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Design of a Website-Based Company Profile at SMK Al-Idrus Kutai Kartanegara

Mu. Aldi Rahmad Fahrozi[1*], Aspianur[2], Wawan Joko Pranoto[3]

[123] Program Studi Teknik Informatika, Fakultas Sains dan Teknologi, Universitas Muhammadiyah Kalimantan Timur

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*Correspondence: Mu. Aldi Rahmad Fahrozi
Email: : 2111102441019@umkt.ac.id

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Abstract: The development of technology in education encourages SMK Al-Idrus Kutai Kartanegara to embrace the digital world. This study aims to address the challenges of limited resources in integrating web design skills by developing a web-based company profile application using the prototyping method. The program involves stages such as requirement gathering, prototype development, user evaluation, and final product development. The resulting application includes interfaces such as a homepage, admin panel, news section, departments, student admission (PPDB), school profile, and login page. Through this activity, students gain practical experience in web development, enabling them to compete in the digital era and meet the demands of the information technology and graphic design industries.

Keywords: Development Of Web-Based Company Profile Applications, Prototyping Method In Vocational Education, Enhancing Students' Web Design Skills

Introduction

In the current digital era, information technology has become a fundamental necessity across various fields, including education. The utilization of information and communication technology (ICT) in education is not only a tool for learning (Listra Firgia, 2021) but also a medium to introduce institutions to the wider public. A school website can serve as an efficient, practical, and easily accessible source of information for diverse audiences (Desty Endrawati Subroto, 2023). SMK Al-Idrus Kutai Kartanegara, as an educational institution in Kutai Kartanegara Regency, has a growing need to enhance its presence in the digital world. As a school focused on developing students' vocational competencies, SMK Al-Idrus requires an effective promotional platform to showcase its profile, vocational programs, facilities, and achievements (Umar Ibrahim, 2021). However, to date, the school lacks a representative digital platform to fulfill this need (Pikir Wisnu Wijayanto, 2023).

As part of the final project for the Internship (PKL) course in the Informatics Engineering Program at Muhammadiyah University of East Kalimantan, we initiated the design of a website-based company profile for SMK Al-Idrus Kutai Kartanegara (Ignatius Satya Paramitha, 2024). This project aims to provide a digital solution that can help the

school enhance its visibility and appeal to the public, particularly prospective students and parents (Allvira Arianti Amir Hamzah, 2021).

The design of this company profile website is expected to present information in a structured, interactive, and engaging manner, making it an effective promotional tool while adding value to the school (Listra Firgia, 2021). Furthermore, this activity offers practical experience for students to apply the knowledge gained during their studies, such as web design, data management, and software development (Mira Orisa, 2023). Through this project, we hope to deliver not only immediate benefits for SMK Al-Idrus Kutai Kartanegara but also a meaningful contribution as students by applying our expertise in real-world contexts (Vindo Feladi, 2022) (Marissa Utami, 2023). This research aims to address the challenges of limited resources by integrating web design skills through the development of a web-based company profile application using the prototyping method (Gamboa, 2022).

Methodology

This study adopts the prototyping software development method, chosen for its ability to provide an iterative and participatory approach to system development (Umar Ibrahim, 2021). This method allows SMK Al-Idrus Kutai Kartanegara to actively participate in every stage of system design and development. Such an approach effectively fosters collaboration between developers and users, enabling early prototypes to be evaluated and refined based on direct user feedback (Khoerunisa, 2023). Consequently, developers can ensure that the resulting system fully meets user needs and expectations in terms of functionality and user experience. The flexibility of this model also helps minimize errors during the final implementation while ensuring the end product aligns with user requirements (Umar Ibrahim, 2021; Vanessa Y. Y. Chia, 2022).

