Sniffer mail

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1. Abstract:

One of the essential services on the internet is the Email Service. The Email server can be vulnerable to several types of cyber-attacks. This research aims to analyze and improve the Email service. This mail is the process of following the path and function performed by the receiver on the received mail. The development of this system serves as a secure way of mailing. The tracking and notification feature is aimed at providing proof of reading mail. The Notification Messages can be sent to either sender's mail Id or if given to the sender's mobile phone. The retractable emails are aimed at providing a means by which the sender can delete his mail even after sending it. This can be used when a person sends a mail to the wrong mail id. The block backup feature provides a means of preventing printing, saving, and copying the mail contents. This can be used for secured mails that are not intended for manipulation. Then self destructible mail is also a similar security add-on but in a different context. This feature aims at preventing achieving of the mails in the receiver's mailbox folders. The whole system's working style is abstract to the end-user and provides a feature-rich secured way of mailing.

Keywords: Encryption, decryption, key, RSA algorithm

2. Introduction:

The project is aimed at developing communication among colleagues about the project via email. The purpose of the project is to enhance the security among the communication of workers. It allows the sender to be aware of when and how this mail reaches the client and what the receiver does with it. There are two types of users, desired users (they are in the same team) and undesired users(they belong to different teams). The admin decides who are desired, users, and undesired users.

In our project, we have a notification feature that is aimed at providing proof of reading mail, which hardly any mail service offers. The notification messages are sent to the sender's mail id and vice versa. The block forwarding feature is a worthy alternative for mail encryption. Encryption is done to prevent access from undesired users. In the same way, this feature prevents unintended users from viewing the mail. In this system, once the receiver deletes the mail, it is automatically sent to the administrator. The administrator views the deleted mails in the form of a document.

3. literature survey:

In 1995, Daniel l. McDonald enlightens the merits of one type pad by launching a software name done time passwords in everything (OTP) that diverge from S/key (Password sequence of authentication)during designing. OPI defeats password sniffing attacks. He provided security from various attacks like shoulder surfing. Shoulder surfing is a technique to maintain view by direct observation to gain information. It is commonly used to obtain passwords, PINs, security codes, and similar data.

In 2006, Susan gave information that when the user inputs password publicly, the rate of risk of attackers of stealing password increases. The attacker easily captures the password by following the user's authentication process. This is known as shoulder surfing. Super valiance is the best solution for dealing with shoulder service. Susan developed and evaluated a game like graphical authentication method known as convex hull click(CHC). CHC inhibits users from knowing about a graphical password safely in dangerous locations as users can quickly go to a password image. Password sniffing creates lots of problems as the transfer of passwords goes in the same format through a communication medium. HTTPS needs a secure cover to make encryption sessions during browsing.

In 2009, Adam Barth provided defense against content sniffing XSS. They construct a model content sniffing algorithm that offers security and also maintains compatibility having four major browsers. Web browser teaches the algorithm to work on the Content of HTTP responses and MIME type of the server. If the attacker detects this algorithm, he can easily lead to cross-site scripting (XSS) attack. In his study, he found models of this algorithm with the help of four major browsers.

In 2012, Syed Imran Ahmed Quadri [3] provided security against attacks for client and server sites. In his research paper, this security framework provides prevention methods for server sites and works from client sites. This works against Content sniffing attacks. This security is important to prevent phishing sites by file splitter technique. The demerit of this framework is that it doesn't work against the browser as it treats non HTML files as HTML files. He proposed a security system to detect Content sniffing in server-client relations as it secures the server and warns the client site.

In 2012, Usman Shaukat Qureshi provided modern web applications to internet users by launching AJAX, which reloads pages and updates only important sections of web pages. It consists of a large number of essential components that deal with HTTP requests, HTML codes, client &amp, and server-side scripts. It consists of different layers that provide various threats in web applications, leading to a large number of attacks. For example, Content sniffing attack, Mal- advertising attack, CSR forgery attack, XSS attacks, Man in the middle attacks, and Clickjacking attack. They focus on improving the security of web applications (AJAX).

Electronic mail Security by using Message Encryption and Digital Signature

Now a day's electronic mail is one of the most widely used applications on the internet. Using email, internet users can send and receive messages from other internet users. Simultaneously, the security of an email is an essential issue while sending sensitive information, like bank transactions, commercial secrets, even the country's intelligence information being delivered through emails. To achieve email security, we need to use such a mechanism that provides security to these emails. We can use the S/MIME (Secure Multipurpose Internet Mail Extension) for secure email communication. So, in this paper, I present the review of the security mechanism provided by S/MIME

, which has been an industry standard for secure email exchange.

4. Implementation:

4.1 Problem description:

At present, many existing mail clients provide very fundamental features such as reading, forwarding, moving, deleting, etc. But they do not provide proof for reading the mail, security features such as block forwarding. The aforementioned is an email acknowledgment system that resolves the issuer above deletes the mail-in Trash, that mail cannot be retrieved later. Our project aims to enhance security and communication among co-workers. Here, the admin plays a vital role where he/she decides the status of his/her employees. There are two types of users.

1.Desired users

2.Undesired users.

Every user has their username and password. If the sender and receiver are desired users, the sender sends the mail to the receiver, and this notification message is sent to the receiver's mail id. The receiver views the mail only through the product. After the receiver views the mail and this notification is sent to the sender's mail id.

