# HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

Diploma Moject

# «HIGHER TECHNICAL INSTITUTE - PAST, PRESENT, AND PUTURE»

DEVELOPMENT OF A COMPUTER PROGRAM USING VISUAL BASIC

E. 1252

GEORGE COUGLAS

JUNE 2001

# HIGHER TECHNICAL INSTITUTE

### NICOSIA - CYPRUS

# ELECTRICAL ENGINEERING COURSE

## **DIPLOMA PROJECT**

### "HIGHER TECHNICAL INSTITUTE-PAST, PRESENT, AND FUTURE" DEVELOPMENT OF A COMPUTER PROGRAM USING VISUAL BASIC

### E.1252

## BY GEORGE DOUGLAS

# JUNE 2001



#### ACKNOWLEDGMENTS

I would like to express my sincere appreciation to my project supervisor Mr. S Voskarides lecturer in the Electrical Department of the Higher Technical Institute for all of his help, especially in the collection of the information, for his advice and also for his patience with me.

Also I would like to thank my family for their support during the time I studied in the Higher Technical Institute.

### LIST OF CONTENTS

#### INTRODUCTION

1

CHAPTER 1: VISUAL BASIC PROGRAMING LANGUAGE	
1.1 Introduction To Visual Basic Programming	3
1.2 Integrated Development Environment	5
1.3 The Basic Elements Of The Visual Basic Environment	6
1.4 Creation of a Visual Basic Application	10
1.5 The Application Programmers Interface	13

#### **CHAPTER 2: USING THE PROJECT**

2.1 Using The Program	16
2.2 The Sections Of The Main Menu	17
2.3 Running The Program	21

#### **CHAPTER 3: THE CREATION OF THE PROGRAM**

3.1 Collection of Data	23
3.2 Getting The Pictures	23
3.3 Creating the Video Clips	24
3.3.1 Video Capturing	24
3.4 Using The Timer Control	27
3.5 Playing Sound In the Program	28
3.6 Playing Video In The Program	29

CONCLUSION	5
------------	---

APPENDICE: Program Code

31-74

30

#### INTRODUCTION

The main objective of this project is the development of a program with subject "Higher Technical Institute – Past, Present, and Future". The Higher Technical Institute, or HTI, was established in 1968 and since has had a very successful course in the educational field in Cyprus. In fact, it was the highest educational establishment in Cyprus until the creation of the Cyprus University. After decades of invaluable offer to Cyprus educational and industrial fields, the HTI has reached a milestone with its inclusion in the new University of Cyprus of Applied Sciences. The university is expected to receive its first students in 2003.

The programming language that was used for the development of the program is Visual Basic 6. The main reasons for choosing Visual Basic are:

- Visual Basic is the most popular programming language, which makes its learning an essentiality
- Compared to other languages, such as C++, Visual Basic allows the user to create windows applications very easily, which makes it ideal for the program that must be created
- Its vast popularity, means that there will be a lot of sources, especially in the internet, that will help the solving of potential problems.

The program offers practically any information a person may need about the Higher Technical Institute. There are documents, pictures, and even video clips that will allow the user to get a complete picture for HTI. The program's interface is really user friendly and in effect, a person who has never had any experience with computer programs before will find it easy to use. The following subjects provide information about Visual Basic, the program itself, and how the program was created. Apart from this project report, the program on the corresponding CD should be run in order to obtain a full understanding of the project

# CHAPTER 1

## VISUAL BASIC PROGRAMMING LANGUAGE