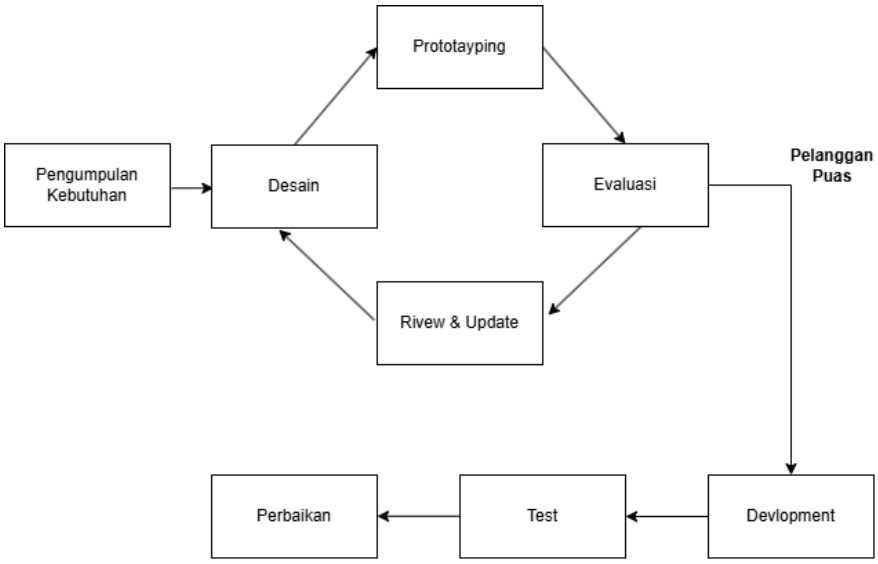

Figure 1. Diagram Prototype

The prototyping method begins with identifying needs, focusing on understanding the information SMK Al-Idrus aims to communicate through its website. Data collection

involves gathering details such as the school's vision and mission, information about departments, facilities, and notable activities and achievements. This data serves as the foundation for structuring and developing website content. Next, an initial draft is created in the form of a simple design or mockup, providing a preliminary visualization of the website's layout, navigation, and user interface. Tools like Figma or Adobe XD are commonly used at this stage to produce clear and comprehensible visuals (Krithika, 2024).

The initial draft is then presented to the school to gather feedback on the design, structure, and content. This input forms the basis for refinements, including adjustments to colors, layouts, or specific features as requested. Once all feedback has been incorporated and approved, the development phase begins. Technologies such as HTML, CSS, JavaScript, and frameworks like Laravel are utilized to build a functional website. The final stage involves testing and maintenance. The completed website undergoes testing to ensure all features operate smoothly and are free from errors. After the website is live, routine maintenance is carried out to update content, fix bugs, or add new features as needed. This flexible approach ensures the final product aligns perfectly with user requirements and fulfills the project's objectives (Yunis, 2021).

Result and Discussion

Use Case Diagram

A use case diagram provides a visual representation of the functional processes expected from a system. It illustrates the interactions between actors (external parties or users) and the system. The use case diagram is used to depict how users interact with the system and to describe user behavior within the application.

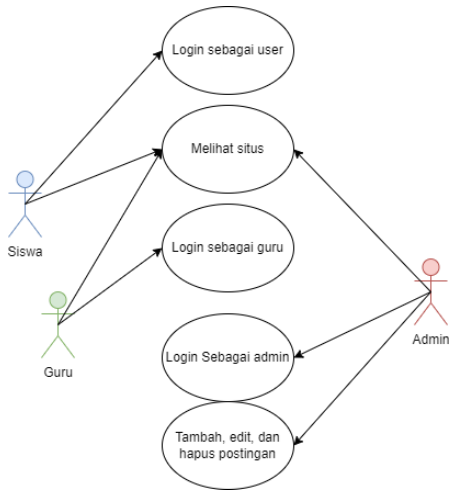

Figure 2. Use Case for User, Teacher, and Admin

Figure 2 shows a use case illustrating the processes available to different types of users. Regular users can view the website content, teachers can view the website and log in as teachers, while administrators can view the website, log in as admins, add, edit, and delete posts.

Activity Diagram

An activity diagram is used to model workflows and activities within a process. It plays a role in visualizing and grouping the system's flow without specifying the system's details.