If the sender and receiver are undesired users, the process is the same as in the desired users, but the security key is generated automatically while the receiver receives the notification message. The receiver views the mail in the form of a ciphertext (encrypted mode). After the receiver uses the security key and views the mail in the way of plain text (decrypted mode), the administrator views all user details, sent mails, and deleted emails.

4.2 Methodology:

Our system consists of several modules.

4.2.1 Module 1:

Authentication:

The user goes through a registration process. His/Her profile details are stored for giving information such as Name, Address, Mobile number, Mail id, Date Of Birth, Father's Name, User name, and password. To the provided user name and password facility and credentials should be appropriately checked at the time of login.

4.2.1 Module 2:

Notification:

The Notification Module provides proof for reading the received mails. The Notification Messages are sent to the receiver's mail Id while composing messages and also sent to the sender's mail Id while reading received mails.

4.2.3 Module 3:

Admin:

In Our Project, the admin plays a vital role. He decides who should be the desired users and undesired users. He can view all the details of desired and undesired users. He also views the sent mails and deleted mails by the users. Once the receiver deletes the mail, it will be stored as a document and sent to the admin.

4.2.4 Module 4:

Desired user:

All the users have their username and password to use the product. The desired users communicate with each other easily. The users compose the mail to another desired user. Then that receiver will receive the notification from his/her personal mail. Once the receiver views the notification, then the sender gets a notification to his/her personal mail id that the receiver has viewed the message.

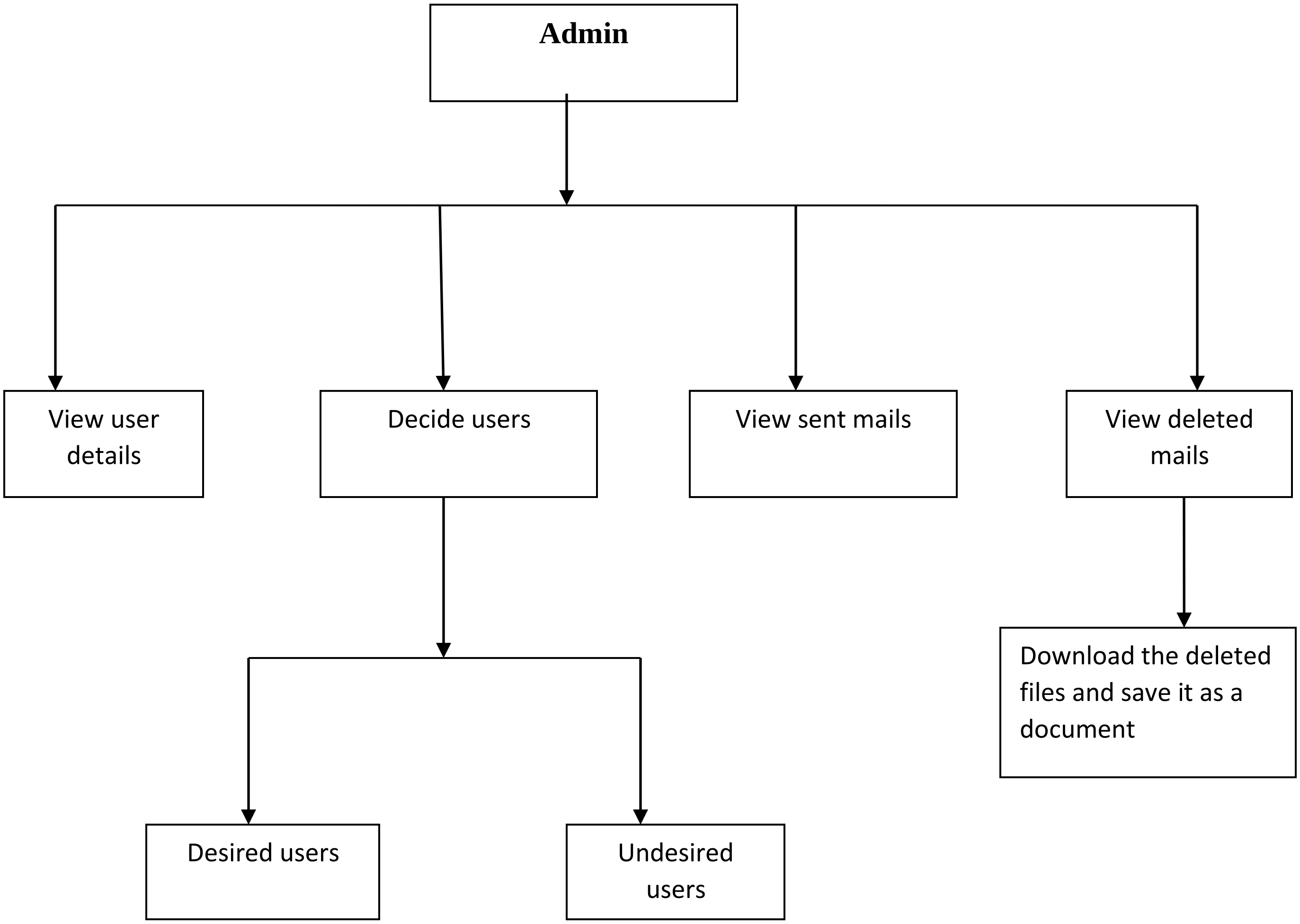
4.2.5 Module 5:

Undesired user:

