

**HIGHER TECHNICAL INSTITUTE
COMPUTER STUDIES DEPARTMENT
DIPLOMA PROJECT**

**GEOGRAPHICAL INFORMATION SYSTEM
IN SUPPORT OF EDUCATIONAL DEVELOPMENT**

This project is submitted
in partial fulfillment
of the requirements
for the award
of the Diploma
in Computer Studies

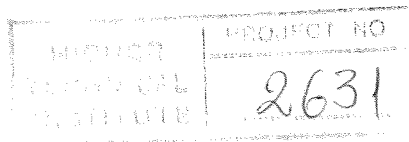
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SYSTEM ANALYSIS

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About The Project

The purpose of this project is to provide a Geographical Information System with a Decision Support System for the educational development to all the educational levels (preprimary, primary, secondary, and third level).

Basically, the system will handles some of the decisions of the Ministry of Education. That is, the system will be able to, find out the most appropriate areas for building a school, find out the budget for the building of the school, and also, find out the budget for the functionality of the school. Maps will be provided with these decisions. There will be a general map of Cyprus, and maps for all the towns of Cyprus : Nicosia, Limassol, Larnaca, Paphos, Famagusta, and Kyrenia. Through these maps the user will be able to view information about the schools, about the available areas for building schools, and about demographic information.

The user will be able to keep data in the system for the various schools of Cyprus, their school name, the number of students of each school, the number of schools in each area, the available areas for building a school which are given to the ministry of education by Poleodomia, the educational level of each school, the budget which is given to each educational level every year, the male and female population, the population of young couples, the number of students at each level - preprimary, primary, secondary, and third level.

With these data the system will handle some of the decisions of the Ministry of Education which will be manipulated by the users (technocrats, managers, and director).

As referred above the system it will be a geographical information system and a decision support system in support of Educational development. A GIS is an organised of computer hardware and software designed to efficiently create, manipulate, analyse, and display all types of geographically or spatially referenced data. A GIS allows complex spatial operations that are difficult to do otherwise. A decision-support system can handle different kinds of decisions based on certain criteria.

That means the system will take into consideration different kinds of criteria in order to take up a decision. The way it will be handled is the following:

The technocrat can choose from a menu, the input screens for data entry. Also, the managers can use the three decisions screens for evaluating his studies. They can view the output results in different forms: reports, graphs, maps, and statistics.

The reports and graphs must be produced automatically by a user-friendly information system which will interact with the existing databases and retrieve the information required. The system must allow the user to focus on, information of interest.

Introduction

All the decision will involve geographical information. Except from the decisions the system will create reports, statistics, graphs, and maps. This kind of information must be provided and used by the directors of the Ministry in order to help them in decision making.

The graphs, statistics and maps would be able to draw the attention of its user to special cases.

TABLE OF CONTENTS

	<u>PAGE</u>
Acknowledgment	1
About The Project	2
1. CHAPTER 1 : INVESTIGATION PHASE	
Activity 1 : INITIAL INVESTIGATION	
1.2.2 Information Gathering Methods	4
1.2.3 Preliminary Statement of the Business Problem	6
Information About the Organization	7
1.2.4.1 General Information About the Organization....	7
1.2.4.2 Functions of the Organization	7
1.2.4.3 Organizational Structure	9
1.2.4.4 Present Goals.....	10
1.2.4.4 Future Plans	10
1.2.4.6 Policies	11
1.2.4.7 Problems Faced	11
1.2.5 Information About the People	
1.2.5.1 Employees	12
Job Duties	13
1.2.6 Information About the Work	
1.2.6.1 Information Movement	14
1.2.6.2 Methods and Procedures for Performing the Work	5
1.2.6.3 Work Schedules and Volumes	15
1.2.6.4 Performance Criteria	16
1.2.6.5 Control Mechanisms	16
1.2.6.6 Inputs to the System	16
1.2.6.7 Outputs From the System	17
1.2.7 Information About the Work Environment	
1.2.7.1 Location	18
1.2.7.2 Physical Arrangement of Work Areas	18
1.2.7.4 Resources Available	18
1.2.7.4 Expected Changes	19
1.2.8 Conclusions	19

