Design of gallery web-based space booking system as media service

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Abstract. Aim of this study is 1) to create a web-based booking system as a service media at Studio and Gallery B9 Department of Fine Arts, Semarang State University. 2) to implementing a trial-based studio and gallery lending system as a supporting facility for students of the Department of Fine Arts, Semarang State University. Methodology that used is SDLC, which is used as an appraiser on the website. After using a questionnaire for 22 students. The results obtained that the website-based lending system has good communication effectiveness, this is evident from the results of the questionnaire showing 86% communication efficiency. The problem of the model and visual appearance is vital as a representation of the Department and University, it is considered to have an aesthetic level that is 89% efficient and easy to use. The features on the website are also interesting so they can show 89% results. After testing the loan, 82% said they were satisfied using this feature. The average input provided is giving a checklist about the facilities that are owned in each studio.

1. Introduction

The development of information technology is currently experiencing an increasingly significant speed increase. Knowledge and technology complement each other in order to get information technology advances, it directly and indirectly. These development’s eventually also impacted all aspects of life. One of these impacts can be looked in the fundamental changes in information technology. Information technology becomes very dominant in the process of managing many things [1].

One of them is as an application to manage the system schedule to booking Gallery B9 Department of Fine Art, Semarang State University. The Department of Fine Art, FBS UNNES has facilities to exhibit works of art through Gallery B9. This is important because technology is needed to help the education management system. Implementation of Information Technology Governance (IT Governance) in tertiary institutions is highly needed so that the development of investment and the application of information technology has a maximum value [2].

It is implemented, so far the functions of Gallery B9 is for art space and focused on the appearance of student work for the final reports assignment, or serves as a local academic exhibition. This will be affected by the lack of involvement of the public outside of UNNES, both the social of the arts field or art publics.

From the assumptions above, the authors assume that Gallery B9 has functioned as an educational space open to the public. Some students who will use Gallery B9 facilities, seem difficult to access the Gallery which is complicated. Initially students must ask about the schedule for using Gallery B9.

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whether used by others or not. Then the student reports the booking to the head of laboratory, and the Head will give a letter of recommendation to the staff to help the process of accessing the Gallery. All of this process must be known form the student’s supervising lecturer (if Gallery B9 is used to exhibit study projects).

That is needed a technology that can manage the booking of Gallery B9. That without borders or limited by space and time, so that it can be used very easily and is open to anyone who wants to booking access of Gallery B9. Through these assumptions, the author tries to design a web-based Gallery B9 booking system as a media service at the Art Department of FBS UNNES, for two subectives. They are to create a web-based booking system as a service media at Gallery B9 Department of Fine Art, Semarang State University, and Implementing a trial-based website B9 Gallery booking system as a student support facility.

The information system is a system within the organization that meets the needs of daily transaction processing, supports operations, is managerial and strategic activities of an organization's activities and provides certain external parties with the necessary reports. Ten principles for good design, Good design is innovative, useful, aesthetic, understandable, unobtrusive, honest, long-lasting, detail, environmentally friendly and simple.

2. Research methods
This research chooses qualitative-descriptive research. The method used is SDLC, because the SDLC method can see the overall effectiveness of the website [3]. This is consistent with the statement that SLDC Is the application of the application of problem solving obtained from a systems approach to the development of information systems solutions to business problems [4] and SDLC models are such type of methodologies which are used for the development of software project with their different development phases like analysis phase, designing phase, programming phase, testing phase and maintenance phase [5].

Although there are many variations of the traditional SDLC, they all have the following common phases in one form or another. Planning, System Analysis and Requirements, System Design, Development, Testing, Implementation, Operations and Maintenance [6].

This paper will be written with descriptive qualitative and served with statistics as measurement. Descriptive statistics are statistics used to analyze data in ways that describe or depict the data that has been collected as it is without intending to generally accepted conclusions or generalizations [7].

Through this scheme, the writer analyzing the design of booking website Gallery B9, by applying it to several studies of Aesthetic theory. After that the website will be tested on 22 students as subjects and finally get the results. Data was collected using controlled observation techniques, interviews, and tests. The results will then be used to draw conclusions.

