Cinematic-Based Multimedia Web Profile Design For Wesley Elementary School

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ABSTRACT

Technological developments, especially in the field of information and communication, are growing rapidly, including multimedia. This requires educational institutions to develop information media that is appropriate to these developments. Due to the urgent need for more effective and attractive promotions for prospective students, audio-visual media has become an interactive choice and is easily accepted by the public. Wesley Elementary School, to obtain accurate information. The method used by researchers is the Waterfall method. The specifications of the Waterfall method in software or website development include various elements that regulate how the project is carried out from start to finish. At the system analysis stage, an analysis of a system that is currently running at Wesley Elementary School will be carried out to find out existing problems, then plans and solutions will be prepared to solve problems in designing a more effective and efficient system. Then the results will create a school website that is can be accessed by other people. The information system is designed to provide information easily, quickly and accurately so that outsiders can get information. This website profile can help the general public to get wider information about Wesley Elementary School without having to visit the school. It is hoped that future researchers can develop the user interface so that the appearance of the designed web profile can be more attractive and of better quality. In the future, a more updated UI/UX can be developed.

Keywords: Information, Website, Method Waterfall

INTRODUCTION

The rapid development of technology, particularly in the field of information and communication, has seen significant growth, especially in multimedia. This progress requires educational institutions or organizations to continuously develop information through various media channels in line with advancements. The pressing need for diverse informational and promotional tools necessitates the use of interactive and effective promotional media to attract new students. One such interactive and effective medium is audiovisual media.

Audiovisual media is an information and promotional tool that is easily accepted by the public due to its communicative way of delivering information. In this medium, messages and information can be clearly visualized through both visual and audio formats. Currently, Wesley Elementary School, located at Jl. S.M. Raja Km 10/Jl. Perhubungan, Marindal II, Patumbak District, Deli Serdang Regency, is a rapidly growing school with significant achievements, both academically and non-academically. By offering various facilities and knowledge with a focus on quality, Wesley Elementary has become a leading private educational institution in Medan City.

In terms of information and promotion, Wesley Elementary School currently lacks an interactive and engaging media platform for introducing the entire profile of the school. This is because the school still relies on conventional methods, such as distributing brochures, banners, and verbal communication, which are less attractive and less promotional. Consequently, the overall information and promotion about the school remain quite limited. Although Wesley Elementary School has been established for a long time, it does not yet have a school profile website to introduce the educational foundation to the public. Therefore, the educational foundation requires a website to deliver information to the public about the school's profile.

The design of a cinematic-based profile website for the school involves a unique approach in presenting the school's information. Based on the issues outlined by the researcher, the researcher is interested in conducting a study titled "Design of a Cinematic-Based Multimedia Profile Website for Wesley Elementary School" to obtain accurate information that will facilitate the establishment of a brand image in the public eye, expand media networks, and attract new students who wish to enroll at Wesley Elementary School.

LITERATURE REVIEW

Design

Design is a process of defining what will be done by using various techniques and involves a description of the architecture, components, and limitations that will be encountered during the process. According to Pratama et al. (2022).

Web Browser

A web browser is a software or program that functions to display and interact with documents provided by a web server. Through a web browser, users can access the information provided by the web server. A web browser is also known as a browser, surfer, or internet browser. It is a computer program that provides the facility to read web pages on a computer, as stated by Andriyan et al. (2020).

Web Profile

A web profile is a website that only displays information about the vision, mission, history, organization, services, or products offered but does not directly sell products. A web profile is an application that describes the profile of a company or an individual. This web application is typically used to introduce the profile of a company or individual to the public, according to Muharto (2019).

Multimedia

Multimedia can be considered a new form in the development of computer programs by integrating more than one medium. Even if it contains only two elements, it is still considered multimedia. The definition of multimedia can be understood as the use of computers to create and combine text, graphics, audio, moving images, video, and animation, integrating links and tools that allow users to navigate, interact, create, and communicate. Multimedia is the use of computers to display and combine text, graphics, audio, and video with links and tools so that users can navigate, interact, create, and communicate. In conclusion, multimedia is the use of computers to present and integrate text, graphics, audio, moving images, video, and animation, as stated by Studi et al. (2015).