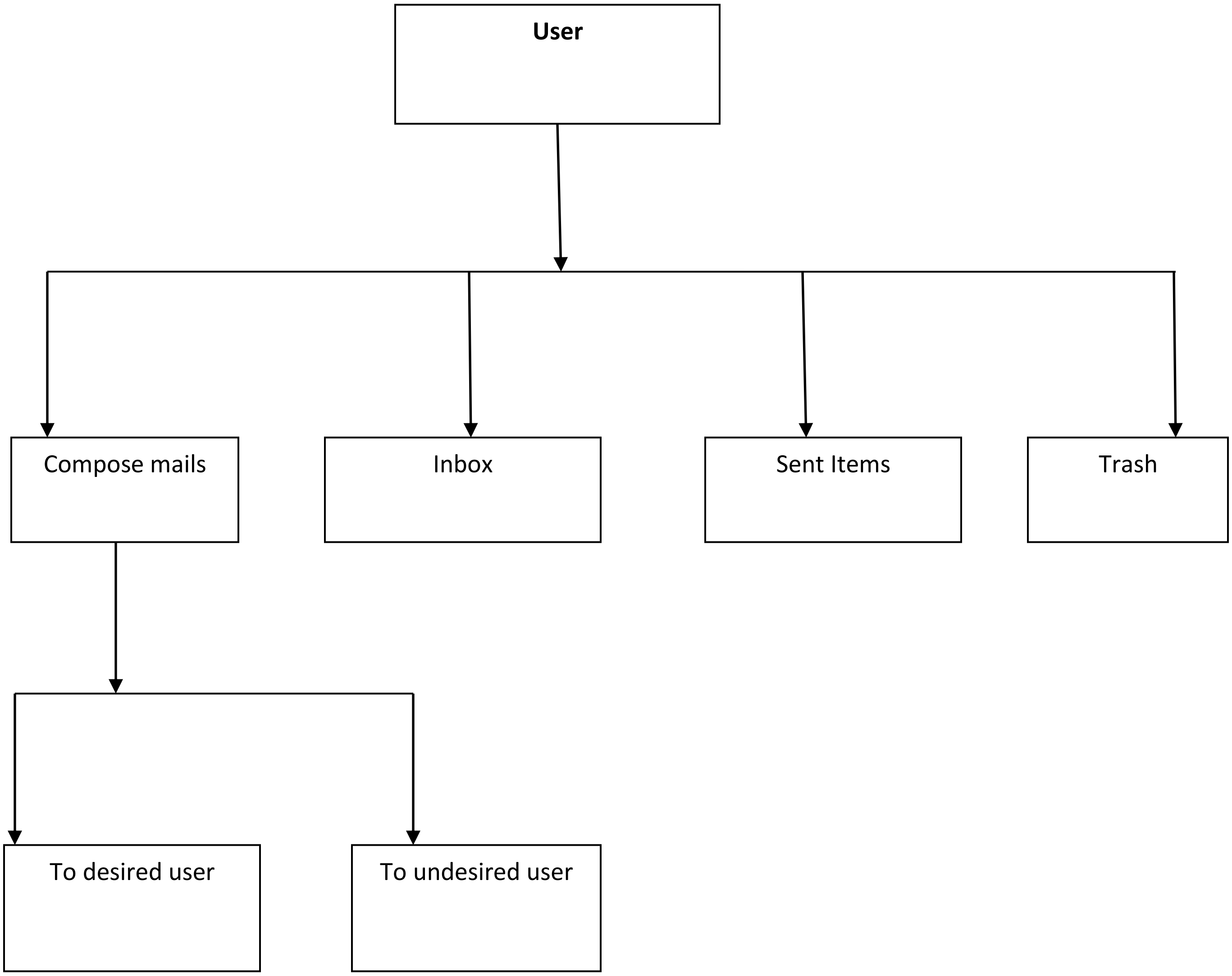
If the employee is an undesired user, then he/she sends the mail from the product to another user. Then the receiver receives the notification from his/her personal mail. But here the receiver will receive a security code using that code he/she can view the message from the product

