

CHAPTER I

INTRODUCTION

1.1. Background

The current advancement of technology has driven the emergence of various more interactive learning media, one of which is the video game. Through the Game Based Education approach, learning can be packaged in a more active form, in which students do not merely receive information passively but also interact directly with the material being studied [1]. In this context, for an educational game to convey material effectively, its development requires careful design across various aspects, ranging from game mechanic design, interaction flow, and visual presentation in the form of graphics, UI, and UX, to audio aspects such as sound effects and mood-supporting music [2].

Following the proclamation of Indonesian independence on 17 August 1945, the government called for the raising of the Red and White flag throughout Indonesia, including Surabaya. During the same period, as World War II ended, Allied forces—particularly the British and the Dutch—began to re-enter Indonesian territory. In Surabaya, Hotel Yamato was designated by AFNEI (Allied Forces Netherlands East Indies) as a rehabilitation center for prisoners of war and internees. Mistreatment by Dutch soldiers and the Dutch leadership's refusal to recognize Indonesian sovereignty sparked a disturbance on the night of 19 September 1945, later known as the Hotel Yamato Incident [3].

Several previous studies have developed educational games with similar themes, including those concerning the Battle of Surabaya and the flag-tearing event at Hotel Yamato. Evaluation using the Game User Experience Satisfaction Scale (GUESS-18) method showed a user satisfaction score of 3.80 out of 5.00. Although fairly good, that development still had limitations in the form of an insufficiently deep storyline, limited interaction, and a not-yet-optimal integration between game elements and the delivery of historical material.

The main limitation of previous research lies in the lack of storyline depth, which made the learning experience less immersive. To address this, this study uses the Interactive Digital Narrative (IDN) approach, which allows players to

interact directly with the storyline through the available choices. With this approach, players do not merely receive historical information passively but are also involved in a decision-making process that affects the course of the story. This is expected to increase player engagement and understanding of the historical context more deeply than a linear narrative approach.

Based on this, this study focuses on developing the educational game “Insiden Hotel Yamato” with several improvements: the addition of interactive features, the development of a more varied storyline through the Interactive Digital Narrative (IDN) approach, and the refinement of game mechanics that support the learning process. User experience evaluation will be carried out using the GUESS-18 method, targeting a higher score than previous research. Through this development, the resulting game is expected to function as an effective medium for learning history and capable of improving students' understanding of the Hotel Yamato Incident more deeply.

1.2. Problem Formulation

Based on the background described above, the following are the problem formulations to be addressed:

1. How can a game architecture be designed that is able to integrate a valid historical narrative with an alternative (what-if) path without reducing the player's understanding of historical facts?
2. How is the Interactive Digital Narrative (IDN) method applied in delivering the historical narrative in the game?
3. What is the level of user experience of the developed game based on the GUESS-18 method, and how does it compare with previous research?

1.3. Scope Limitations

In this final project, there are several scope limitations, among others:

1. The development of the “Insiden Hotel Yamato” game uses Unity 2022.
2. The target users are students at the junior high to senior high school level.
3. The main story in the game refers to valid history and does not deviate from historical facts, whereas the alternative path (branching story) is used

as a hypothetical (what-if) scenario to support the learning process.

4. The narrative design method uses Interactive Digital Narrative (IDN).
5. The user experience evaluation uses the GUESS-18 method.

1.4. Objectives

The objectives of this final project are:

1. To develop the educational game “Insiden Hotel Yamato” with interactive features and game mechanics that support history learning.
2. To apply the Interactive Digital Narrative (IDN) method in the development of the game's storyline.
3. To measure and compare the level of user experience using the GUESS-18 method against previous research.

1.5. Benefits

The benefits obtained through this final project are:

For the researcher:

1. To broaden the researcher's knowledge by applying the knowledge gained during coursework, especially in the field of game development.
2. To produce an educational game product that can be developed further in subsequent research.

For users/students:

1. To obtain an interactive and engaging history learning medium about the Hotel Yamato Incident.
2. To improve understanding of historical material through a gameplay experience that involves historical decision-making.

For readers:

1. To serve as a reference for readers on the process of creating and developing a 2D game using Unity 2022.
2. To broaden insight into the use of games as a learning medium based on Game Based Education.