RESEARCH METHODS

The research in this thesis is design research, also known as research and development, and the system development methodology used is the Waterfall method. The Waterfall method in software or website development includes various elements that regulate how the project is carried out from start to finish.

Waterfall Method Stages:

1. Requirements Gathering and Analysis
2. System Design
3. Implementation
4. Testing
5. Deployment
6. Maintenance

Stage	Description
Requirements Gathering	Collect detailed requirements from the client or end-user
System Design	Prepare system specifications and design solutions
Implementation	Code and build the software according to the design
Testing	Systematically test the software for errors and bugs
Deployment	Deploy the software in a live environment
Maintenance	Ongoing maintenance and updating of the software

Figure 1. Waterfall Method Workflow

RESULT AND DISCUSSION

System Analysis

Web system analysis involves studying the problems that arise and determining the needs of system users to identify solutions to these problems. Before designing the system, the researcher first conducts a system analysis of the current system to clearly understand the existing issues. Based on this, the researcher designs a proposed system.
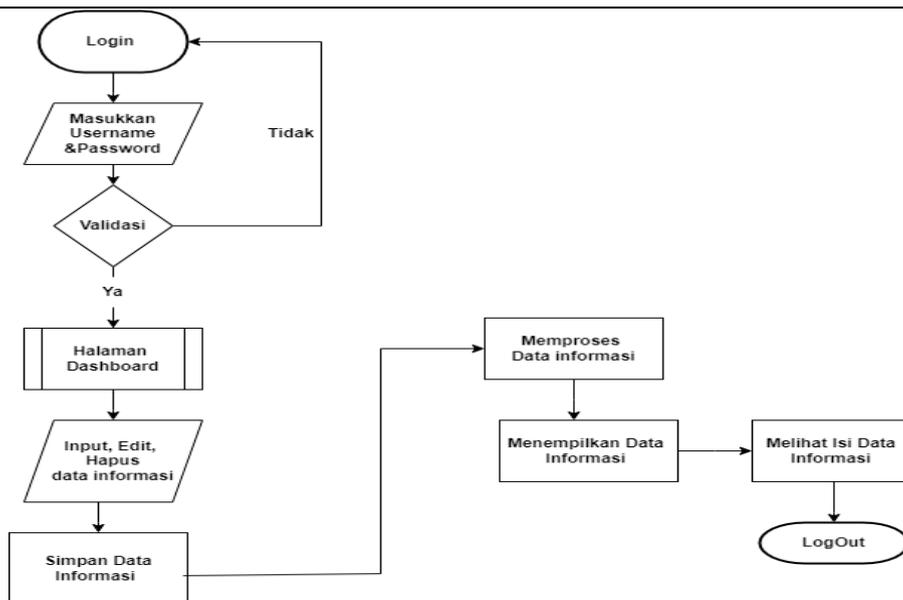
In the system analysis phase, an analysis of the existing system at SD Wesley will be conducted to identify the problems. Following this, a plan and solution will be developed to address the issues and design a more effective and efficient system.

Proposed System Analysis

The process for prospective students or the public to obtain information currently is as follows:
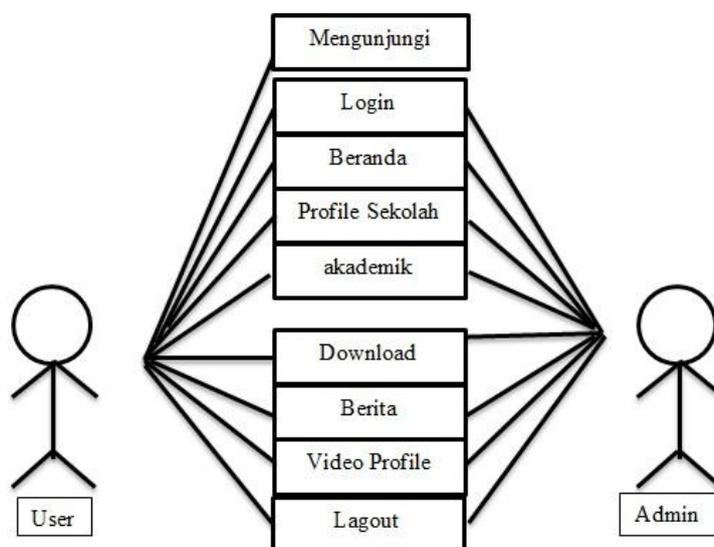
1. Prospective students/public directly visit SD Wesley School.
2. Prospective students inquire directly about the information they need from the school.
3. The school provides the requested information.

