

# Radja lan Keris

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## Abstract

The diverse culture and wealth of Indonesian traditional folklore provides a multitude of characters and visual references to inspire modern storytelling through digital games. This project explores the possibility of developing a narrative and characters based on Indonesian traditional folklore and mythology to implement within a digital game. The novelty of characters and plot never seen before in contemporary games, combined with the current popular trend of immersive horror gameplay, should provide emotional engagement that increases players' retention to the game contents, providing a platform for communicating Indonesian culture within a global environment.

**Keywords:** digital game, traditional folklore

## Abstrak

**Judul:** Radja lan Keris

*Beragam budaya dan kekayaan cerita rakyat tradisional Indonesia menyediakan sejumlah besar karakter dan referensi visual untuk menginspirasi pendongengan secara modern melalui digital game. Proyek ini mengeksplorasi kemungkinan untuk mengembangkan sebuah narasi dan karakter-karakter berdasarkan cerita rakyat dan mitos tradisional Indonesia untuk diimplementasikan dalam sebuah digital game. Karakter dan plot yang baru dan belum pernah dilihat dalam game kontemporer, digabung dengan trend populer saat ini dalam gameplay horor yang imersif, dapat menyediakan keterlibatan emosional yang menambahkan retensi pemain terhadap konten game tersebut, dengan demikian menyediakan sebuah platform untuk mengkomunikasikan kultur Indonesia dalam lingkungan yang global.*

**Kata Kunci:** digital game, cerita tradisional

## Introduction

Radja Lan Keris is a first-person survival horror video game. The development of the game story and characters is inspired by Indonesian folklore and mythological creatures, as well as the story of Calon Arang (<http://www.mantrahindu.com/calon-arang-rahasia-legenda-dan-ilmu-hitam/>), a witch who was well-versed in the dark arts and threatened to curse a village because everyone was too afraid to marry her daughter.

The game revolves around a villager, Radja Radhen Soeltan, who was sent by the villagers to marry the daughter of a witch in order to find her weakness and prevent her from cursing the village.

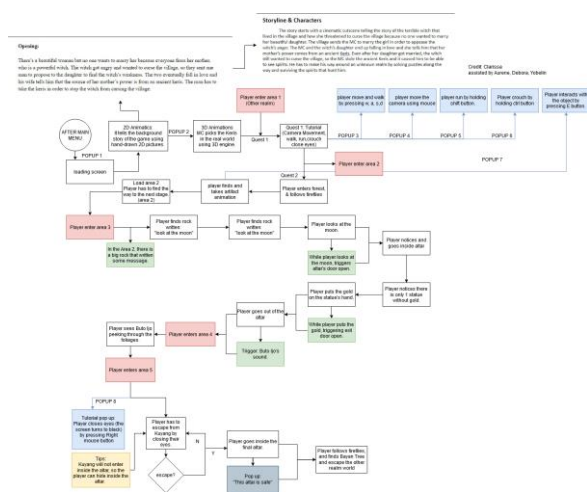
We chose this particular folklore for its unique characters and plot that are otherwise unseen in modern day games. Our goal with this project is to

implement Indonesian culture within an immersive horror game and introduce it to a global environment. There aren't a lot of games that use Indonesian mythology or folklore in the market, but Indonesia has so much untapped potential with an abundance of folklores and mythologies that can serve as a base for a unique storyline.

To achieve this, we implemented the story of Calon Arang into our plot and designed the look of the game to have a very local vibe, more specifically traditional Javanese. From the environment, characters, story, up to the game GUI, we designed them all to showcase Indonesian culture. So the players can have a feel of Indonesian culture when they play this game.

## Pre-Production

The first things to consider in our graduation work were the goal of the game, the possibility of making the game due to lack of manpower, and how the game will eventually look like in the end. With inspiration from *Outlast* (Red Barrels, 2013), we decided on a non-shooter survival horror game. Then we decided on a story based on an Indonesian horror folklore which is in line with the goal of our team. An example we used of a horror game that uses local folklore is *Unforgiving: A Northern Hymn* (Angry Demon Studio, 2017), a survival horror game heavily inspired by Swedish and Norse mythology. We then developed our idea even more by writing a script and designing the gameplay using flowcharts for a more detailed and structured work. This is the flowchart we created for our gameplay:



Flowchart by Clarissa Adi Guna, Debora Christy Rumawas Simona, Yobelin, Stephanie Aurene Tedja (2020)

**Image 1. Gameplay flowchart**

After that, we created the concepts for characters and environments, as well as the UI and GUI, and storyboards for the game cutscenes.



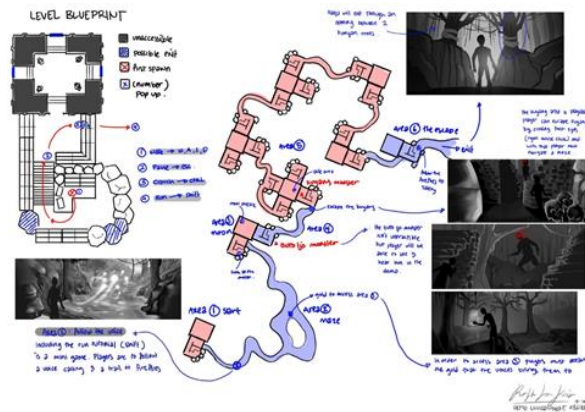
Artwork by Debora Christy Rumawas Simona (2020)

**Image 2. Radja costume design**



Artwork by Yobelin (2020)

