

**FINAL RESEARCH REPORT**

**BUILDING A WEB-BASED E-LEARNING INFORMATION SYSTEM IN  
UNIVERSITAS TRUNOJOYO MADURA USING THE WATERFALL  
METHOD**



**INFORMATICS ENGINEERING MAJOR  
FACULTY OF COMPUTER SCIENCE  
UNIVERSITAS NAROTAMA SURABAYA  
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**Submitted to Fill The Requirements  
To Obtain a Bachelor of Computer (S.Kom) Degree  
in The Informatics Engineering Study Program**

**Faculty of Computer Science  
Narotama University Surabaya**

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Defended in front of the Examiner of the Research Final Seminar  
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Surabaya, February 2023

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## STATEMENT LETTER

I hereby declare that in this Research/Research Final Report there is no work that has ever been submitted to obtain a bachelor's degree in a university, and to the best of my knowledge there is also no work/opinion that has been written by other people, except those which are referred to in writing in the manuscript. and mentioned in the Reference List/Bibliography.

If a plagiarism is found, I am willing to accept the consequences in the form of academic sanctions and other sanctions given by the authorities in accordance with the provisions of the applicable laws and regulations.

Surabaya, February 3, 2023



HOSAM QASEM ABDO MAHYOUB AL-GALAL  
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## **ABSTRACT**

E-learning is a form of education that combines motivation, communication, efficiency and technology. The aim of this research is to design and build a web-based e-learning information system, at Trunojoyo Madura University. In this study used the Waterfall development method. The Waterfall model has a process that flows systematically from one stage to another. These stages are analysis, design, coding, testing, maintenance and this application is built using PHP as the Server-Side Programming Language, MySQL as the database server and the CodeIgniter Framework. The results of the research can design and build a web-based e-learning information system that can facilitate the online class learning process. That with an e-learning information system it can facilitate the process of student attendance, which provides valid and accurate attendance information and can design student e-learning information systems to make it easier to print reports.

Keyword: E-Learning, Website, PHP, MySQL, Waterfall

**PRO PATRIA**

**SURABAYA**

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