4.2.6 Flow diagram:

4.2.6.1 Admin panel:

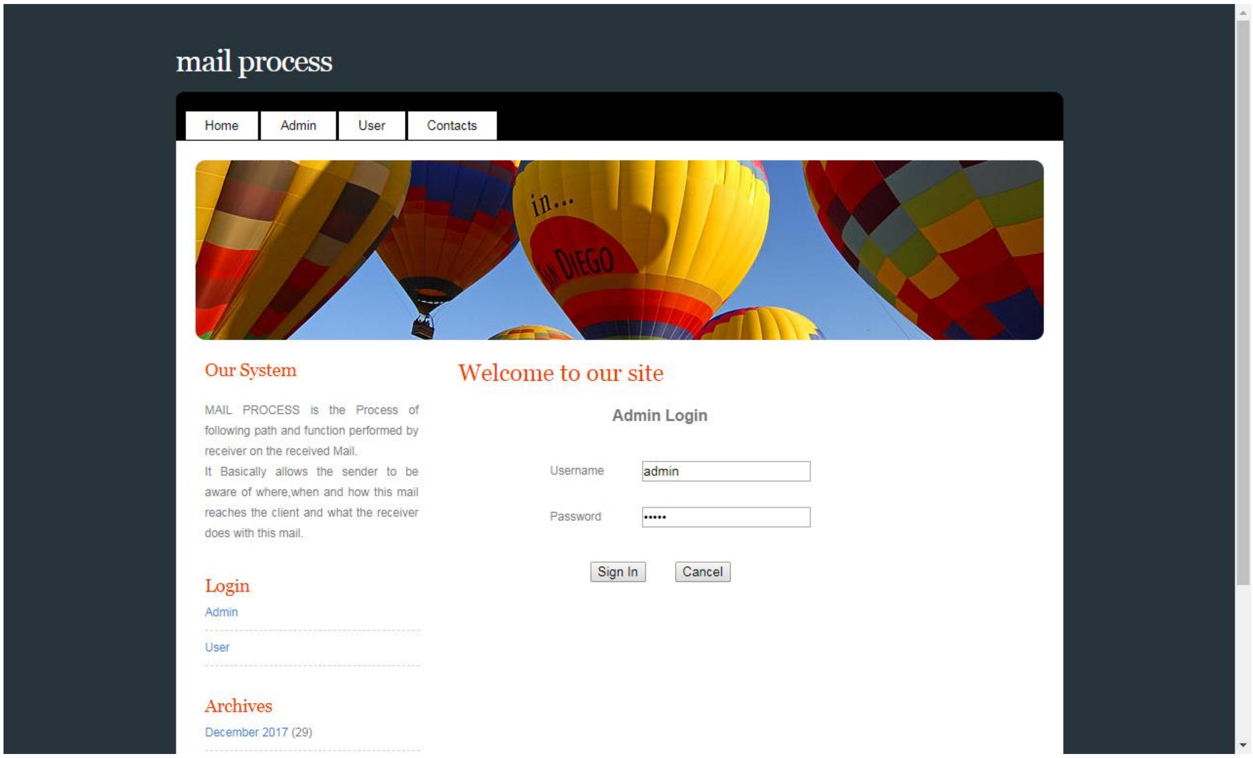


4.2.6.2 User panel:



5. Result:

The system consists of five modules. They are authentication, notification, admin, desired user, the undesired user. The user can securely send the mail.



Our System

MAIL PROCESS is the Process of following path and function performed by receiver on the received Mail.
It Basically allows the sender to be aware of where,when and how this mail reaches the client and what the receiver does with this mail.

Login

Admin

User

Archives

December 2017 (29)

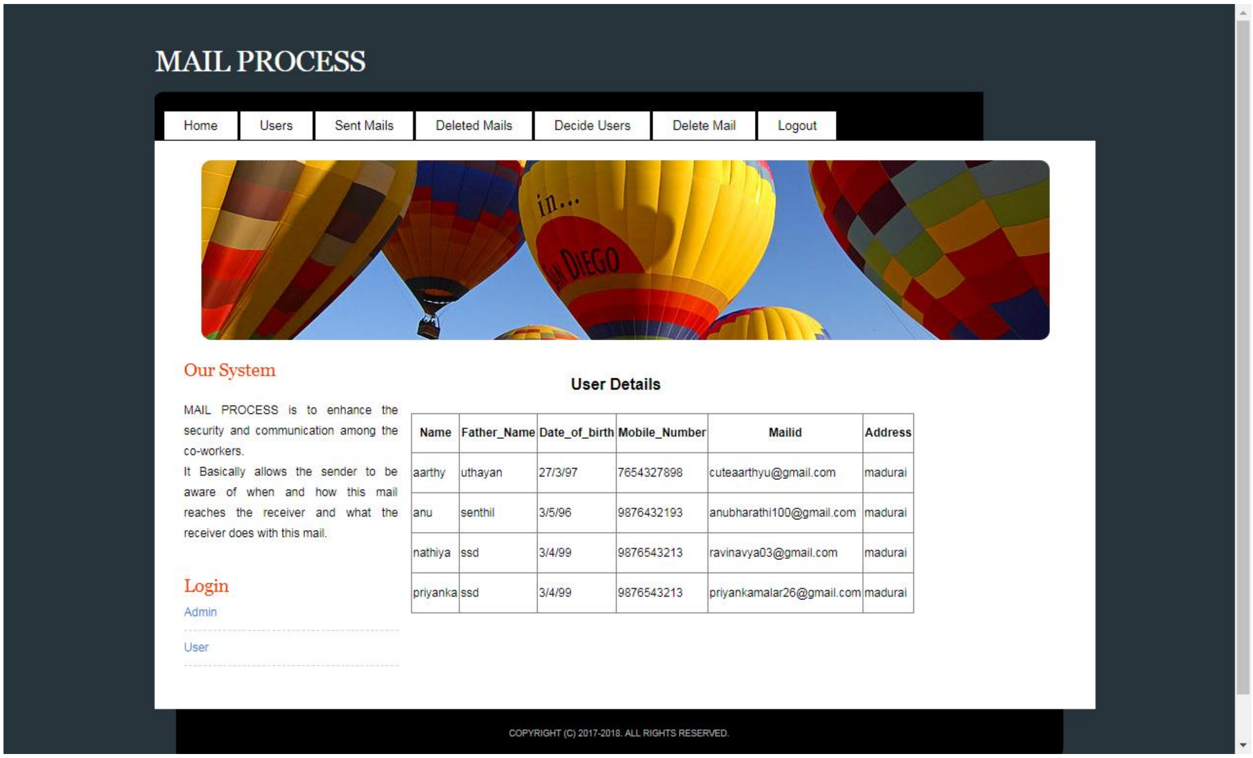
Welcome to our site

Admin Login

Username: admin

Password: •••••

Fig 1: The admin can enter their user name and password on this page. They can monitor the user's activity.



