

Computerization of
Registration and Administration System

**Computerization of HTI
Registration and Administration System**

Kladeftiras Michael
Kyriakou Chrystalla
Papa Elena

by

**Kladeftiras Michael
Kyriakou Chrystalla
Papa Elena**

The Department of General Studies
of the Higher Technical Institute
Nicosia Cyprus

in partial fulfillment of the requirements
for the diploma in
Project Report
Submitted to

the Department of General Studies
of the Higher Technical Institute

Project Supervisor: Nicosia Cyprus

in partial fulfillment of the requirements
for the diploma in
COMPUTER STUDIES Department,
H.T.I.

Project Supervisor: Dr. Gordon Frank

PhD in Computer Science

Project Supervisor: **Mrs. Maria Theodorou**

External Assessor: **Dr. Gordon Frank**

May 1990

May 1990



**Computerization of HTI
Registration/Administration System**

Prepared by project team #39, 3CS - May 1990

Summary

The project team worked during the year in order to develop a New Computerized Registration and Administration System which will meet the needs of the Higher Technical Institute. HTI is a live organization which change and updates its rules and regulations continually. This makes the development of such a system more difficult. As far as the registration procedures are concerned we have tried to incorporate as much flexibility as possible into all the system so as to prolong the life of the system and to decrease maintenance.

Presently part of the system has been completed and installed at one of the four different departments. It will operate as a single user system and the data of each department will be centralized at the registry office using a centralization facility provided by the system. Due to the high risks of the data involved and in order to give a chance to the new system to prove itself, the system will have to operate in parallel with the existing manual system for about a period of one Academic year.

The development history and all related information is described in this report. The Systems Development Life Cycle methodology taught at HTI has been followed in presenting this report.

A separate User Manual has been developed in a separate binding, to assist the users while operating the system.

Finally in a separate documentation, the source listings of the system are provided. Authorised persons will be able to refer to this coding in order to make any changes needed. The only source listings that have not been made public are the modules that are involved with the password encryption.

TABLE OF CONTENTS

| | |
|---|----|
| ACKNOWLEDGMENTS | 1 |
| SUMMARY | 2 |
| INTRODUCTION | 3 |
| 1. THE SYSTEMS DEVELOPMENT LIFE CYCLE | 4 |
| 2. INVESTIGATION PHASE | 6 |
| 2.1. INTRODUCTION | 6 |
| 2.2. INITIAL INVESTIGATION | 8 |
| 2.3. FEASIBILITY STUDY | 11 |
| 2.4. FINAL MANAGER'S DECISION | 13 |
| 3. ANALYSIS AND GENERAL DESIGN PHASE | 15 |
| 3.1. REVIEW TOOLS | 15 |
| 3.2. EXISTING SYSTEM REVIEW | 19 |
| 3.3. NEW SYSTEM REQUIREMENTS | 32 |
| 3.4. NEW SYSTEM DESIGN | 59 |
| 3.5. IMPLEMENTATION AND INSTALLATION PLANNING ... | 64 |
| 4. DETAILED DESIGN AND IMPLEMENTATION PHASE | 66 |
| 4.1. TECHNICAL DESIGN | 66 |
| 4.2. TEST SPECIFICATION AND PLANNING | 82 |
| 4.3. PROGRAMMING AND TESTING | 83 |
| 4.4. USER TRAINING | 83 |
| 4.5. SYSTEM TEST | 84 |
| 5. IMPLEMENTATION | 85 |
| 6. CONCLUSION | 87 |

APPENDICES

| | |
|--|---|
| DESCRIPTION OF CURRENT SOFTWARE SYSTEM | A |
| DOCUMENTS OBTAINED DURING THE ANALYSIS STAGE | B |
| DATA DICTIONARY | C |
| OUTPUTS TO THE USERS | D |
| SYSTEM'S SCREENS | E |
| GLOSSARY OF TERMS | F |