**Image 3. Buto Ijo turnover concept**



Concept by Stephanie Aurene Stephanie Tedja (2020)

**Image 4. Revised level design**



Artwork by Debora Christy Rumawas Simona (2020)

**Image 5. GUI design**





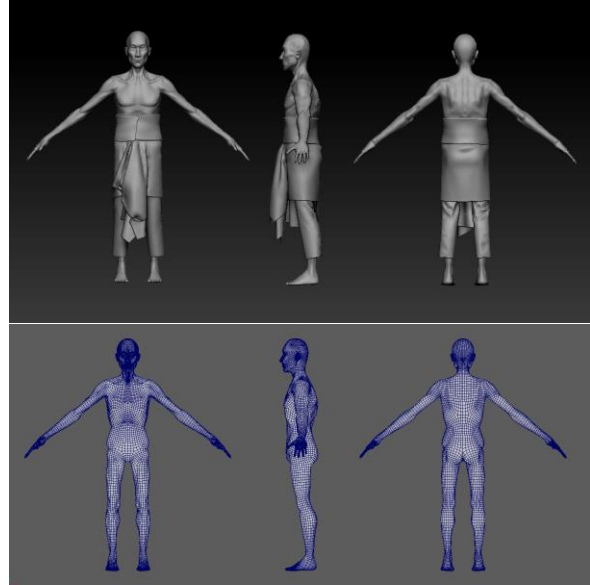
Design by Yobelin (2020)  
**Image 6. UI design**



2D Illustrations by Debora Christy Rumawas Simona and Yobelin, Compiled by Stephanie Aurene Tedja (2020)  
**Image 7. 2D illustrations for prologue animation**

### ***Main Production***

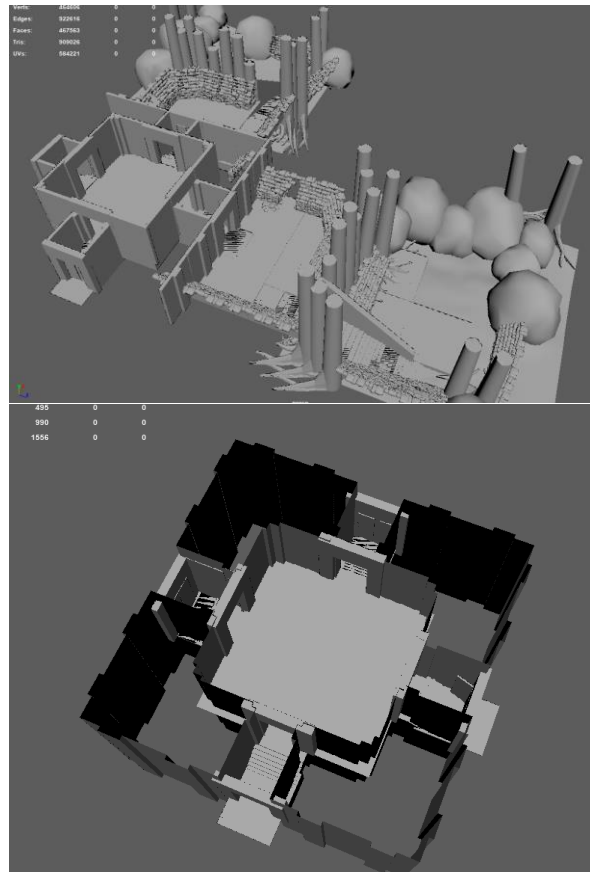
After the designs are all done. We began to produce 3D models for the characters and environments and put them inside the Unity engine to compile the game. From sculpting Hi poly in Zbrush, retopologizing and UV mapping in maya, texturing in Substance Painter, to rigging the characters. These are some of the progress in creating the main character:



3D Model by Nicholas Ariel Bintoro (2020)  
**Image 8. Radja sculpt and retopology**

After one model is done, they're put inside the engine for testing. Animations for the character are done at the same time of engine testing. And of course the animation has to be baked first.

Environment modeling began with creating the greybox, followed by making the necessary props and texturing them.



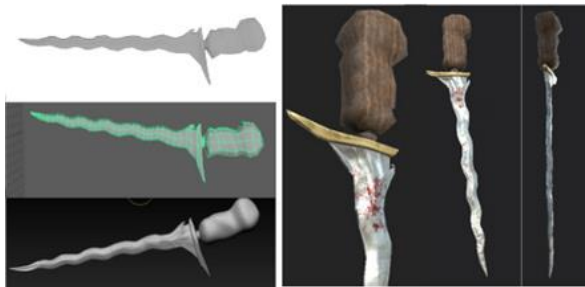
3D Model by Stephanie Aurene Tedja (2020)  
**Image 9. Greybox**



Texture by Clarissa Adi Guna (2020)  
**Image 10. Textured statue**



Prop by Clarissa Adi Guna (2020)  
**Image 11. Grass props**



*Keris* Lowpoly, Retopology, and Sculpt by Stephanie Aurene Tedja, Texture by Clarissa Adi Guna (2020)  
**Image 12. Keris prop model**

### ***Post Production***

After finishing the textures, we put them in the Unity engine. First, we organized the models and applied textures, then we evaluated what needs to be changed and modified. We keep doing this until everyone is happy with the results. Afterwards, the lighting is arranged to set the mood and atmosphere.



Lighting by Clarissa Adi Guna (2020)

**Image 13. Lighting arrangements and final lighting**

We also need to apply optimizations, sound effects, post processing, as well as beta testing for bugs and other glitches.

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