

# CHAPTER I

## PRELIMINARY

### 1.1 Background

In this era of globalization the development of technology grows rapidly a lot of work that is easy with technology. One of them is the production of animated films that are currently experiencing a very rapid development. Where the animation films that are in production today almost everything is already using computer technology. It also affects the creation of 2D animations that are increasingly fast and easy to create.

Animation is a set of static images that are in sequential order, giving rise to an illusion that makes an object or image feel like moving as the animator wishes. In general, his animations in the two are 2D animations and 3D animations. 2D Animation is an animation that is show in a flat field or 2 dimensional (agus suheri).

There are many techniques used for the creation of 2D animations from traditional techniques to new techniques. One of the new techniques used is the use of rigging techniques as a way to create animations. Rigging techniques are commonly used in 3D animation creation but with the development of this technique technology can be applied in simpler 2D animations. Rigging is a method

Installation of a skeleton on an object or digital model, in order to be in motion or in manipulation by an animator.

In the 2D rigging technique there is a common deficiency that a visible character does not have space because the animation is performed only on the X and Y axes. But this can be solved by applying 3D illusions to the character or object, the 3D illusion can be accomplished by manipulating the camera's viewpoint and shadows.

Based on the background above in conclusion how to apply the 2D rigging technique in the production of cartoon film.

### **1.2 Formulation Of The Problem**

Based on the background above, we can take the formulation of the problem, namely, how to implement rigging techniques so that 2D animation has a 3D illusion by manipulating the rotating movements of the animated characters?

### **1.3 Scope Of Problem**

From the formulation of the problem above can be made a problem limitation As follows:

1. The film made is a short film.
2. Using 2D animation techniques.
3. The drawing technique uses digital animation.
4. animated using 2D Rigging.

5. The application of rigging techniques includes: character.
6. the application of 3D illusions includes: head.
7. Testing uses comparison techniques by comparing points to achieve 3D illusions.

#### **1.4 Purpose**

The objectives to be achieved by the authors of the preparation of this study are as follows:

1. Apply rigging techniques to 2D animation.
2. To design and make a cartoon movie "Moon Keeper" with 2D animation.
3. To apply 3D illusions to 2D animation.
4. As a requirement to complete the undergraduate study program (S1) at Amikom University Yogyakarta.

#### **1.5 The Benefits**

Benefits for writers:

1. Can explore 2D animation rigging techniques.
2. For S1 graduation requirements.

Benefits for readers:

1. Readers can find out the stages of designing 2D animation "Moon Keeper".
2. The reader can find out the use of 2D rigging.

Benefits for animators:

1. As a reference for making animation.
2. As a comparison tool for other animation techniques.

## **1.6 Research Methods**

### **1.6.1 Method Of Collecting Data**

#### **1. Literature Study Methods**

Collecting literature data sourced from books, media, or other people's research results with data related to cartoons.

#### **2. Literature Method**

The process of collecting data through books, tutorials, and all material related to the production process can be obtained at the library or from the internet.

### **1.6.2 Analysis Method**

#### **1. Functional Requirements Analysis**

Analyze what functional requirements can support the production process of animated films.

#### **2. Non-Functional Requirements Analysis**

Analyze any non-functional requirements that support the production process of animated films.

### 1.6.3 Design Method

2D Cartoon Film Design Method It is a cartoon film design method, which goes through 3 stages, namely: Pre Production Stage, Production Stage and Post Production Stage.

### 1.6.4 Testing Method

In the test a comparison is made between the animation that has been made with other existing animations and assess the appropriate scenario in order to prove if the animation that has been made has achieved the goal of making 3D illusions by changing the camera's perspective.

### 1.7 Writing System

To facilitate the writing of a thesis, the author describes the thesis into five chapters, as follows:

#### **CHAPTER I                      PRELIMINARY**

In this chapter explains the background, problem formulation, problem boundaries, research objectives, research methods, and writing systematic.

#### **CHAPTER II                      THEORETICAL BASIS**

This chapter contains a description of theories about 2D cartoon films, animation principles, types of animation, animation techniques, the process of making animation, software used in making animated films.

### **CHAPTER III      ANALYSIS AND DESIGN**

This chapter contains the stages of pre-production including, making story ideas, themes, making characters, visual scripts and storyboards.

### **CHAPTER IV      IMPLEMENTATION AND DISCUSSION**

This chapter explains the stages of designing animated films from production to post-production.

### **CHAPTER V      CLOSING**

This chapter contains conclusions and suggestions from the entire research process that has been carried out.