The purpose of the proposed system analysis is to identify the deficiencies or weaknesses in the current system, specifically in the analysis of the ongoing website profile system at SD Wesley. The system proposed by the researcher is one that addresses the shortcomings and weaknesses outlined previously.

Figure 2. Flowchart of Admin and User Systems at SD Wesley

A use case diagram is a type of diagram in UML that describes the interaction between the system and actors. The use case diagram can also describe the types of interactions between the system user and the system itself. The following is the use case diagram for the SD Wesley school profile website.

Figure 3. Use Case Diagram for SD Wesley

The use case diagram in Figure 4.3 consists of two actors, with the system starting at the end of the use case diagram:

1. Visitors can view and access the website pages and read the available information.
2. Admin is an operator with access rights to operate the website. The admin must first log in to the admin page, then the admin can input, edit, delete, and update data related to the school profile at SD Wesley.

Activity Diagram

An activity diagram is a type of UML diagram that models the processes occurring within a system. The following is the activity diagram for the SD Wesley school profile website, divided into two parts: admin and user.
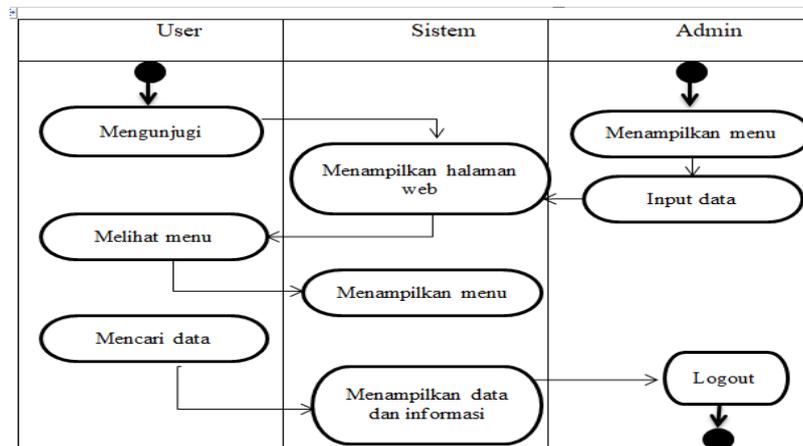

Figure 4. Activity Diagram for SD Wesley

Class Diagram

A class diagram is a type of UML diagram used to display the information within a system that will be used later. Below is the class diagram for the design of the company profile at SD Wesley.
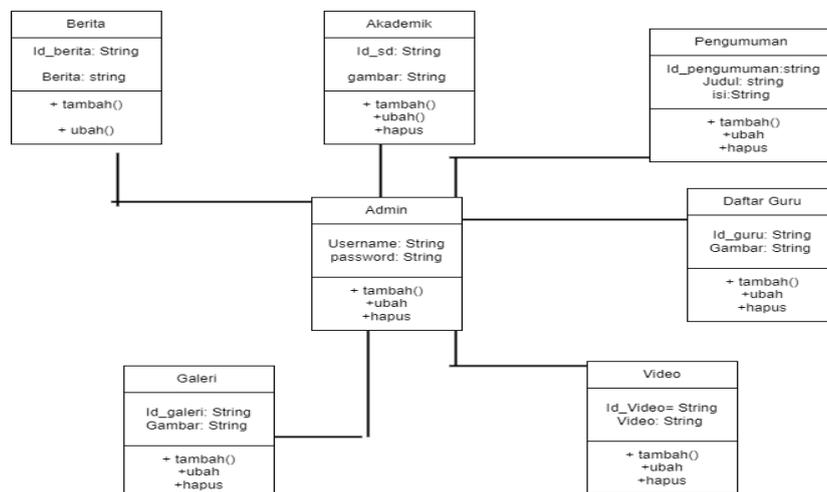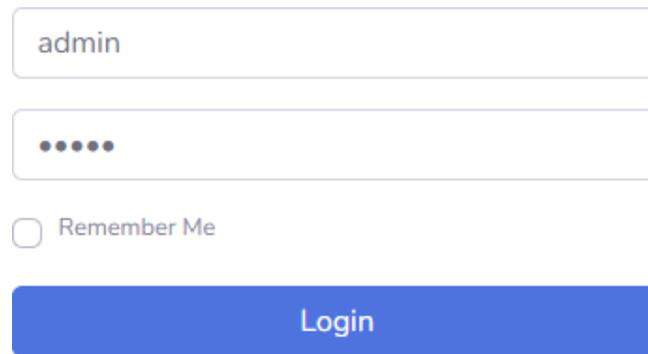

