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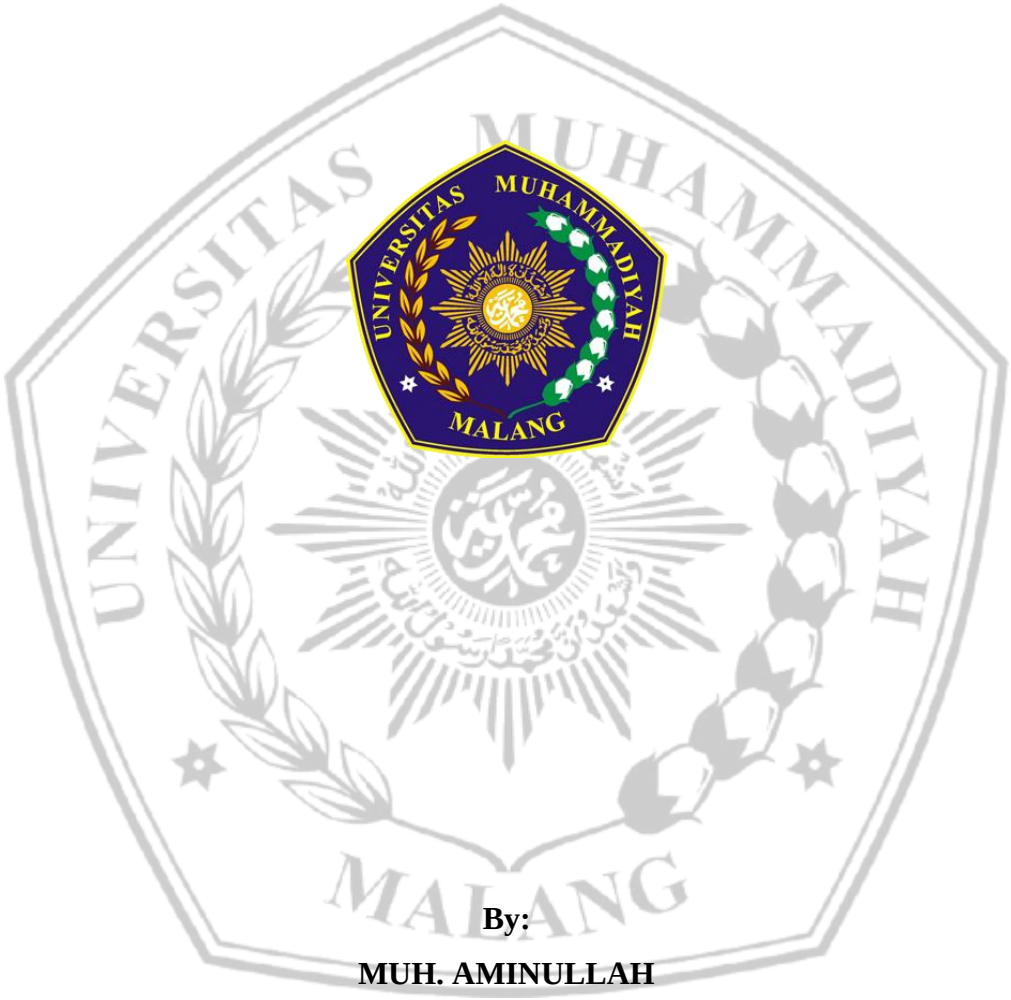
WEB3 FOR EDUCATIONAL GAMES: A PROTOTYPING AND SIMULATION APPROACH TO EXPLORING FUTURE LEARNING PLATFORMS

