

## **WEB-BASED UiTM BARBERSHOP MANAGEMENT SYSTEM**

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**Abstract** - Web-based UiTM Barbershop System is a web-based application that seeks to optimize the operations of barbershops by providing barbers and proprietors with an intuitive framework for appointment scheduling and efficient administration. The waterfall is a sequential software development approach used to construct the project. To ensure the system's efficacy, functionality, and usability, a sample of 30 respondents participated in testing. This evaluation assessed the system's capabilities, performance, and user interface. The respondents' responses were analyzed to validate the system and make any necessary adjustments. Based on the received feedback, the project's objective was effectively met. Respondents deemed the Web-based UiTM Barbershop Management System genuine, functional, and usable. This demonstrates that the system can optimize barbershop operations and provide a convenient platform for patrons and barbers. By implementing the Barbershop Management System and adhering to the Waterfall methodology, the project demonstrates a systematic approach to software development, ensuring that the project objectives are met, and the final product is validated by user testing. This implementation's success paves the way for enhanced operations and increased barbershop administration efficiency.

**Keywords:** barbershop, appointment, web-based application

### **1. Introduction**

This project intends to build a Web-based UiTM Barbershop Management System using PHP. The system will provide students, staff, and administrators with an expedient platform for managing barbershop operations. The project also includes evaluating the Web-Based UiTM Barbershop Management System through functionality and usability testing. This testing phase ensures the system is user-friendly, accurately performs its intended functions, and meets user requirements. The testing process's feedback will be collected and analyzed to determine which areas require enhancement or refinement.

### **2. Methodology**

The researcher utilized the Waterfall Model as the project development methodology and developed this system using the System Development Life Cycle (SDLC). The technique included the System Planning, Analysis, Design, Implementation, Testing, Maintenance, and Documentation phases. During the initial system planning phase, it was necessary to conduct preliminary research, identify the project's problem, objectives, scope, and significance, and conduct a literature review based on journals and related works. The subsequent phase is system analysis, which identifies the necessary hardware and software for development. The subsequent step is to initiate the system design phase, characterized by creating the entity relationship diagram (ERD) used in database design to construct an overview of data structures. The system implementation phase follows: writing the program code, constructing the system interfaces using Sublime, and storing the data in MySQL using phpMyAdmin. User-focused usability and functionality evaluations are conducted during the testing phase. The documentation phase concluded with an evaluation of the project's results and a discussion of its faults.

### **3. Results and Discussion**

This study's primary objective was to evaluate the Web-Based UiTM Barbershop Management System by evaluating its functionality and usability. Google Form was used to administer an online questionnaire to 30 individuals to collect data for evaluation purposes. The purpose of the questionnaire was to assess the opinions and experiences of the participants regarding the system's functionality and usability. The Likert scale, which ranges from 1 to 5, was used to measure responses, with options ranging from "strongly disagree" to "strongly agree." The outcome of functionality

and usability testing attained to achieve the objective.

#### **4. Novelty of Research/Product**

The Barbershop Management System provides online appointment scheduling, which provides consumers with a seamless and convenient booking experience. Customers can easily access the system from any internet-connected device and select their desired appointment time intervals. This saves consumers and barbers time and effort by eliminating the need for phone inquiries or walk-ins. A web-based system stores and backs up customer and appointment information in a secure manner. This substantially reduces the risk of data loss compared to manual or paper-based systems, protecting customer data and maintaining the confidentiality of sensitive information. Online appointment scheduling increases consumer satisfaction and loyalty due to its convenience. Customers can plan their visits and receive reminders and notifications promptly if they can readily reserve their preferred time slots. This streamlined process reduces wait times and enhances efficiency, resulting in a more satisfying consumer experience.

#### **5. Conclusion**

In conclusion, this system helps the user to make appointments more easier and business owners run their operations more efficiently. In addition, all the objectives of this project, which was to develop Web-Based UiTM Barbershop Management System using PHP and to evaluate Web-Based UiTM Barbershop Management System using functionality and usability testing was successfully completed and achieved.

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