Our System

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Login

Admin

User

User Details

Name	Father_Name	Date_of_birth	Mobile_Number	Mailid	Address
aarthy	uthayan	27/3/97	7654327898	cuteaarthyu@gmail.com	madurai
anu	senthil	3/5/96	9876432193	anubharathi100@gmail.com	madurai
nathiya	ssd	3/4/99	9876543213	ravinavya03@gmail.com	madurai
priyanka	ssd	3/4/99	9876543213	priyankamalar26@gmail.com	madurai

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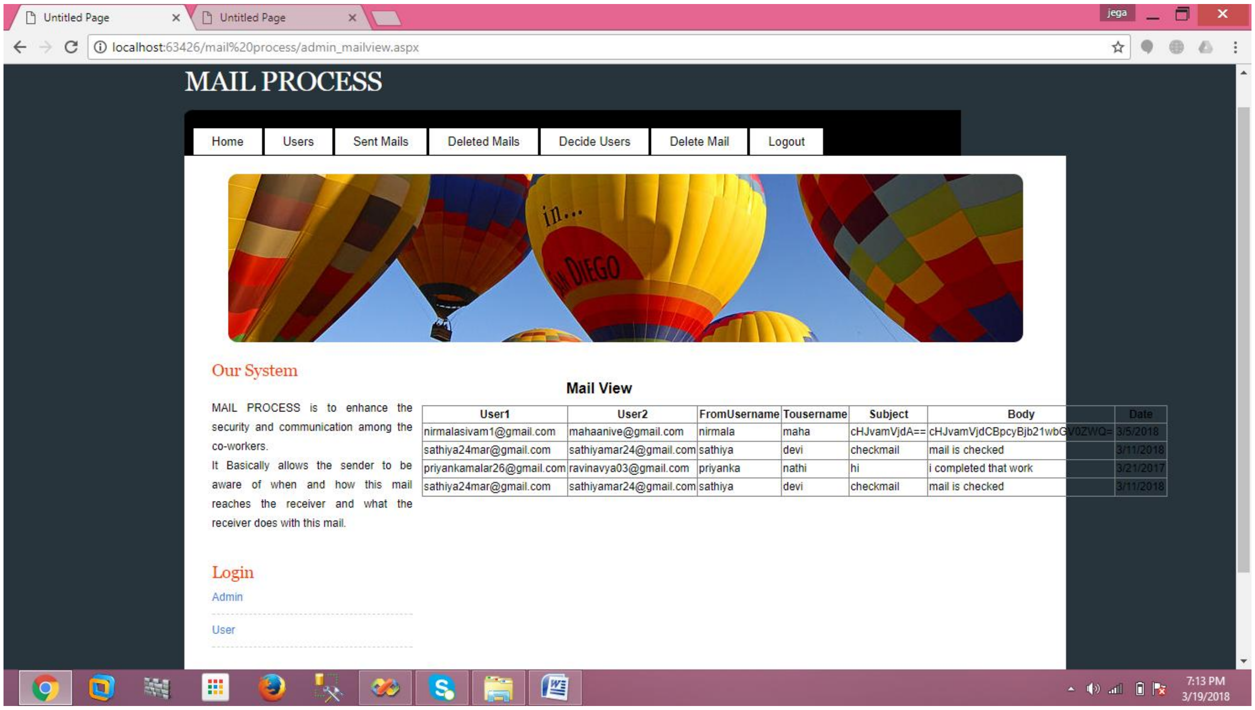
Fig 2: The admin includes the user details provided by the user at the time of user signup.