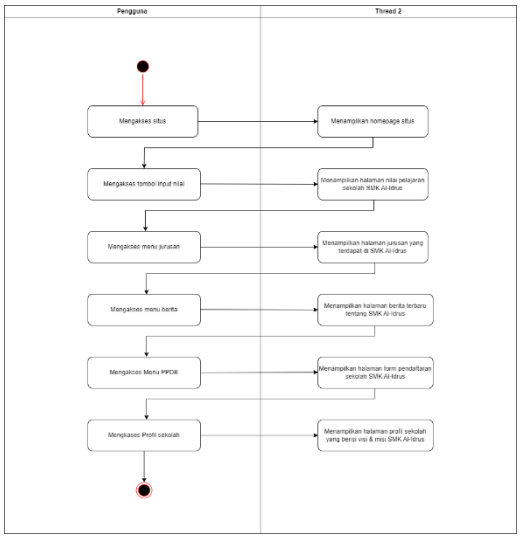

Figure 3. Activity Diagram as User

Figure 3 illustrates an activity diagram depicting the process where a user logs in and navigates to the webpage.

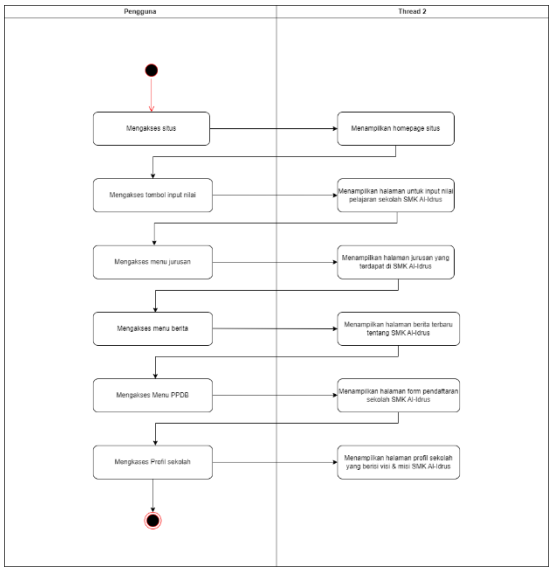

Figure 4. Activity Diagram as Teacher Login

Figure 4 represents an activity diagram showing the process of a teacher logging into the system.

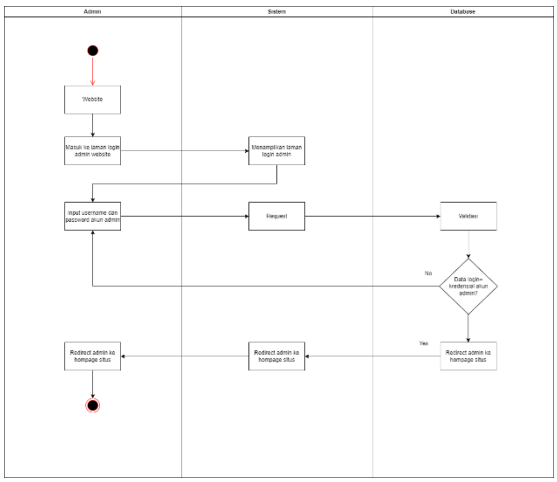

Figure 5. Activity Diagram as Admin Login

Figure 5 depicts an activity diagram detailing the steps involved when an admin logs into the system.

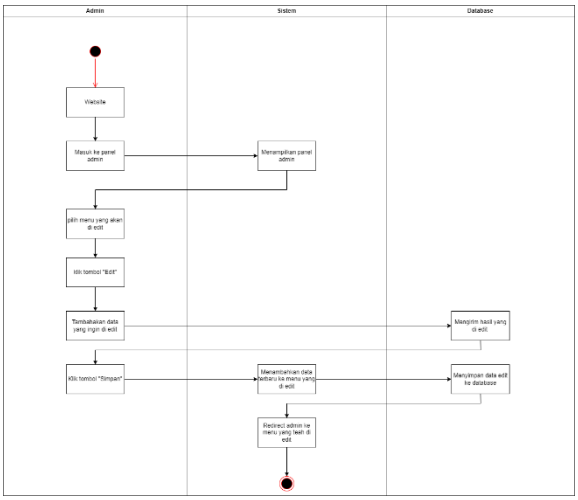

Figure 6. Activity Diagram as Admin Edit Post

Figure 6 illustrates an activity diagram showing the process where an admin edits a post.

