



Bahria University
Discovering Knowledge

FINAL YEAR PROJECT REPORT

**AN ANDROID APPLICATION WHICH SENDS
ENCRYPTED MULTIMEDIA MESSAGE**

By

NAVEEN FAROOQ (43864)

UZAIR SAEED (43838)

SYED MURTUZA RIZVI (41618)

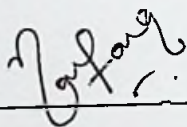
**SUPERVISED BY
(MS. SUMEERA HASHMI)**

BAHRIA UNIVERSITY (KARACHI CAMPUS)

2019

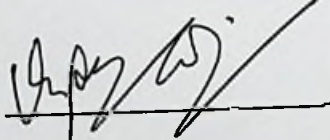
DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

Signature : 

Name : Naveen Farooq

Reg No. : 43864

Signature : 

Name : Uzair Saeed

Reg No. : 43838

Signature : 

Name : Syed Muhammad Murtuza Mehdi

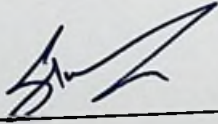
Reg No. : 41618

Date : _____

APPROVAL FOR SUBMISSION

We certify that this project report entitled "AN ANDROID APPLICATION WHICH SENDS ENCRYPTED MULTIMEDIA MESSAGES" was prepared by NAVEEN FAROOQ, UZAIR SAEED and SYED MUHAMMAD MURTUZA MEHDI has met the required standard for submission in partial fulfilment of the requirements for the award of Bachelor of Computer Science (Honours) at Bahria University.

Approved by,

Signature :  _____

Supervisor: Miss Sumeera Hashmi

Date : 12-2-20 . _____

ACKNOWLEDGEMENTS

We would like to thank everyone who had contributed to the successful completion of this project. We would like to express my gratitude to my research supervisor, **Miss Sumeera Hashmi** for her invaluable advice, guidance and her enormous patience throughout the development of the research.

In addition, we would also like to express my gratitude to our loving parent and teacher who had helped and given me encouragement.

AN ANDROID APPLICATION WHICH SENDS ENCRYPTED MULTIMEDIA MESSAGES

ABSTRACT

With the spread of computerized information around the world through the internet, the security of the information has raised a concern to the individuals. The confidentiality and privacy should be maintained while transferring the data between users. But now a days data transferring mediums are not secure enough to transfer highly confidential information. Information security has become one of the main challenges for information sharing through internet. Numerous strategies are here to protect the information from going under the control of the unapproved individual. So, we are proposing an android application to secretly send information through steganography. Steganography is a technique for securing data, its basic purpose is to hide secret message in a digital image or video. Digital images and videos are excellent carrier of hidden information. In this technique we use image and video as a medium to hide text. In this project we are using LSB (**Least Significant Bit**) algorithm, in which the binary representations of the secret data have been taken and the LSB of each byte is overwritten within the image where as in video a frame is extracted and same task as image has performed for a frame and then the frame is again merged into the video. This project is highly focusing on encryption of data by using image and video steganography.

Keywords: steganography, steganography techniques, data hiding

TABLE OF CONTENTS

DECLARATION	i
APPROVAL FOR SUBMISSION	ii
ACKNOWLEDGEMENTS	v
ABSTRACT	vi
TABLE OF CONTENTS	viii

CHAPTER

1	INTRODUCTION	
1.1	Background	1
1.2	Problem Statements	2
1.3	Proposed System	2
1.4	Aims and Objectives	2
1.5	Scope of Project	2
1.6	Advantages of Project	2
1.7	Target Audience	2
2	LITERATURE REVIEW	
2.1	Characterization of Steganography Systems	3
2.1.1	Undetectable	3
2.1.2	Invisibility	3
2.1.3	Capacity	3
2.1.4	Robustness	3
2.1.5	Security	4
2.2	The Mechanics of Steganography	4
2.2.1	Undetectable	4
2.2.2	Invisibility	4
2.2.3	Capacity	4
2.2.4	Robustness	4
2.2.5	Security	4
2.2.5	Security	4
2.3	LSB Algorithm	5
2.4	Comparison of Different Applications	5

3	DESIGN AND METHODOLOGY	
3.1	Methodology	7
3.2	Designing and Implementation	8
3.3	Development	8
3.4	Information gathering	8
3.5	Sequence Diagram	9
3.6	Use Case Diagram	9
3.7	Block Diagram	10
3.8	Project Screenshots	10
4	IMPLEMENTATION	
4.1	Project Components	23
4.1.1	Backend	23
4.1.2	Frontend	24
4.1.3	Application Screenshots	24
5	Testing and Evaluations	
5.1	Testing and Evaluations	27
5.1.1	Backend	23
5.1.2	Frontend	24
6	Conclusion and Recommendation	
6.1	Conclusion	31
6.2	Recommendations	31
6.2.1	Reduce preprocessing time	31
6.3	Future Work	32
	REFERENCES	33