

# CHAPTER 1

## INTRODUCTION

### Background

History in Indonesia should be preserved as the nation's culture. Heroes that exist in Indonesia is one of Indonesia's precious history considering how they struggle for Indonesia independence from the invaders. But unfortunately in this digital era, Indonesian heroes began to be forgotten by the Indonesian people themselves. By utilizing the rapidly expanding digital era, Indonesian heroes can be reintroduced in a more interactive and engaging way by packing it in a game. Game is a fun-based solving problem activity (Jesse Schell, 2008). In today's world, internet is used by everybody. The internet is all about connecting machine together and communication. This is where network programming comes. Network programming allows interprocess communication (Abhijit A. Sawant, 2013). Along with the development of network programming, this development certainly affects several aspects and one of them is in the field of gaming. Most game applications can only be played by a single player, which may lead to dissatisfaction and saturation of the player because it only interacts with the computer (artificial intelligence). To reduce this, multiplayer-based games were created where players can play with other players to achieve certain goals such as getting the highest score among players, reaching the highest level, or to destroy enemies along with other players. By carrying the concept of multiplayer and history, the author makes educational-history multiplayer game application.

This game application uses java as its programming language. To connect between user and other user author uses java socket. Java socket is one of java library that used for networking. The author of this project uses array as data structure to store images and player information. Because using array is easy to

call an image using array index. Array also easy to maintain. And for reducing player saturation, this game completed with attractive interface using javaswing.

The name of this application game is “Guess The Hero”. Where the game provide a Indonesian hero picture that is separated into small parts into 9 button. Player has a chance to open one of that small parts image alternately so player has a hint to guess that image. First player that can guess that image win this round and got 1 point from that. After that the image will dissapear and load another image.

### Scope

the author formulates the problem as follows :

1. How the client – server communication works so the image in all client that appeared are same , and the client get the turn respectively?
2. What happen if one of the player have disconnect at the middle of the game?
3. What happen if someone join when the game still playing?

In order for research to be more focused and not widespread from the discussion in question, in this project the authors limit it to the scope of the study as follows :

1. Only player that occur in one network that can play this game.
2. There is no security in this game.
3. This game doesn't have update feature for the client.
4. This game only start when 3 client joined.

## **Objective**

The purpose of this project is to be an alternative history learning about Indonesian Heroes for people to study because its packed by playing a game and competition with other player as well as helping people to develop their imaginary abilities.