MAIL PROCESS

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Login

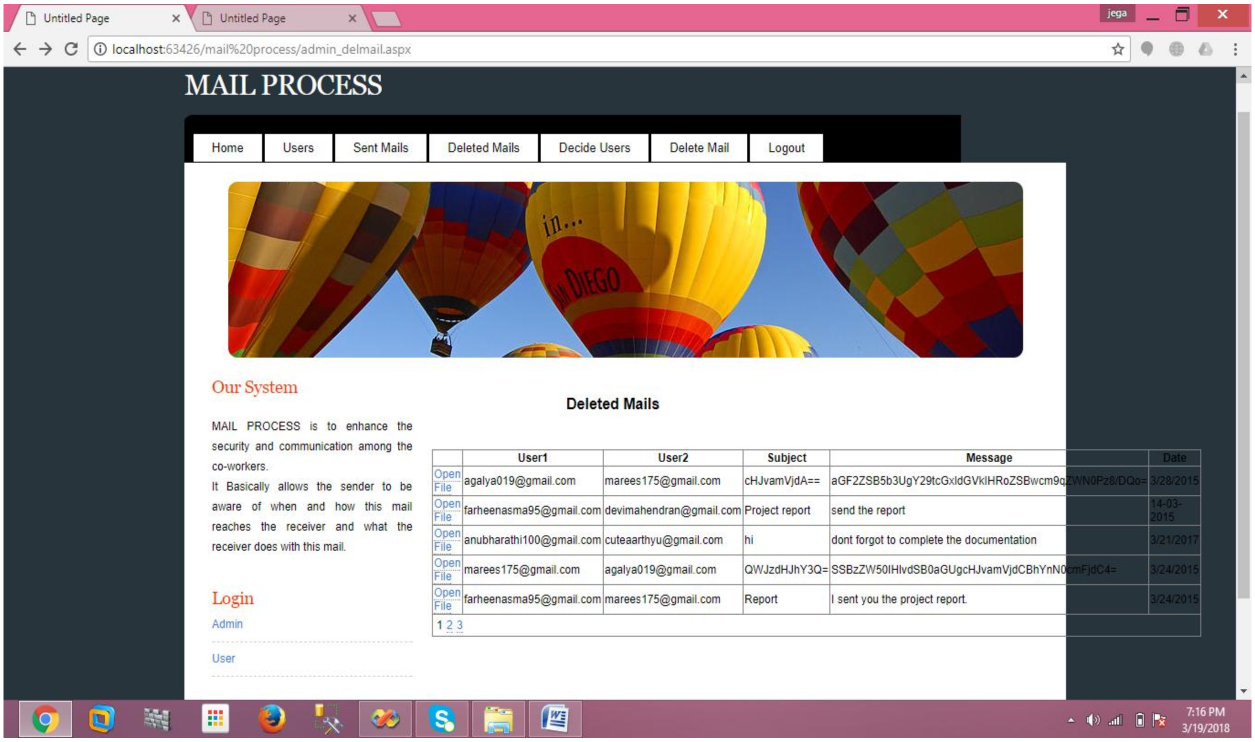
Admin

User

Mail View

User1	User2	FromUsername	Tousername	Subject	Body	Date
nirmalasivam1@gmail.com	mahaanive@gmail.com	nirmala	maha	cHJvamVjdA==	cHJvamVjdCBpcyBjb21wbGV0ZWQ=	3/5/2018
sathiya24mar@gmail.com	sathiyamar24@gmail.com	sathiya	devi	checkmail	mail is checked	3/11/2018
priyankamalar26@gmail.com	ravinavya03@gmail.com	priyanka	nathi	hi	i completed that work	3/21/2017
sathiya24mar@gmail.com	sathiyamar24@gmail.com	sathiya	devi	checkmail	mail is checked	3/11/2018

Fig 3: Sender's mail details in admin login.



MAIL PROCESS

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Login

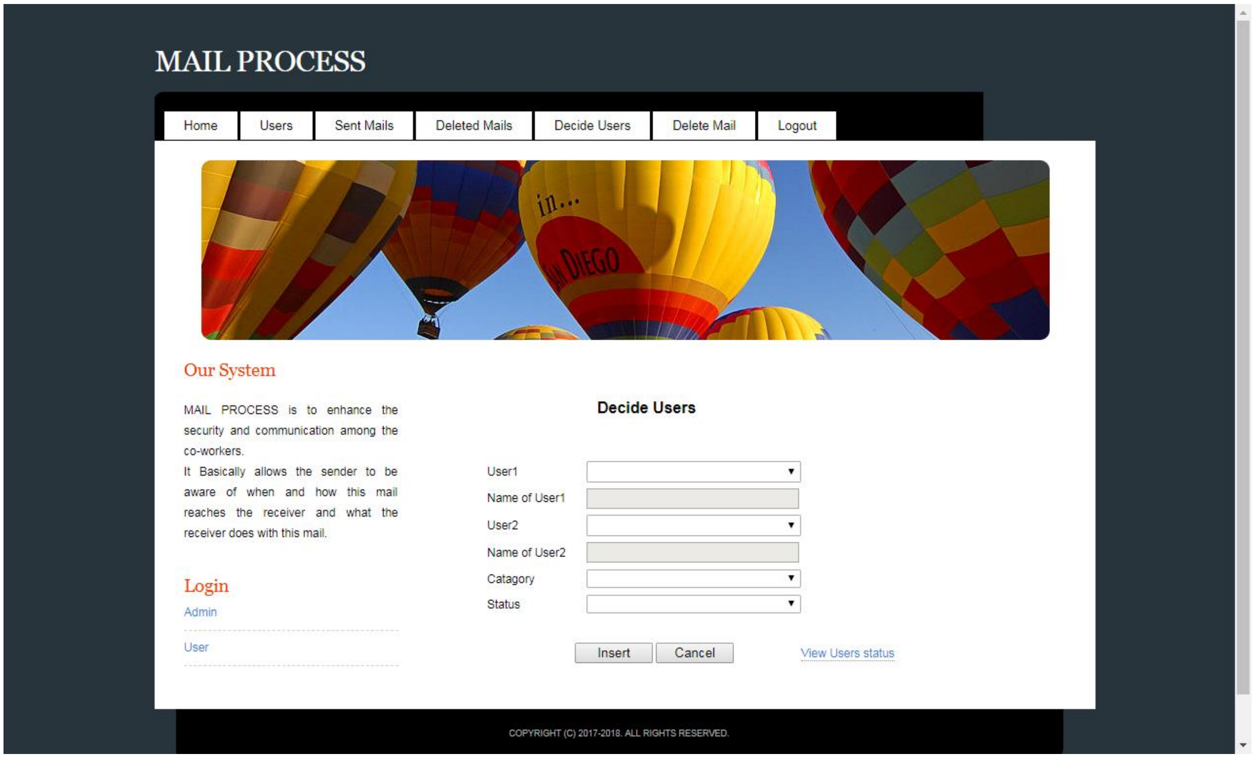
Admin

User

Deleted Mails

	User1	User2	Subject	Message	Date
Open File	agalya019@gmail.com	marees175@gmail.com	cHJvamVjdA==	aGF2ZSB5b3UgY29tcGxldGVkIHRoZSBwcm9qZWN0Pz8/DQo=	3/28/2015
Open File	farheenasma95@gmail.com	devimahendran@gmail.com	Project report	send the report	14-03-2015
Open File	anubharathi100@gmail.com	cuteaarthyu@gmail.com	hi	dont forgot to complete the documentation	3/21/2017
Open File	marees175@gmail.com	agalya019@gmail.com	QWJzdHJhY3Q=	SSBzZW50IHlvdSB0aGUgcHJvamVjdCBhYnN0cmFjdC4=	3/24/2015
Open File	farheenasma95@gmail.com	marees175@gmail.com	Report	I sent you the project report.	3/24/2015
1 2 3					

