

WEBSITE APPLICATION CREATION FOR E-JOURNAL

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Abstract

This research aims to develop a website application which aims to facilitate the management and distribution of electronic journals (e-journals) efficiently. The development methods used are user needs analysis, system design, implementation and evaluation. This application is designed to provide an easy-to-use platform for journal managers to upload, manage and publish articles online. Apart from that, this application is also equipped with a search feature that makes it easier for readers to find articles that are relevant to the topic of interest. Evaluation is carried out through functionality testing and user satisfaction to ensure the performance and usability of this application. The research results show that this application can increase efficiency in managing and distributing electronic journals and provide a satisfactory user experience.

Keywords: E-Journal; Website; Design; Codeigniter 3 Framework.

INTRODUCTION

The use of information and communication technology has brought significant changes in various aspects of life, including in the academic and scientific world. One of the innovations created is an electronic journal (e-journal), which makes it easy to access and distribute scientific articles online. E-journals have become an important means of facilitating the exchange of information and dissemination of knowledge in various fields of science. The e-journal web application is an information technology innovation that has an important role in supporting the process of managing journals and scientific publications in the current digital era. E-journals allow researchers, academics and the general public to easily access and disseminate research results online. By using the e-journal web application, the process of managing, peer-reviewing and publishing articles becomes more efficient. Even though e-journals have become one of the main tools in scientific communication, managing and distributing e-journals still often poses challenges for editors and readers. The process of managing articles, creating indexes, and providing easy access for readers to aspects that require special attention.

Researchers searched for several pieces of literature including [1] that this application makes it easier to store student publications and search for student publication data if necessary. [2] makes it easier for users to submit journals to be more distributed. [3] can simplify and speed up the process of publishing and managing

articles electronically, resulting in higher efficiency. [4] Solutions for article management, allowing editors to access and manage papers more quickly, easily and efficiently. [5] Applications can make it easier for students to search for journals. [6] The website has features that make it easy for users to access easily without experiencing difficulties.

By finding several comparisons for the journals above in this context, the development of website applications for e-journals becomes relevant as an effort to increase efficiency and quality in the management and distribution of e-journals. This website application can provide solutions to various problems faced in managing e-journals, starting from managing articles, searching, to accessibility for readers. By considering the important role of e-journals in supporting the research process and dissemination of knowledge, this research to develop a website application for e-journals can facilitate efficient management and distribution of e-journals. This introduction will outline the background, problems faced, and objectives of this research. In addition, a review of related literature will also presented to support the understanding and relevance of research in a broader context.

RESEARCH METHODOLOGY

This research uses a software development approach to design and implement website applications for e-journals. The software development method used is (Iterative Software Development Model) which is developed in stages with repeated iterations. The stages carried out in this research include:

1. User Needs Analysis:
 - o Conduct literature studies to understand the basic needs of users in managing and distributing e-journals.
 - o Conduct interviews and surveys with journal managers, editors and e-journal readers to identify specific needs, challenges and expectations regarding e-journal website applications.
2. System Design:
 - o Designing e-journal website application based on the results of the needs analysis
 - o Develop functional and non-functional specifications for applications that include key features, user interface and security.
3. Implementation:
 - o Website applications use technology and programming languages that suit the needs and specifications that have been designed.
4. Evaluation :
 - o Perform application functionality testing to check the correctness and performance of implemented features.

- o Collect feedback from users and use evaluation results to make improvements and improvements to the application.

RESULT AND DISCUSSION

Usecase Diagram

Usecase diagram that describes the interaction between users and the E-Jurnal web application based on the requirements that have been identified:

