#### HIGHER TECHNICAL INSTITUTE



#### COURSE IN COMPUTER STUDIES

DIPLOMA PROJECT (Project Report)

## COMPUTERIZED MONOPOLY GAME

DEMETRIS MINA 9 JUNE 1999

HIGHER TECHNICAL INSTITUTE 3046

### INTRODUCTION

In this project I have undertaken, I'm going to develop a computerized version of the well-known board game, MONOPOLY. As you might all know MONOPOLY is a board game that is played among teenagers and not only. But do you know anything about the history of this game? Let's see some things.

Charles B. Darrow was a sales rep for an engineering firm, when the stock markets crash of 1929 took place. Like thousands of Americans, he lost his job, and could only keep food on the table by doing small mechanical work for people, like fixing irons, and other small items. He even walked dogs, and began Making Jigsaw Puzzles, and other game inventions in his spare time. None of which ever made it anywhere.

However in 1934, his wife and him were expecting their second child, so he needed to do something to increase the income of the family.

So Mr. Darrow sat down and remembered when his wife and him took a trip to Atlantic City, a few years before the loss of his job. Remembering the city, the street names, and the whole image of Atlantic City so clearly in his mind, he decided to design a game after this city that he remembered so well.

He began drawing squares on a piece of tile, and adding colors to those squares with whatever paint he could find at the local hardware store. He then decided that he would let the players of this game be able to buy these streets, and own them. And in a sense own part of Atlantic City.

And he eventually came up with the game we all know as Monopoly®.

http://members.aol.com/david16073/history.html

# TABLE OF CONTENTS

INTRODUCTION	1
	2
1. INVESTIGATION PHASE	
1.1 ACTIVITY 1: INITIAL INVESTIGATION	
1.1.1 FEW WORDS ABOUT MONOPOLY GAME	
1.1.2 OBJECTIVE OF THE GAME	
1.1.3 RULES OF THE GAME	
1.1.3.1 • Equipment and Preparation	4
1.1.3.2 The Banker and the Bank	4
1.1.3.3 The Play	4
1.1.3.4 Go	5
1.1.3.5 Buying Property	5
1.1.3.6 Paying Rent.	5
1.1.3.7 Chance and Community Chest	6
1.1.3.8 Income Tax	6
1.1.3.9 Jail	6
1.1.3.10 Free Parking	7
1.1.3.11 Houses and Hotels	7
1.1.3.12 Building Shortage	8
1.1.3.13 Selling Property	8
1.1.3.14 Mortgages	8
1.1.3.15 Bankruptcy	9
1.1.3.16 Miscellaneous	9
1.1.4 EXISTING COMPUTERIZED MONOPOLY GAMES	10
1.1.5 DISADVANTAGES OF THE REGULAR MONOPOLY GAM	E10
1.1.6 REQUIREMENTS AND OBJECTIVES OF THE COMPUTERIZE	ED
SYSTEM	10
1.1.7 DEVELOPMENT TOOL TO BE USED	11
1.2 ACTIVITY 2: FEASIBILITY STUDY	12
1.2.1 Financial Feasibility	12
1.2.2 Schedule Feasibility	14
1.2.3 Technical Feasibility	
1.2.4 Operational Feasibility	
1.2.5 Human Factors Feasibility	

2.	ANALYSIS AND GENERAL DESIGN PHASE	16
	2.1 ACTIVITY 3: EXISTING SYSTEM REVIEW	17
	2.2 ACTIVITY 4: NEW SYSTEM REQUIREMENTS	19
	2.3 ACTIVITY 5: NEW SYSTEM DESIGN	20
	2.4 ACTIVITY 6: IMPLEMENTATION AND INSTALLATION PLA	ANNING24
	2.4.1 Preliminary Detail Design and Implementation Plan	25
	2.4.2 Preliminary System Test Plan	25
	2.4.3 User Training Outline	25
	2.4.4 Preliminary Installation Plan	26
3.	DETAIL DESIGN AND IMPLEMENTATION PHASE	27
	3.1 ACTIVITY 7: TECHNICAL DESIGN	
	3.2 ACTIVITY 8: TEST SPECIFICATION AND PLANNING	29
	3.3 ACTIVITY 9: PROGRAMMING AND TESTING ACTIVITY	31
	3.4 ACTIVITY 10: USER TRAINING	32
	3.5 ACTIVITY 11: SYSTEM TEST	33
4.	INSTALLATION PHASE	34
	4.1 ACTIVITY 12: FILE CONVERSION	
	4.2 ACTIVITY 13: SYSTEM INSTALLATION	36
5.	REVIEW PHASE	37
	5.1 ACTIVITY 14: DEVELOPMENT RECAP	38
	5.2 ACTIVITY 15: POST-IMPLEMENTATION REVIEW	
6.	CONCLUSION	40
A	PPENDICES	42
~	APPENDIX A: PROJECT SPECIFICATIONS	42
	APPENDIX B: GANTT CHART	44
	APPENDIX C: SYSTEM FLOW CHART	46
	APPENDIX D: STRUCTURE CHARTS	48
	APPENDIX E: CONTEXT DIAGRAM & DFDs	57
	APPENDIX F: DATA DICTIONARY	65
	APPENDIX G: PRINTED SCREENS	103
	ADDENIDIY H. CDECIAL DROCECCING CONCIDED ATIONS	110