THESIS



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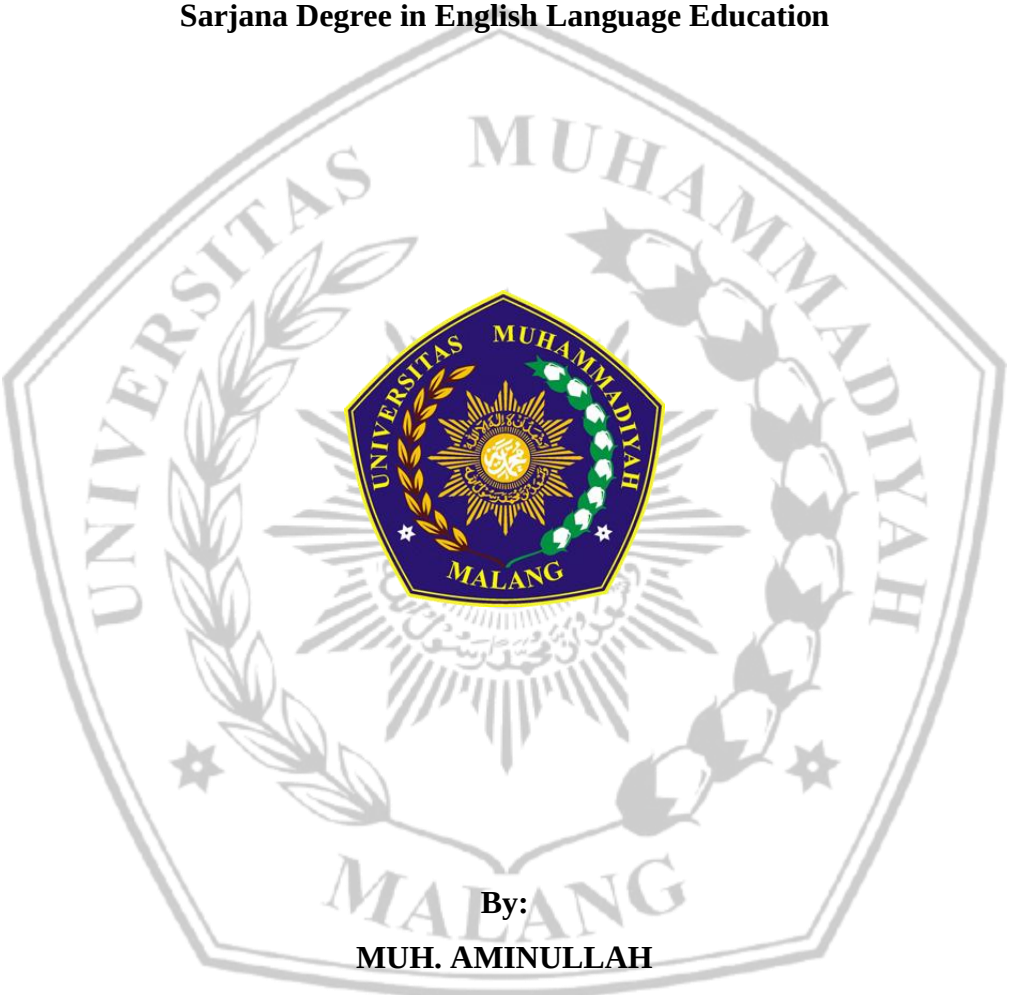
THESIS

This thesis is submitted to meet one of the requirements to achieve

Sarjana Degree in English Language Education



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APPROVAL

This thesis was defended in front of the examiners of the Faculty of Teacher Training and Education of University of Muhammadiyah Malang and accepted as one of the requirements to achieve Sarjana Degree in English Language Education on 22 July, 2025

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MOTTOS AND DEDICATION

MOTTO

"Advancing through persistent refinement"

-Aminullah-

DEDICATIONS

I dedicate this thesis to:

1. Myself
2. My parents
3. All my friends.

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AUTHOR'S DECLARATION OF ORIGINALITY

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ABSTRACT

Research Objectives: This Research and Development (R&D) study employed the ADDIE model to develop and evaluate a Web3-integrated educational game prototype designed to enhance English language learning engagement and motivation among 12th-grade students at SMKN 2 Dompu. Data was collected through pre- and post-game surveys from 24 students, along with feedback from a design expert and a teacher. The findings revealed high student engagement, significant perceived learning gains, and strong motivation driven by the blockchain-based reward system. Furthermore, the study demonstrated that Web3 technologies, specifically NFT-gated progression and ERC-20 token rewards implemented via the Thirdweb SDK, can be effectively integrated into educational games without compromising the learning or gaming experience. This research concludes that Web3-integrated educational games offer a promising approach to address student disengagement and motivational challenges, providing unique benefits such as enhanced motivation, technological literacy, and a sense of ownership over learning achievements.

Key words: *Educational Games, English Language Learning, Gamification, Student Engagement, Web3.*

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