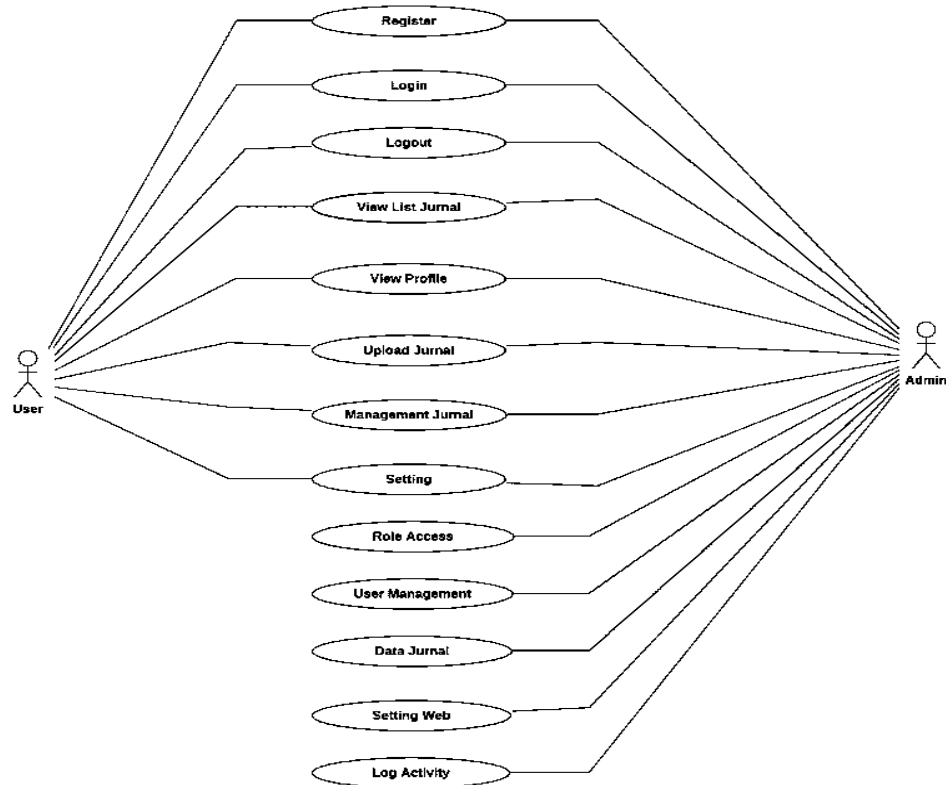


Figure 1. Usecase Diagram

System Implementation

To implement the E-Jurnal web application, we use the PHP programming language with the help of the Codeigniter 3 framework. Below is the application that has been created.



Figure 2 Menu Login Page

The steps for users to enter the application are by using a previously registered account. Users enter the email and password associated with their account. The application verifies the user account, if valid the user successfully logs into the system and can continue. If there is an error, a description will appear.

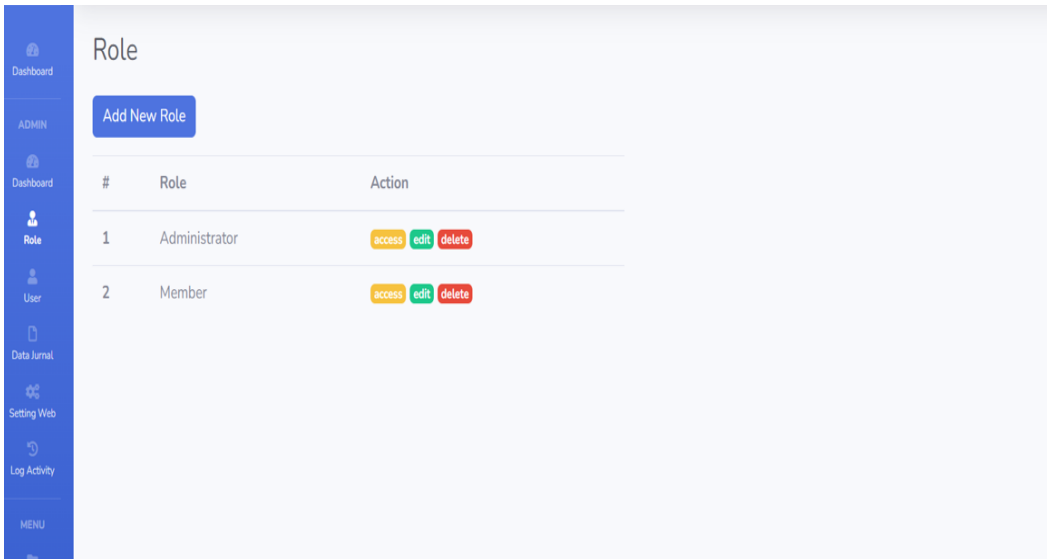


Figure 3 Role Access

Functions to limit access at the account level.

Admin selects the Role menu, Admin changes access restrictions at a certain level