Activity 2 : FEASIBILITY STUDY

1.3.1 Financial Feasibility	20
1.3.2 Reccomendations	22
1.3.2.1 NetWork	22
1.3.2.2 Standalone Personal Computer for each user	23
1.3.2.3 Conclusion	23
1.3.3 Feasibility Study Consideratinos	24
1.3.3.1 Financial Feasibility	24
1.3.3.2 Operational Feasibility	24
1.3.3.4 Technical Feasibility	25
1.3.3.4 Schedule Feasibility	25
1.3.3.5 Human Factors Feasibility	26

2. CHAPTER 2 : ANALYSIS AND GENERAL DESIGN PHASE

Activity 3 : EXISTING SYSTEM REVIEW

2.1 Review Tools	28
2.2 Major Items Discussed During The Interviews	29
2.2.1 Findings From the Interviews	30
2.2.2.1 Interview 1	30
2.2.2.2 Interview 2	32
2.3 Existing System Review	34
2.3.1 Information about the Existing System	34
2.3.2 Physical Documentation	35
2.3.3 Current System Deficiencies	35

Activity 4 : NEW SYSTEM REQUIREMENTS

2.4.2 User Specification Document	36
2.4.2.2 Overview Narrative	36
2.4.2.3 System Function	37
2.4.2.4 Processing	37
2.4.2.5 Data Dictionary	37
2.4.2.6 Process Description	38
2.4.2.7 Data Structure Diagram	38

2.4.2.8 Outputs for users	39
2.4.2.9 Inputs to the System	39
2.4.2.10 User Interface	39

Activity 5 : NEW SYSTEM DESIGN

2.5.2 New System Design Specifacaton Document	40
2.5.2.2 Performance Criteria	40
2.5.2.3 Security and Control	40
2.5.3 Packaged Application Software Reccomendation	43
2.5.4 Technical Support Specification	43
2.5.4.1 New Hardware	43
2.5.5 Management Overview	43
2.5.5.1 Personnel Requirements	43
2.5.5.2 User Acceptance Statement	43

**Activity 6 : IMPLEMENTATION AND INSTALLATION
PLANNING**

2.6.1 Preliminary Detailed Design and Implementaion Plan	44
2.6.3 Preliminary System Test Plan	45
2.6.4 User Training Outline	47
2.6.5 Preliminary Installation Plan	47
2.6.6 Hardware and Software Plan	47

**3. CHAPTER 3 : ANALYSIS AND GENERAL DESIGN
PHASE**

Activity 7 : TECHNICAL DESIGN

3.1 Technical Design	49
3.2 Detailed Design Specification	50
3.2.1 Application Software Design	50
3.2.2 Backup Requirements	50
3.2.3 Recovery Procedures	51
3.2.4 Logging Requirements	51

Activity 8 : TEST SPECIFICATIONS AND PLANNING	
3.3 Test Specification and Planning	52
Activity 9 : SYSTEM DEVELOPMENT AND TESTING	
3.4 System Development and Testing	53
Activity 10 : SYSTEM DEVELOPMENT AND TESTING	
3.5 User Training	54
Activity 11 : SYSTEM TEST	
3.5 System Test	55

4. CHAPTER 4 : INSTALLATION PHASE

Activity 12 : FILE CONVERSION	
4.2 Technical Design	56
Activity 13 : SYSTEM INSTALLATION	
4.3 System Installation.....	57

APPENDICES

APPENDIX A - Appendices of Investigation Phase

- A1 - 2 Interviews and Questionnaire
- A2 - Study
- A3 - Building Needs
- A4 - Organizational Structure
- A5 - Educational Problems
- A6 - Analytical Processing of Decisions

APPENDIX B - Appendices of Feasibility Study

- B1 - Project Plan
- B2 - Gant Chart

APPENDIX C - Appendices of Existing System Review

- C1 - Source Inputs and Outputs

APPENDIX D - Appendices of New System Requirements

- D1 - Context Diagram
- D2 - Diagram 0
- D3 - Diagram 7
- D4 - Diagram 9
- D5 - Diagram 10
- D6 - Data Stores
- D7 - Data Elements
- D8 - Inputs
- D9 - Outputs
- D10 - Rough Sketches
- D11 - Process Description

APPENDIX E - Appendices of Technical Design

- E - Structure Charts

APPENDIX F - Appendices of Test Specifications and Planning

- F - Testing Timetable