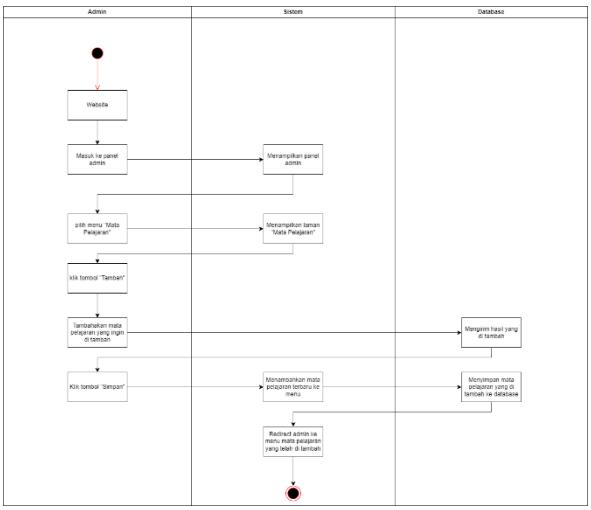

Figure 7. Activity Diagram as Admin Add Post

Figure 7 depicts the activity diagram showing the steps an admin follows to add a new post.

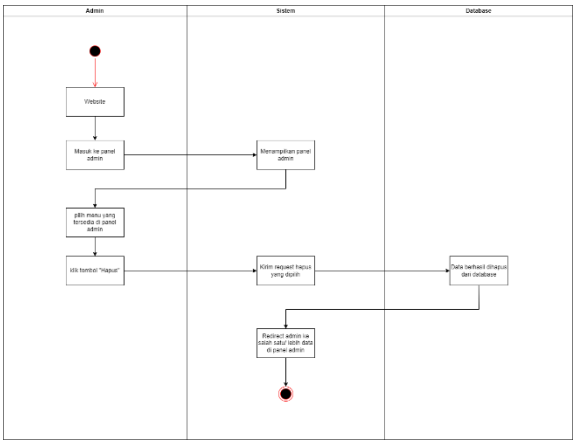

Figure 8. Activity Diagram as Admin Delete Post

Figure 8 illustrates an activity diagram representing the process where an admin deletes a post.

Website Interface for Company Profile

The outcome of this project is the design of a company profile website for SMK Al-Idrus Kutai Kartanegara. This website aims to promote and introduce the school through a functional web application. The website includes several key pages such as the homepage, admin panel, news section, department overview, new student admissions (PPDB), school profile, and login pages for users, teachers, and administrators.

Figure 9. Homepage

The homepage, shown in Figure 9, is the first page users see when accessing the website. It displays the entire menu and provides information such as the latest news, details about school departments, and activities related to SMK Al-Idrus Kutai Kartanegara.

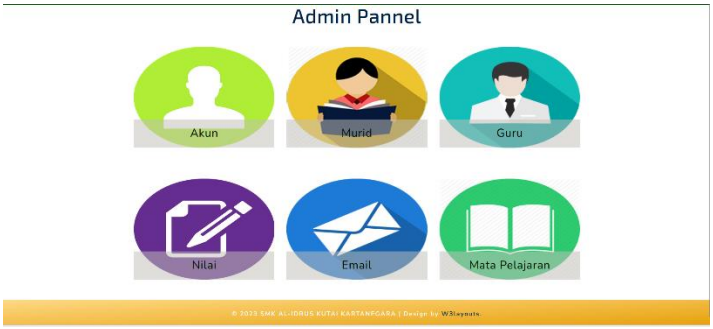

Figure 10. Admin Panel

Figure 10 showcases the admin panel interface, which includes functionalities for managing accounts, students, teachers, grades, emails, and subjects. These elements can be modified by the administrator.

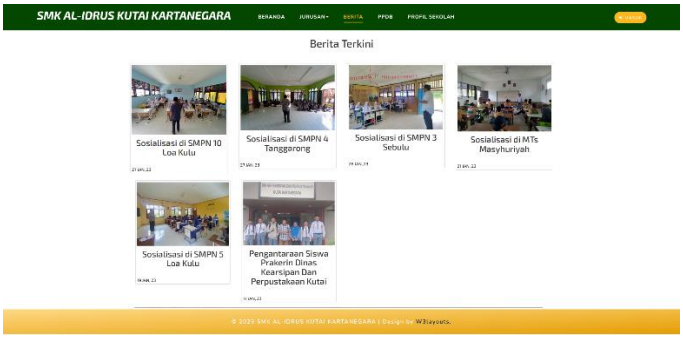

Figure 11. News Section

Figure 11 displays the news section, where updates about the school's activities, both internal and external, are featured.