Fig 4: Mail process deleted mail



MAIL PROCESS

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Decide Users

User1	▾
Name of User1	
User2	▾
Name of User2	
Catagory	▾
Status	▾

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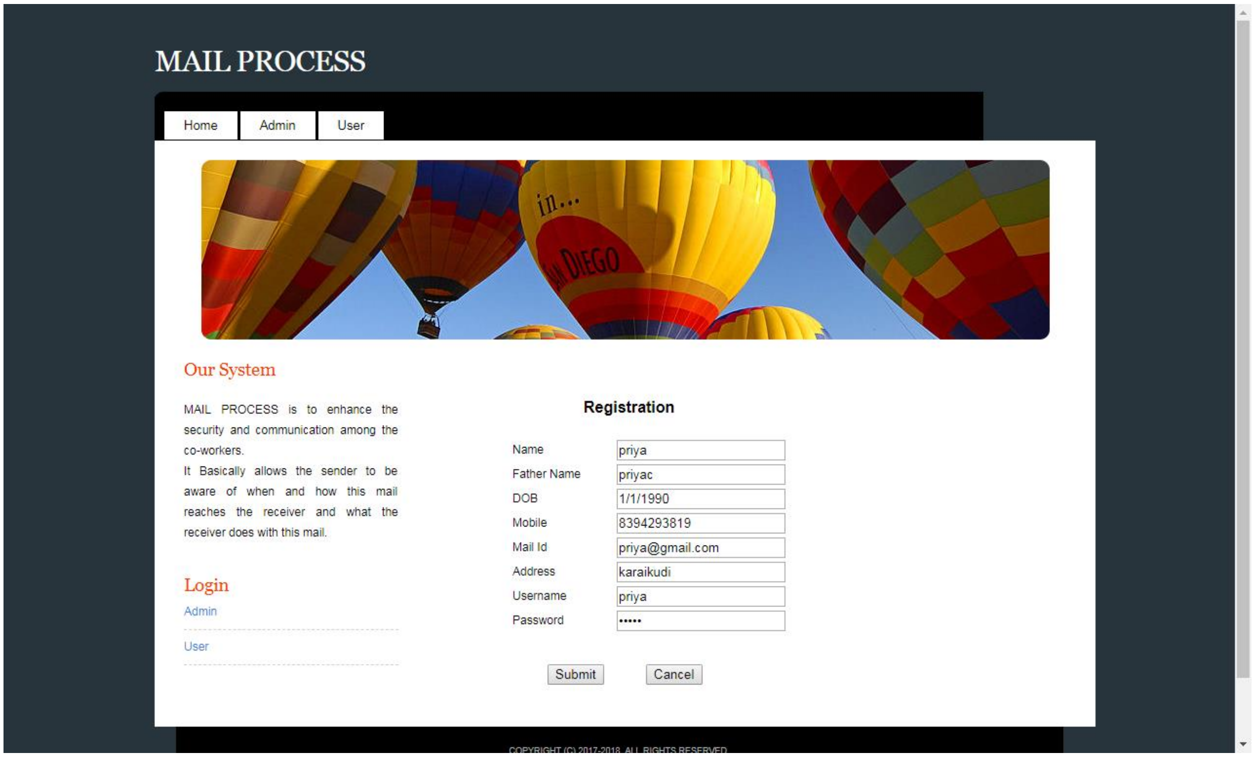
Fig 5: Send the mail to the desired user.



MAIL PROCESS

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Registration

Name	priya
Father Name	priyac
DOB	1/1/1990
Mobile	8394293819
Mail Id	priya@gmail.com
Address	karaikudi
Username	priya
Password	•••••

