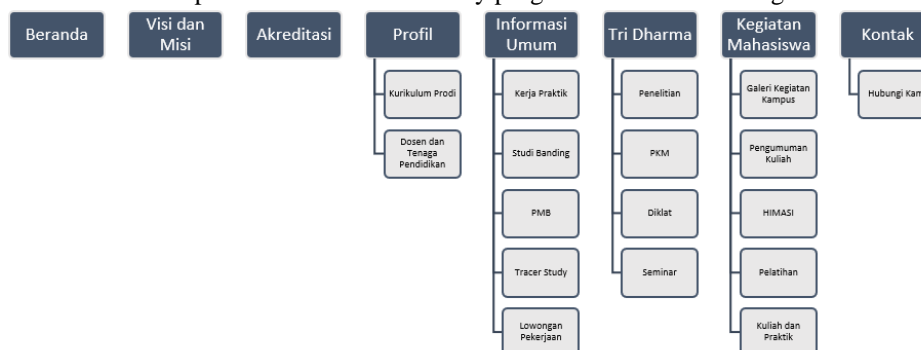


Figure 11. Website Information Content Structure.

### 3.3 Website Prototype

The front page of a website is the main information window for users to take the next step, whether to browse information throughout the website or leave the website. Therefore the front page must characterize the home of the appropriate study program. Armed with information collected from users, it will be easier to design the front page of the website.



Figure 12. Website Prototype.

#### 4. Conclusion

Website is one of the most widely used media by individuals, governments, organizations, and educational institutions in the era of digital technology as it is today. According to webometrics.com Universities in the world that use website media are 11998 or more, meaning that the website has a very important role in disseminating information quickly through the internet network. In the world of education as a form of university existence in carrying out its vision and mission in the world of education. The results of research, production work, and various university activities can be accessed or displayed widely in any part of the world until they get recognition. On a regular and national scale, the existence of a university website is indispensable to serve the information needs of the wider community. This research still needs to be developed again with adequate supporting facilities. The need for information and communication through website media must be supported by the use of technological advances in the field of information and communication. Many plugins provided by wordpress can be used and utilized to complete the features on the website. The goal is that the university website can function properly to serve the information and communication needs of the wider community.

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