Figure 12. Departments

Figure 12 illustrates the departments page, which provides information about the available programs at SMK Al-Idrus Kutai Kartanegara, such as Visual Communication Design (DKV) and Light Vehicle Engineering.

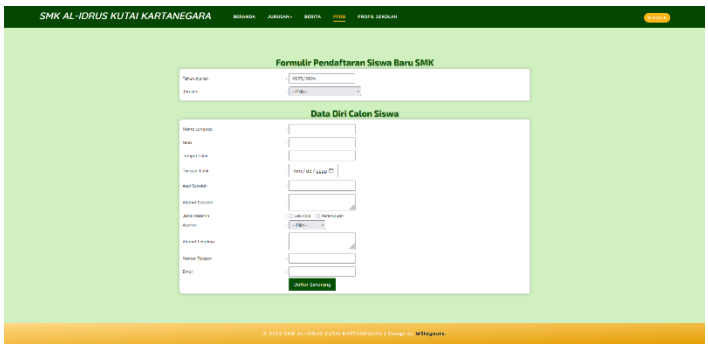

Figure 13. PPDB Page

Figure 13 shows the New Student Admissions (PPDB) page, which is accessible to prospective students wishing to enroll at SMK Al-Idrus Kutai Kartanegara.

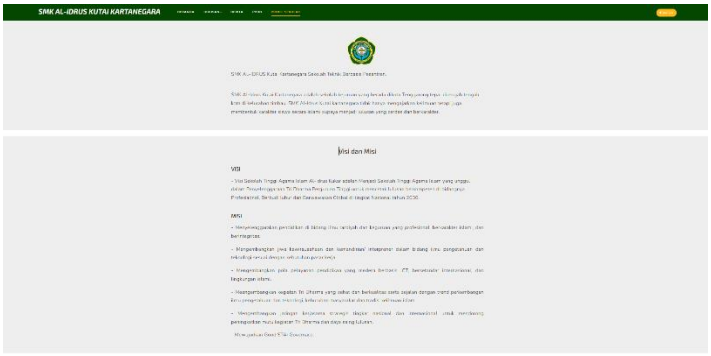

Figure 14. School Profile

Figure 14 highlights the school profile page, presenting the vision and mission of SMK Al-Idrus Kutai Kartanegara.

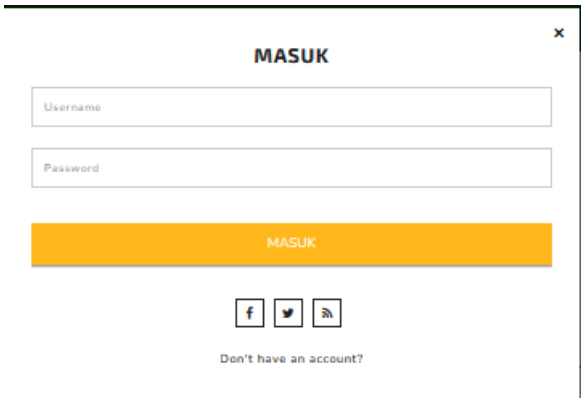

Figure 15. Login Page

Figure 15 depicts the login page for users, teachers, and administrators. Each group can log in to access functionalities tailored to their respective needs.

Figure 16. Meeting Documentation
Figure 16 showcases the documentation of meetings held at the school.

Figure 17. Learning Process Documentation

Figure 17 illustrates documentation of the teaching and learning process at SMK Al-Idrus Kutai Kartanegara.

Conclusion

The design of the company profile website for SMK Al-Idrus Kutai Kartanegara using the prototyping method is an effective approach to meet the digitalization needs of this educational institution. By involving the school directly in every stage of development, this method ensures that the final product aligns with the specific needs of its users, both in terms of design and functionality. The process, starting from requirements identification to testing and maintenance, provides flexibility in development while minimizing the risk of errors. The use of modern technologies such as HTML, CSS, and web frameworks enables the creation of a website that is not only representative of the institution but also easily accessible to a broad audience. This project not only serves as a solution for SMK Al-Idrus to enhance its digital visibility but also offers valuable practical experience in applying information technology skills to real-world scenarios. Thus, the prototyping method provides a solid foundation for delivering a relevant, high-quality, and user-oriented system.

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