## TABLE OF CONTENTS

CERTIFICATE OF APPROVAL	
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
LIST OF FIGURES	iv
1. INTRODUCTION	1
1.1 BACKGROUND	1
1.2 PROBLEM DEFINITION	1
1.3 PURPOSE	2
2. OBJECTIVES	3
3. LITERATURE REVIEW	4-5
4. REQUIREMENT ANALYSIS	6
4.1 FUNCTIONAL REQUIREMENTS	6
4.2 NON-FUNCTIONAL REQUIREMENTS	6
4.2.1 ACCESSIBILITY	6
4.2.2 EFFICIENCY	
4.2.3 RELIABILITY	6-7
4.3 SOFTWARE REQUIREMENTS	7
4.3.1 PHOTOSHOP	7
4.3.2 PYTHON 3.7	7
4.3.3 SQLite	7-8
4.3.4 ATOM IDE	8
4.3.5 MICROSOFT WINDOWS 10 OS	8
4.4 FEASIBILITY STUDY	8
4.4.1 ECONOMIC FEASIBILITY	8
4.4.2 TECHNICAL FEASIBILITY	9
4.4.3 OPERATIONAL FEASIBILITY	9

4.4.4 TIME FEASIBILITY9
5. SYSTEM DESIGN AND ARCHITECTURE10
5.1 USE CASE DIAGRAM10
5.2 LEVEL 0 DFD11
5.3 LEVEL 1 DFD12
5.4 ENTITY RELATIONSHIP DIAGRAM (ERD)13
5.5 SYSTEM DIAGRAM14
6. METHODOLOGY15
6.1 SOFTWARE DEVELOPMENT APPROACHES15
6.1.1 INCREMENTAL MODEL15
6.2 ALGORITHMIC STEPS FOR RUBIK'S CUBE IMAGE ENCRYPTION16
6.2.1 RUBIK'S CUBE ENCRYPTION ALGORITHM16-19
6.2.2 RUBIK'S CUBE DECRYPTION ALGORITHM20-21
6.2.3 ADVANTAGES OF RUBIK'S CUBE ALGORITHM21
6.2.4 APPLICATION OF IMAGE ENCRYPTION21
7. RESULT AND ANALYSIS22
8. CONCLUSION23
9. LIMITATIONS AND FUTURE WORK
10. REFERENCES
11. APPENDIX