

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

In this era technology advances rapidly growing, starting from the making of programs that are widely used by business circle to the depiction of an analysis to take a decision, which will be displayed visually. Visualization is a form of information delivery used to describe things through images, animations, and diagrams that can be calculated, explored, and analyzed. In the science of informatics, the learning normally used for decision making is the binary tree, binary tree is a tree that each node has only 2 relation per level.

So the binary tree visualization is a visual image that will be displayed using the binary tree function to form a binary tree. Inside the binary tree there are several initial structures i.e root, parent, child, and leaf. Root is the first node in the middle. Parent is node that already has a relation and will have another relation under it. Child is a node that has a relationship with parent. And leaf is a node that has no relation anymore.

In the program that created this there are several functions to form a binary tree that is insert, search, and delete. Overview of insert that is inputs a lot of data from the user to be stored in txt. Overview of search that is search for lots of data from users that have been stored in txt. And, Overview of delete that is delete one data from txt by input from user.

### 1.2 Scope

The scope of this project that is

1. How to create the visualization of binary tree in PHP
2. How users can add, search, and delete data in the visualization of binary tree

### 1.3 Objective

The purpose of this project is

- to help the reader in understanding about the form of binary tree
- to help the reader in understanding about binary tree path process
- to help the reader in understanding about binary tree usage function

