HIGHER TECHNICAL INSTITUTE COURCE IN COMPUTER STUDIES

DIPLOMA PROJECT

đ

A GIS FOR CULTURAL EVENTS IN CYPRUS

CS/205

DEMETRIS DEMETRIOU LOUIS TSOURIS

17 JUNE 1998

HER PROJECT NO. NICAL 2499 A GIS for Cultural Events In Cyprus

INTRODUCTION

The major scope of the project is to construct an interactive geographical information system, which will allow Cypriots and tourists, or any other user to find all the activities of the cultural centers existing in Cyprus. The system will also give information and details about all the cultural events and places that take place in Cyprus at any moment. The system will be as flexible as possible for drawing queries. All the registered cultural events centers should submit to the system administrator information regarding cultural events that will take place at their center. The queries will be based on various parameters. The system will be responsible to present the requested information geographical as well as in the usual GUI database method. It will also be responsible to prepare statistics in suitable forms, such as table, draft and graph forms. The system will be developed using geographical information system tools as well as suitable database system. A possibility of developing this project on internet might be, so the registered cultural centers should have the privilege to update the events of their own centers themselves. The system will be user friendly, interactive, flexible and expandable. Security measures will be provided, these are passwords and user levels. On Line Help will be available. Backup and restore procedure as well.

CO	NT	'EN'	ГS
	100000000000000000000000000000000000000		

Acknowledgments	×
Introduction	11
Summary	vi
Methodology	vii
Market Research	ix
Chapter 1 : INVESTIGATION PHASE	1-25
1.1 Initial Investigation	1-12
1.1.1 Investigation activity	1-2
1.1.1.1 Problem Definition	yana
1.1.1.2 Existing Procedures	1-2
1.1.1.3 Possible Solutions	2
1.1.1.4 Classify User Requests	2
1.1.1.5 Evaluate Feasibility	2
1.1.1.6 Tradeoffs	2
1.1.2 Information Gathering	3-5
1.1.2.1 Information about the organization	3
1.1.2.2 Information about the people	3
1.1.2.3 Information about the work	4
1.1.2.4 Information about the work environment	4
1.1.2.5 Sources of information	4-5
1.1.2.6 Methods of gathering information	5
1.1.3 Evaluation of findings	5-8
1.1.4.1 System Input	9
1.1.4.2 System Output	9-10
1.1.5 Recommendations	11-12
1.1.5.1 Recommendation 1	yuuuna Maanaa
1.1.5.2 Recommendation 2	12
1.2 Feasibility Study	13-25
1.2.1 Introduction	13
1.2.2 Financial Feasibility (Cost/Benefit analysis)	14-19
1.2.3 Operational Feasibility	20
1.2.4 Technical Feasibility	21-24
1.2.4.1 System recommendation	23-24
1.2.5 Schedule feasibility	25
1.2.6 Human factors feasibility	25
1.2.7 Conclusion	25
Chapter 2 : ANALYSIS AND GENERAL DESIGN	26-39
PHASE	
2.1 Existing System Review	26
2.2 New System requirements	26-31
2.2.1 Overview Narrative	26

PAGE

2.2.2 System function	26-27
2.2.3 Processing	27
2.2.3.1 Context Diagram	2.7
2.2.3.2 Diagram 0	27
2.2.4 Data Dictionary	28
2.2.5 Data structure and data access diagrams	28
2.2.6 Outputs to the users	28-29
2.2.7 Inputs to the system	29
2.2.8 User interface with the system	30
2.2.9 User specified physical requirements	30
2.2.10 Unresolved policy considerations	31
2.3 New System Design	32-35
2.3.1 Overview narrative	32
2.3.2 System function	32
2.3.3 Security and Control	32-34
2.3.3.1 User authentication	33
2.3.3.2 Environmental Risks	33-34
2.3.3.3 Computer Viruses	34
2.3.4 Packaged Application software recommendation	34
2.3.5 Technical support specification	35
2.4 Implementation and installation planning	36-39
2.4.1 Preliminary Detailed design and Implementation	36-37
Plan	
2.4.2 Preliminary Test Plan	37
2.4.3 User Training Outline	38
2.4.4 Preliminary installation plan	39
Chapter 3 : DETAILED DESIGN AND	40-45
IMPLEMENTATION PHASE	
3.1 Technical design	40-43
3.1.1 Introduction	40
3.1.2 Application software design	40
3.1.3 Backup requirements and recovery	41
3.1.4 Human / machine interface	41
3.1.5 Security and control measures	42-43
3.2 Test specification and planning	43-
3.2.1 Test specification	43
3.2.2 Test planning	43
3.3 Programming and testing	44
3.4 Revised Feasibility	44-45
3.5 System Test	45
Chapter 4 : INSTALLATION PHASE	46
4.1 System Installation	46

Chapter 5 : REVI 5.1 Development 1 5.2 Post Implemen 5.3 System Expan Vocabulary	EW PHASE Recap ntation Review dability	47-48 47 47 48 49-52
	ş	

APPENDICES

Appendix A	Few Words about Cyprus
Appendix B	Source Documents
Appendix C	Interviews
Appendix D	Context Diagram
Appendix E	Data Flow Diagrams
E1	DFD 0
E2	DFD Query Processing
E3	DFD Reports Processing
E4	DFD Maintenance
E5	DFD Access Level
Appendix F	Data Dictionary
F1	Processes
F2	Data Stores
Appendix G	Outputs to the users
G1	Browse
G2	Graph
G3	Table
G4	Мар
G5	Card
Appendix H	Inputs to the system
H1	Cinema entry form
H2	Theatre entry form
H3	Dance entry form
H4	Poetry entry form
H5	Galleries entry form
H6	Festivals entry form
H7	Others entry form
H8	Lectures entry form
H9	Music entry form
H10	Events entry form
H11	Places entry form
Appendix I	Gantt Chart
Appendix X	Market Research