**CHAPTER I**

**PRELIMINARY**

* 1. **Background**

Human needs for technology are a very useful need. Many new technologies are developed as computerized systems to support work systems in a company. The use of technology is also used to measure safety in driving and in working in an agency or person. This is done to avoid unwanted events and minimize accidents that occur.

In driving, everyone tends to be potentially involved in an accident. Someone who is the cause of an accident is of course caused by several factors, such as not concentrating, being sleepy, often not known what caused it. The government and agencies concerned find it difficult to find ways to reduce accidents that occur on the road caused by motorists on the road. Brainwave activity when driving can tell the condition of a driver, whether he is conscious, nervous or otherwise, but unfortunately there are still few people who know about this and the absence of a tool to measure brainwave activity.

Therefore from this problem, an innovation tool is needed that can measure brainwave activity when driving. From these problems, we try to make a tool that will make it easier to find ways to reduce the number of accidents that occur on the highway by drivers. This tool will be built using the Logistic Regression method or what else to use. We give the title of this project “Pengukuran Aktivitas Gelombang Otak Dalam Keselamatan Berkendara Menggunakan Metodologi Logistic Regression”.

* 1. **Problem Identification**

Based on the background of the problems stated above, the identification of the problem is:

* + 1. The absence of a device that measures brain wave activity when driving.
    2. Difficulties experienced in reducing the number of road accidents due to car or motorcycle.
  1. **Research Purposes**

Based on the background of the problem and identification of the problem, the objectives to be achieved are:

* + 1. Make a tool that makes it easier to measure brain activity when driving.
    2. Facilitating work in reducing the number of accidents that occur on the highway caused by cars or motorcycle.
  1. **Scope of Work**
     1. This tool is only used to measure brain activity when driving.
  2. **Writing System**

The writing system and discussion of this project 2 report can be explained as follows:

**CHAPTER I PRELIMINARY**

The chapter that contains explanations related to general information systems, namely: background, identification, problem boundaries, objectives, and systematics of writing.

**CHAPTER II THEORETICAL BASIS**

Chapters that contain theories taken from books that will explain the definition. In this chapter also explains where there are components used in aids.

**CHAPTER III ANALYSIS AND DESIGN**

The chapters contain about analyze of “Pengukuran Aktivitas Gelombang Otak saat Berkendara Menggunakan Metodologi Logistic Regression” in the form of data flow that is running. Explanation of System design that will be made as data that will be made.

**CHAPTERS IV RESEARCH METHODOLOGY**

Contains the methodology used for research.

**CHAPTERS V IMPLEMENTATION**

This chapter discusses the testing of the system as a whole and also analyzes the results of research and system performance.

**CHAPTERS VI CONCLUSIONS AND RECOMMENDATION**

Contains conclusions on the research that has been carried out and provides suggestions for further system development.