



UNDERGRADUATE THESIS

DEVELOPMENT OF A 2D ACTION RPG EDUCATIONAL GAME ON THE HISTORY OF THE BATTLE OF PUPUTAN MARGARANA USING BRANCHING NARRATIVE AND STEALTH MINIGAME

RADITYA LUNGGUK SATYA PUTRA
NPM 21081010259

THESIS ADVISORS

Chrystia Aji Putra, S.Kom., M.T
Andreas Nugroho Sihananto, S.Kom., M.Kom.

**MINISTRY OF HIGHER EDUCATION, SCIENCE, AND TECHNOLOGY
UNIVERSITAS PEMBANGUNAN NASIONAL VETERAN JAWA TIMUR
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INFORMATICS STUDY PROGRAM
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APPROVAL SHEET

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By :
RADITYA LUNGGUK SATYA PUTRA
NPM. 21081010259

Has been defended before, and accepted by, the Board of Assessors of the Thesis Examination of the Informatics Study Program, Faculty of Computer Science, Universitas Pembangunan Nasional Veteran Jawa Timur, on March 9, 2026:

Approved,

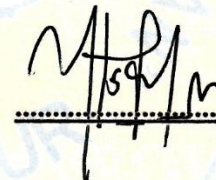
Chrystia Aji Putra, S.Kom., M.T
NIP. 19861008 202121 1 001


..... (Advisor I)

Andreas Nugroho Sihananto, S.Kom., M.Kom.
NIP. 19900412 202406 1 003


..... (Advisor II)

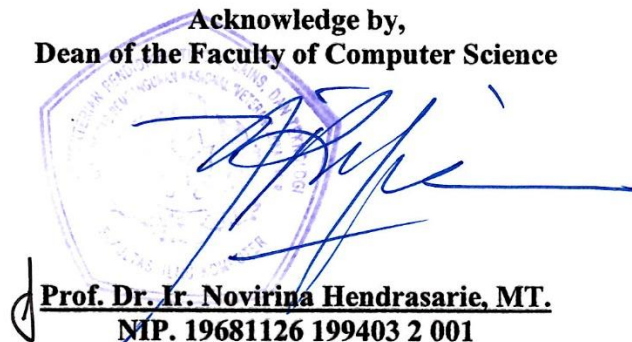
Yisti Vita Via, S.ST., M.Kom.
NIP. 19860425 202121 2 001


..... (Head Assessor)

Afina Lina Nurlaili, S.Kom., M.Kom.
NIP. 1993121 3202203 2 010


..... (Assessor I)

Acknowledge by,
Dean of the Faculty of Computer Science


Prof. Dr. Ir. Novirina Hendrasarie, MT.
NIP. 19681126 199403 2 001

APPROVAL SHEET

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By :

RADITYA LUNGGUK SATYA PUTRA
NPM. 21081010259

Approved to proceed to the Thesis Examination



Approved by,

**Coordinator of Informatics Study Program
Faculty of Computer Science**

Fetty Tri Anggraeny, S.Kom., M.Kom.
NIP. 19820211 202121 2 005

STATEMENT OF ORIGINALITY

I am the undersigned :

Student Name : Raditya Lungguk Satya Putra
NPM : 21081010259
Degree Program : Bachelor (S1)
Study Program : Informatics
Faculty : Faculty of Computer Science

Hereby declares that this undergraduate thesis contains no part of any other scientific work that has been submitted to obtain an academic degree at any higher education institution. Furthermore, it does not contain any work or opinions previously written or published by others, except for those which are explicitly cited in this thesis and listed completely in references.

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Surabaya, April 12, 2026
Declarant,



RADITYA LUNGGUK SATYA PUTRA
NPM. 21081010259

ABSTRACT

Student Name / NPM : Raditya Lungguk Satya Putra / 21081010259
Thesis Title : Development of a 2D Action RPG Educational
Game on the History of the Battle of Puputan
Margarana Using Branching Narrative and Stealth
Minigame
Thesis Advisor : 1. Chrystia Aji Putra, S.Kom., M.T
2. Andreas Nugroho Sihananto, S.Kom., M.Kom.

History lessons in schools face challenges in attracting students interest due to delivery methods through lectures and static presentation media. This research aims to develop a historical educational game about the Battle of Puputan Margarana using the 2D Action RPG genre, Branching Narrative method, and Stealth Minigame. The development methodology used is Interactive Digital Narrative (IDN) which consists of the requirement analysis, general design, detailed design, implementation, and testing stages. The results showed that all game features were declared functionally valid using Black Box testing. To measure the game's effectiveness in improving historical understanding, Pre-Test and Post-Test evaluations were conducted on 21 junior high school students and 35 general respondents. The test results from the junior high school respondents obtained an N-Gain score of 0.429, which falls into the "Medium" effectiveness category. Furthermore, the test results from the general respondents obtained an N-Gain score of 0.742, which is classified into the "High" effectiveness category. In the GUESS-18 evaluation, the user experience satisfaction level for the Puputan Margarana game was in the "Good" category, with an average score across all aspects of 4.10 out of 5.00. Based on all test results, the Puputan Margarana game is proven effective in improving historical understanding of the Battle of Puputan Margarana and providing a good gaming experience for players.

Kata Kunci : Educational Game, 2D Action RPG, History of the Battle of Puputan Margarana, Branching Narrative, Stealth Minigame

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The author realizes that the writing of this undergraduate thesis still has various shortcomings. Therefore, constructive criticism and suggestions from all parties are highly expected to improve this writing. Hopefully, this undergraduate thesis will provide benefits, both for readers in general and for the author personally.

Surabaya, April 12, 2026

Author

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