**INDEX**

S**.NO TITLE PAGE NO**

1 **INTRODUCTION**  1

2 **SYSTEM REQUIREMENTS & ANALYSIS** 2

2.1. Problem Definition 2 2.1.1. Scope of the System 3

2.1.2. Objective of the System 4

2.2. System Overview 5

2.2.1. Existing System 5

2.2.2. Problems with Existing System 5

2.2.3. Proposed System 5

2.3. System Architecture 6

2.3.1. System Design 6

2.3.2. Detailed Design 6

2.4. Stretched Palette 8

3. **SYSTEM** **IMPLEMENTATION**  11

3.1. Overview of Java 11

3.2. Awt 15

3.2.1. Architecture 15

3.3. Swings 15

3.3.1. Advantages Of Swings 17

3.3.2 Swing GUI Components 18

3.3.3. Java 2D API 18

3.3.4. AES Algorithm 18

4. **SOFTWARE REQUIREMENTS & SPECIFICATIONS**  21

4.1. User Interface 21

4.1.2. Modular Description 21

4.2. Requirements Specifications 21

4.2.1. Hardware Requirements 21

4.2.2. Software Requirements 22

4.3. Functional Requirements 22

4.4. Non Functional Requirements 22

5. **SYSTEM DESIGN**  23

5.1. About Unified Modeling Language 23

5.1.1. Identifying Actors 24 5.1.2. Use case Diagrams 24

5.2. Object Model 25

5.2.1. Class Diagrams 25

5.3. Dynamic Models 27

5.3.1. Sequence Diagram 27

5.4. Architecture Diagram 30

6. **TESTING** 30

6.1. Testing Objectives 31

6.2. Level Of Testing 32

6.2.1. System Testing 32

6.2.2. Code Testing 32

6.2.3. Coding Approach 32

6.2.4. Information Handing 33

6.2.5. Programming Style 33

6.2.6. Verification and Validation 33

6.3. Types of Testing 33

6.4. Test Cases 35

7. **SCREEN SHOTS** 36

8. **CONCLUSION & FUTURE ENHANCEMENT** 43

9. **BIBLIOGRAPHY** 44

10. **SAMPLE CODE** 45