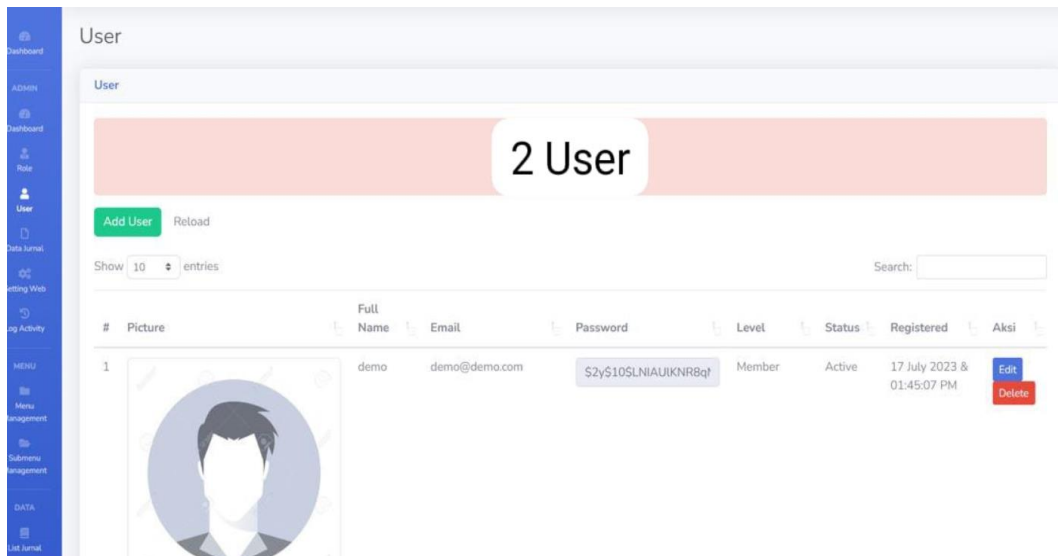


Figure 4 User Management
Steps to manage all user accounts.

Admin selects the option to add a new account or edit or delete an existing account. The manager fills in account information such as email, account level and status.

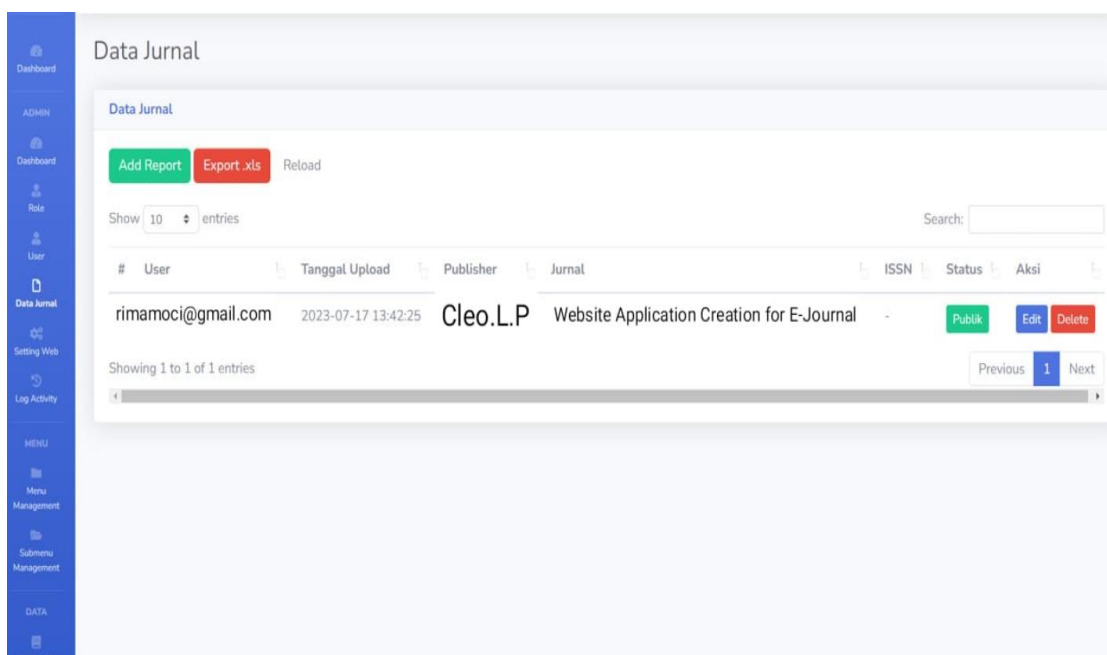


Figure 5 Journal Data
Steps for managing scientific journals by all users.

Admin selects the option to add a new journal or edit or delete, export to Excel an existing journal, Manager fills in journal information such as title, author, ISSN and status

CONCLUSION

The conclusion from the research title "Creating Website Applications for E-Journals" is that this research aims to develop a website-based application specifically designed to provide a platform for electronic journals (e-journals). This application is designed to facilitate the distribution, accessibility and management of content from these journals online. During the development process, we conduct user needs analysis, formulate application requirements, and design the user interface. Implementation of the application using the PHP programming language with the Codeigniter 3 framework resulted in the conclusion that this e-journal system makes it easy to upload journals which can be accessed by users easily via the website.

With this application, it is hoped that it can increase efficiency in the distribution process and access to scientific publications, as well as expand the range of readers who can access these journals globally via the internet.

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