PROJECT No: E . 9 3 0

SOFTWARE FOR EXAMINATION RESULTS PROCESSING

by

MINA CONSTANTINOS

Project Report
Submitted to
the Department of Electrical Engineering
of the Higher Technical Institute
Nicosia - Cyprus
in partial fulfillment of the requirements
for the Diploma in
ELECTRICAL ENGINEERING

Project Supervisor : Dr. MARIOS KASSINOPOULLOS

External Assessor : Mr. EFSTATHIOS PALOHIS

HIGHER TECHNICAL INSTITUTE
PROJECT NO.
2312

ABSTRACT

The Project deals with the development of a database system that will store and process the Students' grades of the Electrical Department of H.T.I.

The objectives of the Project are:

To write a program in a Data Base language for processing of:

(i) Semester and mid-semester examination results.

(ii) Laboratory marks.

(iii) Any other information concerning students assessment.

Other terms and conditions of the Project are:

1. The program should include also files with all the necessary information concerning Project, Industrial Training, etc.
2. A manual with all the information required for the use of the program should be provided .

TABLE OF CONTENTS

1. CHAPTER 1 1
dBASE IV DATABASE MANAGEMENT SYSTEM 1
1.1. INTRODUCTION TO dBASE IV 1
1.2. WHAT YOU CAN DO WITH dBASE IV 1

2. CHAPTER 2 3
INVESTIGATION PHASE 3
2.1. INTRODUCTION 3
2.2. INITIAL INVESTIGATION 3
2.2.1. ADVANTAGES AN DISADVANTAGES 3
2.2.2. MAJOR DESIRED OUTPUTS 4
2.2.3. POLICY CONSIDERATIONS 4
2.3. FEASIBILITY STUDY 4
2.4. CONCLUSION 4

3. CHAPTER 3 5
ANALYSIS AND GENERAL DESIGN PHASE 5
3.1. INTRODUCTION 5
3.2. EXISTING SYSTEM REVIEW 5
3.3. NEW SYSTEM REQUIREMENTS 6
3.3.1. PROCESS DESCRIPTIONS 6
3.3.2. INPUTS TO THE PROGRAM 6
3.3.3. OUTPUTS FOR THE USERS 7
3.4. NEW SYSTEM DESIGN 7
3.4.1. USER INTERFACES WITH THE SYSTEM 7
3.4.2. HARDWARE REQUIREMENTS 7
3.5. IMPLEMENTATION AND INSTALLATION PLANNING 8
3.5.1. LIST OF MAJOR TASKS 8
3.5.2. USER TRAINING OUTLINE 8
3.6. CONCLUSION 8

4. CHAPTER 4 9
DETAILED DESIGN AND IMPLEMENTATION PHASE 9
4.1. INTRODUCTION 9
4.2. TECHNICAL DESIGN 9
4.2.1. HUMAN-MACHINE INTERFACE DESIGN 9
4.2.2. FILE DESIGN 10
4.2.3. EXPLANATION OF ALL DIFFERENT PROGRAMS 10
4.2.3.1. PRG FILES 10
4.2.3.2. DBO FILES 13
4.2.3.3. DBF FILES 13
4.2.3.4. MDX FILES 15
4.2.3.5. FRM FILES 15
4.2.3.6. FRG AND FRO FILES 17

4.3. TEST SPECIFICATION AND PLANNING 17
4.3.1. UNIT TESTING-MODULE TESTING 17
4.3.2. INTEGRATION TESTING 17
4.3.3. FUNCTION TESTING 18
4.3.4. SYSTEM TESTING 18
4.4. PROGRAMMING AND TESTING 18
4.5. USER TRAINING 18
4.6. SYSTEM TEST 19

5. CHAPTER 5 20
GENERAL COMMENTS AND CONCLUSIONS 20

APPENDICES
APPENDIX A ..... USER MANUAL
APPENDIX B ..... PROGRAMS

REFERENCE BOOKS.