Figure 5. Class Diagram for SD Wesley

System Implementation

At this stage, the system implementation will proceed according to the established procedures to test whether the system meets the requirements and ensure that the admin can successfully convert from the old system to the new system, which will function correctly.
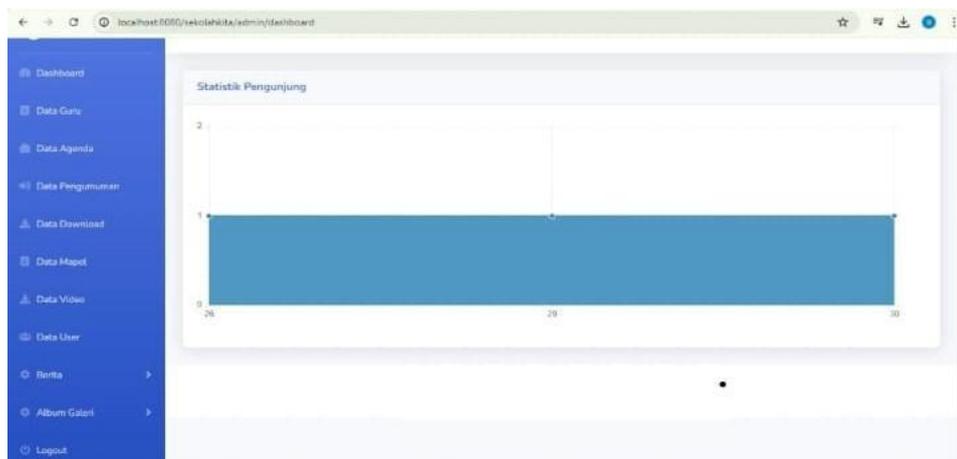
1. **Admin Login Page**

Figure 6. Admin Login Page

This page shows where the admin is required to log in first by entering the email and password in order to manage every admin page available in the administrator menu.

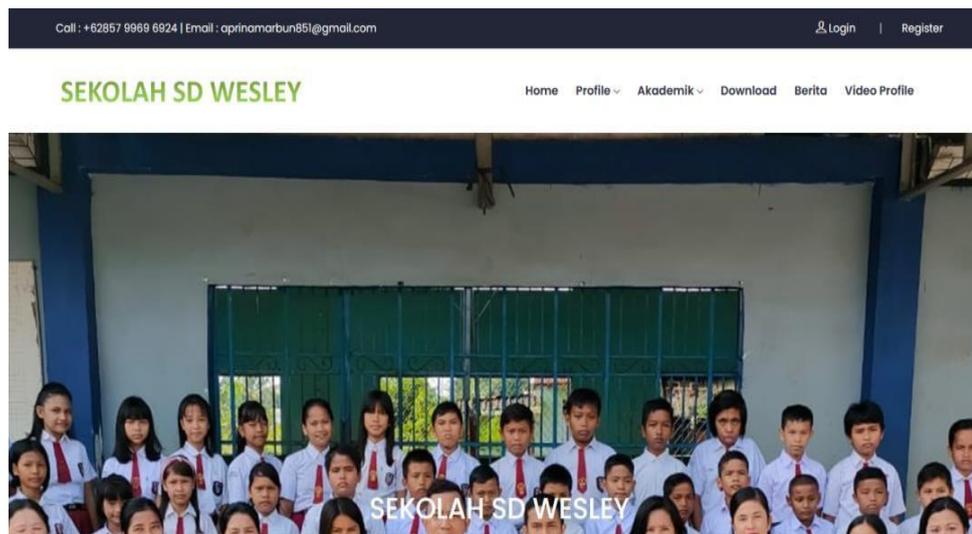2. **Admin Dashboard Page**

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Figure 7. Admin Dashboard Page

This page shows the admin dashboard that appears after login. The dashboard consists of menus such as Home, Profile, Academics, Downloads, News, Video Profile, and User Page, which allows the admin to manage data for each menu available on the user website.

