CHAPTER 1
INTRODUCTION

1.1. Background

Along with the times, technology has become an alternative in solving various problems. One of the results of technological developments is the creation of many applications and software that help many people. The basis of application or software development is the creation of software that can keep up with the times according to user needs and produce software that can increase the effectiveness and efficiency of a company, industry and independent business. From this statement, it's necessary to measure software by testing to produce superior quality software. The purpose of testing is that the software does not contain errors or bugs that can interfere with the performance of the software.

There are two ways of testing that most people do, namely manual testing and automated testing. Testing manually is done by trying the menu, performance and overall features contained in the software. The test requires a lot of resources and time, This is because testing is carried out continuously in the area to be tested so that no errors are found in the software. The author uses automated testing because manual testing has drawbacks, namely less effective and efficient, to support automated testing, the author uses a tool that is Selenium while those used in PT. Hartono Istana Teknologi is conducting manual testing. In testing the author also uses the black box method, black box method is a method that tests functionality, menus, and features without looking at the program. Meanwhile, before doing a test, the author makes a test case in order to find more errors in the software, The technique used in making test cases is Boundary Value Analysis (BVA). Boundary Value Analysis is a test technique that includes a representation of the limit value.

Based on this background and problems, so that a software can run smoothly without finding errors or bugs, the author conducts research with the title “Automatic Testing With Black Box Testing Method And Boundary Value Analysis Techniques At PT. Hartono Istana Teknologi”.

1.2. Problem Formulation

Based on the background described earlier, the problems that can be identified are as follows:

1. Can the black box method be used to test the ArtemisDev trial server?
2. Can automation testing be run using Selenium tools?
3. Can testing be done without paying attention to the concept that has been made by PT. Hartono Istana Teknologi?

1.3. Scope

The limitations of the problem that can be taken from the background of this research are:

1. The testing method used in this research is the black box test method.
2. The tool used is Selenium.
3. Tests were carried out on the Trial Server PT. Hartono Istana Teknologi which refers to functional testing.
4. Tests were carried out on a trial server PT. Hartono Istana Teknologi, namely menu kode perusahaan, site, and lokasi on ArtemisDev.
5. Testing is done with the concept that has been determined by PT. Hartono Istana Teknologi.

1.4. Objective

The author hopes that with this research it can be seen how much error rate can be detected in ArtemisDev trial server by automatic testing using the selenium tool. Then using the black box method, The author is also expected to be able to carry out automation testing properly and correctly by testing buttons and functionality on menu kode perusahaan, site, and lokasi.