Abstract— Do you want to Lock your messages from prying eyes? Do your friends always borrow your phone to play games? Do you concern your short messages may be read by people you do not want to? Our proposed SMS protection system enables user to segregate important/private message from normal messages by allowing its user to transfer the message from main category to private/protected category which has Eigen face based real time protection. Here the proposed system uses two categories first is normal category which second is protected category.

Keywords—prising eyes, play games, segregate important message, real time protection, normal category, protected category.

I. INTRODUCTION

Text messaging has become an integral part of modern communications. First deployed in the late 1990s, the Short Messaging Service (SMS) now delivers upwards of 4.2 trillion messages around the world each year. Because of its ubiquity and its perception as providing a secondary channel bound tightly to a user’s identity, a range of organizations have implemented security infrastructure that take advantage of SMS in the form of one-time codes for two-factor authentication and account validation.

The text messaging ecosystem has evolved dramatically since its inception, and now includes a much wider range of participants and channels by which messages are delivered to phones. Whereas phone numbers once indicated a specific mobile device as an endpoint and were costly to acquire, text messages may now pass through a range of different domains that never touch a cellular network before being delivered to a non-cellular endpoint. Moreover, these systems allow users to send and receive messages for free or low cost using numbers not necessarily tied to a mobile device, specific geographic area or even a single customer. In Our Proposed System, SMS protection system using Inbox Categorization which enables user to segregate important/private message from normal messages by allowing its user to transfer the message from main category to private/protected category which in-turn is protected has Eigen face based real time protection system, the Proposed Security mechanism is based on live face recognition with trained faces.

Here the proposed system uses two categories first is normal category which second is protected category.

II. OBJECTIVES

• Our aim is to design and develop an Android application to protect your.
• Our aim is to design and develop an Android application to protect your personal text messages (SMS & MMS).
• Our system will be designed upon Android system level to provide full privacy and security to your short message box (Messaging).
• After enabling SMS protect application, there will be active Face based authentication system using Eigen face which will provide protection when opening short message apps.

III. RELATED WORK

• The message protection applications that are available in the market do not contain enhanced security.
• They contain normal number and pattern lock password that are easily hacked and known by any other person.
• In survey, we found that no such application provides face recognition as a real time password.

Some reference works are:-

1. Sms_securityWhiteSpace- It discusses how operators can leverage monitoring and advanced security techniques to protect their mobile subscribers, network and business, by White Paper –Tekelec Inc. in 2007.
2. A Secure Digital Signature Approach for SMS Security- SMS framework allows two peers to exchange encrypted and digitally signed SMS messages. The communication between peers is secured by using public key cryptography, by Neetesh Saxena and Narendra S. Chaudhari in 2008.
3. SMS-Based One Time Passwords- SMS-based One-Time Passwords (SMS OTP) were introduced to counter phishing and other attacks against Internet services such as online banking, by Collin Mulline, Ravishankar Borgaonkar,Patrick Stewin in 2009.

International Journal of Emerging Technology and Advanced Engineering

SMS Filtration and Protection System

Monica Daswani¹, Aboli Tembhurne², Harsha Ludhwani³, Rameshwari Patil⁴

¹,²,³,⁴BE Students, Dept of Computer Science & Engineering, Jhulelal Institute of Technology, Nagpur, India
Asst. Professor. Ms. Monali Gulhane, Dept of Computer Science & Engineering, Jhulelal Institute of Technology, Nagpur, India

**IV. PROPOSED SYSTEM**

- Our proposed system is an sms protection system call it smsprotect, which enables user to segregate important/private message from normal messages by allowing its user to transfer the message from main category to private/protected category which has Eigen face based real time protection.
- The proposed system uses two categories:
  1. first one is the normal category and
  2. second is protected category.
- The Proposed Protected Category filters/Segregate the important messages from normal one.
- The Real time Eigen based face Recognition system is proposed for efficient and secure access to Protected Category.

**Module 1:** Module 1 is the Implementation of Complete Framework (all form of Design). In first Module we will design all necessary pages. The first page will be a landing page content the information of all who is involve in the proposed work. Followed by the inbox page which will contain all normal messages.

**Module 2:** Module 2 checks for the Integration and Connectivity between each component of the framework in system.

**Module 3:** Module 3 checks for proper development and completion of each module in system.

**Module 4:** Integration of complete system and Checking for correctness.

The system is further explained with a use case diagram:

**USER:-**

- The user will firstly install the application in its android mobile phone.
- After opening the application, the user will register itself, after which a unique ID and password will be provided to them.
- After logging in, user allows the application to access its contacts and text messages, and a window with text messages opens up.
- Thereafter, the user can select the messages which they want to protect.

**Figure 1. Use case diagram of SMS Filteration and protection system.**
ADMIN:

- Admin provides the login ID and password to the user to access its account.
- The admin will manage and maintain the user account and messages.
- Admin allows the user to access the private messages using face recognition and password protection.

V. RESULTS

SMS Protection system will be designed which enables the user to segregate important/private message from normal messages by allowing its user to transfer the message from main category to private/protected category.

To achieve privacy by categorizing Inbox, open CV will be used for face Recognition with trained faces using Eigen faces as proposed Algorithm.

VI. CONCLUSION

The SMS Protection has become an important aspect today, since all our today’s privacy and personal data security from any source such as bank, social media, email etc. is authenticated either one way or two way based authentication by SMS.

Our Proposed system which uses real time face based authentication is very quick and with high user experience achieve the goal to protect sms very efficiently.

REFERENCES