The output design of the website profile can be seen on the following page.

3. **Website Home Page**

Figure 8. Website Home Page

This page shows the home page where the user enters the website. At the top of the page, there are menus accessible by the user, including Home, Profile, Academics, Downloads, News, and Video Profile. In the center, there is a "Click Here" button, which functions to redirect to the contents of the home page information.

4. **Gallery Page**

Figure 9. SD Wesley School Gallery

This page shows the gallery, where the history page displays school activities and events.

5. **School Video Profile Page**

Figure 10. Cinematic Video Profile of SD Wesley School

This page shows the school's video profile, where users can watch the school profile video.

System Performance

Based on the results of testing the proposed system, a comparison of the performance between the previous system and the proposed system is presented in Table 4.1.

Table 1 System Performance Comparison

No	Previous System	Proposed System Implementation
1	The promotional area for SD Wesley is limited and requires a relatively long time.	The promotional area for SD Wesley is broader and not time-bound.
2	The information provided by the school is less effective and unverified.	The information provided is more effective and reliable.

CONCLUSION

Based on the research conducted on the design of the SD Wesley Web Profile, the researcher draws several conclusions. The designed information system is capable of presenting an interactive multimedia web profile. Therefore, a web profile is needed as a promotional and informational medium to make it more appealing and accessible to the public, aiming to attract prospective students to Wesley Elementary School. With the existence of this web profile, it can help the general public obtain broader information about SD Wesley without the need to visit the school in person.

REFERENCE

Aditya, R., Pranatawijaya, V. H., & Putra, P. B. A. A. (2021). Rancang Bangun Aplikasi Monitoring Kegiatan Menggunakan Metode Prototype. *Journal of Information Technology and Computer Science*, *1*(1), 47–57.

Andriyan, W., Septiawan, S. S., & Aulya, A. (2020). Perancangan Website sebagai Media Informasi

dan Peningkatan Citra Pada SMK Dewi Sartika Tangerang. *Jurnal Teknologi Terpadu*, *6*(2), 79–88.

Christian, Y., & Yanto, E. (2023). *Perancangan dan Implementasi Website di Sekolah SMK Vidya Sasana*. *5*(September), 1006–1013.

Hermansyah, H., Wahyuni, S., & Akbar, A. (2022). Perancangan Sarana Media Informasi Berbasis Web Desa Klambir Lima Menggunakan Metode Waterfall. *JURIKOM (Jurnal Riset Komputer)*, *9*(2), 515.

Ismai. (2018). Perancangan Website Sebagai Media Promosi Dan Informasi. *Journal Of Informatic Pelita Nusantara*, *3*(1), 82–86.

Muharto, R. R. (2019). Perencanaan Sistem Informasi Profil Sekolah Berbasis Web. *IJIS-Indonesia Journal on Information System*, *4*(April), 69–76.

Pratama, Y. H., Sudarmaji, & Irawan, D. (2022). Perancangan Sistem Informasi Layanan Masyarakat Pada Kecamatan Seputih Banyak Kabupaten Lampung Tengah Berbasis Web. *Jurnal Mahasiswa Ilmu Komputer (JMIK)*, *03*(01), 1–5.

Siregar, V. M. M. (2018). Perancangan Website Sebagai Media Promosi Dan Penjualan Produk. *TAM (Technology Acceptance Model)*, *9*(1), 15–21.

Studi, P., Informatika, T., Teknik, J., Fakultas, E., & Universitas, T. (2015*). Implementasi multimedia interaktif pada perancangan.*

Suryana, A., Bahtiar, G., & Mulyanti, N. T. (2023). *Website Profile Smp Yapia Pondok Aren Sebagai Sarana Penyebaran Informasi Sekolah*. *1*(5), 526–535.