3. Results and discussion

3.1. Results
The design of this website display is done by utilizing the internet and applying the Gallery B9 booking system as a tool to facilitate services for students. After the application was done using Adobe Dreamweaver, the writer developed a website majoring in fine arts to implement an additional system. The results from the initial data processing, students gave a positive response to the assessment of laboratory services through this system.
Web-based booking system can (a) use information technology to speed up and improve the performance of Galeri B9's enforcement actions by utilizing the internet network wherever and whenever. (b) Providing information about room booking that is accurate and perfectly on target. (c) By using web-based information technology, minimizing the paper use, stationery and other office stationery. (d) Order authentication, so that everyone can access it, but still can control in the room. So the tools that are borrowed and stored in the room will not be lost and damaged. (e) Does not take much time. (f) Prospective borrowers can directly access the application anytime and anywhere to obtain information on room loan data by utilizing the internet network.

These benefits can be obtained after students write their identity in the first phase (see on Figure 1).

Figure 1. Gallery B9 web system.

Figure 2. Gallery B9 booking system phase 1.
In the first phase, user fill in the date of use, fill in the type of activity, add a description form, fill in the gallery location used whether the gallery space 1,2,3 or 5, fill in the duration and duration of the exhibition by clicking on the date on the side, filling whether to do it weekly/ daily.

Second Phase students are required to fill in their identity in the form of names, student numbers, booking requirements and telephone numbers that can be contacted. And finally click the send button. Through this data the head of the laboratory can give responsibility to students to monitor and maintain the completeness and infrastructure of the laboratory in this case Gallery B9. Then students fill in the use of gallery information in phase 2 (see on Figure 2).

Through this field the head of the laboratory will get accurate data, and can be stored in the calendar application that has been displayed. So that other students who will use the gallery for exhibition activities, can use it on other spaces, days and dates. And finally students can see in phase 4 (see on Figure 4). Then the approving statement can be submitted in the head of the laboratory for validation by the user’s email.

Figure 3. Gallery B9 booking system phase 2.

Figure 4. Gallery B9 booking system phase 3.
3.2. Discussions
The gallery must have the effectiveness of this communication according to the following quote, Museums (art space; included gallery) lean heavily on recent developments in communication technologies to create an authentic experience for online visitors of its galleries. So it takes a good communication media to provide the right information [8]. It takes an understanding of the composition of images to make a better web site. The major image at the top, a photo and its surrounding frame, is the largest single graphical element on the page, reflecting its importance as showing the latest top story. Farther down, there are smaller photos illustrating other stories, the whole being well balanced by the set of text links leading to various news reports [9].

After the questionnaire is calculated processing from 22 subject survey’s, with the question "how do you think the effectiveness of the communication available on the Gallery B9 website?" with interval values are very effective, effective, quite effective, bad, very bad. Then obtained the results that the website-based booking system has good communication effectiveness, the evident is from the results of the questionnaire showing 86% communication efficiency. This is consistent with what Rims said, that a good design is a design that can communicate appropriately. This is because the website uses a simple display and signs that are easily understood, such as dates and others. The use fonts is comfortable to read with arial fonts whose proportions are not too small.

![Figure 5](image_url)

**Figure 5.** Gallery B9 web-based booking system effectiveness.

The second assessment is the model and visual appearance. Visuals are very important on the website, like this quote. Throughout, visual appeal ratings were highly correlated from one phase to the next as were the correlations between the 50 ms and 500 ms conditions. Thus, visual appeal can be assessed within 50 ms, suggesting that web designers have about 50 ms to make a good first impression [10]. This is a vital thing as a representation of the Fine Arts Department, it is considered to have an aesthetic level of 89%. From 22 subject survey’s, with the question "how do you think the effectiveness of the aesthetics on the Gallery B9 website?" with interval values are very effective, effective, quite effective, bad, very bad. This assessment is in accordance with Rims who also said that an attractive design is an aesthetic design. It is said to be aesthetic because this website design is simple, uses blue predominant color, and a white background. The red color is used for dating so that it is easily seen and a sign of primary dominance.
After testing the web-based booking system online, 82% said they were satisfied using this feature. Students stated that if this website-based booking system online greatly cut time and remained in accordance with the stages of authority. Some of them feel less satisfied because this system requires the user to have an internet network that can be used.

4. Conclusion

The conclusion of this research is the character of a portable website that provides open services so that it can be accessed from anywhere and anytime. Because the nature of the website that records this system automatically will facilitate the performance of the Fine Arts Section and provide more optimal supervision through web history. Although it cannot be said to be maximal, this website can be implemented because it has fulfilled the value of communication efficiency, display effectiveness, and user satisfaction, so that laboratory services will be more optimal. Furthermore, this research will be used as a guideline for making a booking website for Gallery B9 to make it easier for students to book a room at Gallery B9.

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Figure 6. Gallery B9 web-based booking system aesthetics.
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