# Chapter 1

#### 1. Introduction (Objective, Methodology & Thesis Organization)

Test Memory USB stick scattered all sizes and types of multimedia in order to detect defects USB stick is of great importance. There are several test programs, but some of these programs can not detect all defects USB stick, others need a long time to test the USB stick and detect flaws which require a long time and therefore high cost.

So the USB stick test and identify flaws is still a problem for many institutions or companies that make flashes where it can not be stick or quality control tested.

#### **Objective:**

The study aims to propose a system simulation to test Memory USB stick has the ability to define USB stick on the computer and deal with literacy and thus detect all flaws, using the test programs available and choose one of them.

#### Methodology:

BeeBasic use program to help make the code test programs available to the forms or graphics stands for the USB stick interior cells from which the user can identify the defects USB stick and where its existence.

This is done with the aid of one of the programming languages that has been used for this purpose the language of the VB.

BeeBasic is a COM DLL library classes that add object-oriented basic script support to your application. With BeeBasic you can call your application's functions and manipulate your application's objects from script. BeeBasic can be used in any programming language: C++, VB, Delphi, etc.

We need only few lines of code to make it work. By Writing custom functions (in any programming language), put them into ActiveX/COM object, connect that object to BeeBasic and the functions will be callable from script. BeeBasic is a quazi-compiler. It ensures fast execution and complete error-reports at parse-time. BeeBasic has built-in debugger. It supports conditional breakpoints, expression

watch, step-by-step execution, etc. BeeBasic also has syntax colouring editor that supports automatic hints. User guide is available.

We can use it as a part of help system. Programmer's guide explains steps that has to be followed to add BeeBasic to application.

The main idea when creating BeeBasic was to minimize code lines needed to add it to the application. The responsibility is only to implement extension functions and objects. It's engine's job to call functions, to check syntax and to report errors.

Simulation System is designed in a way that allows simulation of the proposed Code of currently available software code and link them to the Bee BASIC program so that the implementation of this code on one of the flashes that are stored in the simulation system.

Also, It show the results of implementation in the graphics image and shapes symbolizing the USB stick interior cells which leads to identify the location and the number and forms of flash's defects easily.

In addition, the user of simulation system could choose from one of the proposed test programs by comparing the results of the implementation of the system's codes in accordance with the number of defects discovered and time of the test.

### Thesis Organization:

#### **Chapter 1**

1 Introduction (Objectives, Methodology and Thesis Organization)

#### Chapter 2

2 Background

#### **Chapter 3**

3. Fault Models (RAM & Flash Memory)

#### Chapter 4

4. Test Algorithms (RAM & Flash Memory)

Chapter 55. The proposed Simulation system tests Flashes Memory USB

# **Chapter 6**

6. Simulation Result

# **Chapter 7** 7. Conclusion