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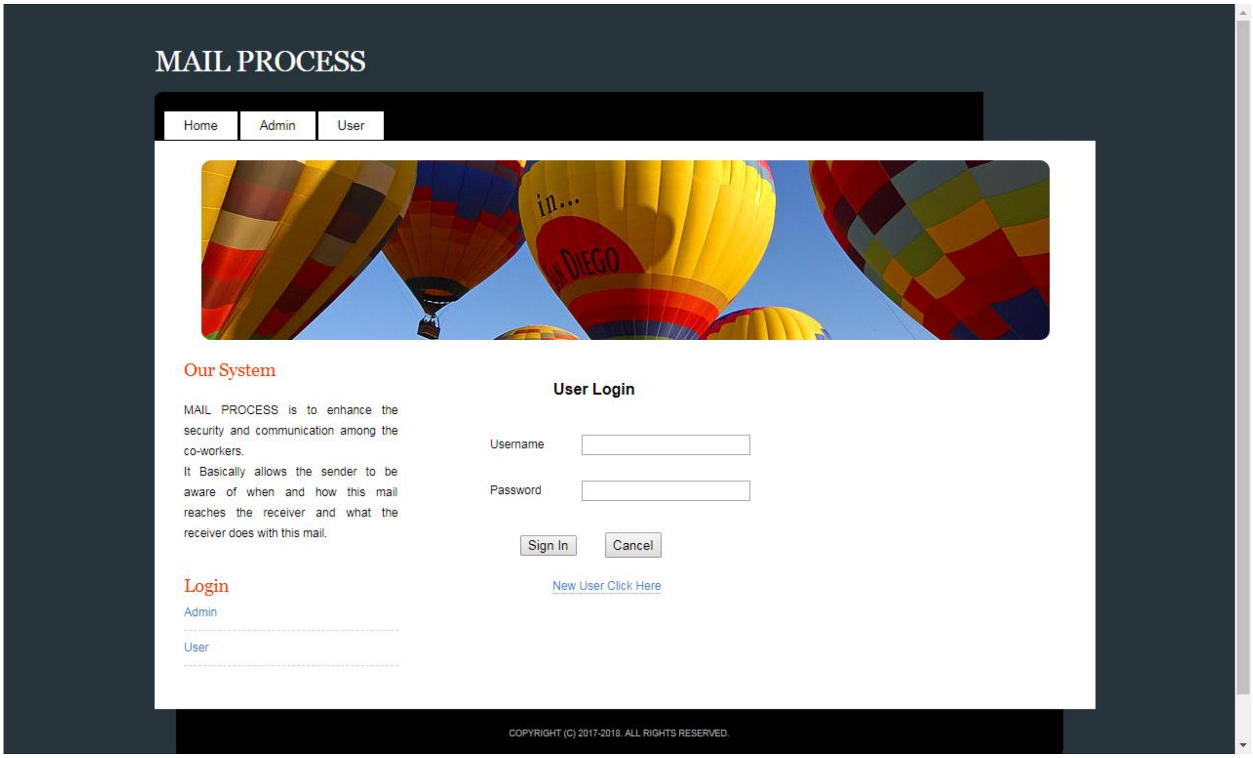
Fig 6: Registration page. If a user wants to send the mail first, they have registered the user form.



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Login

Admin

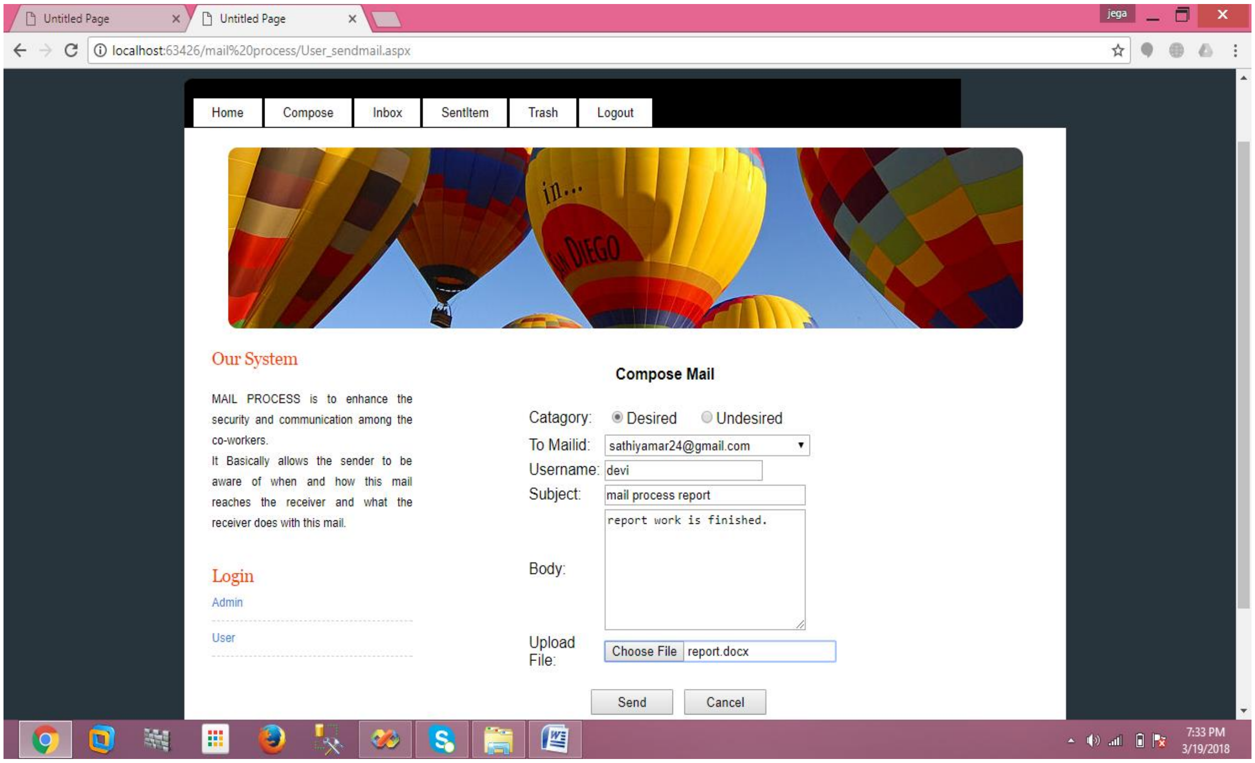
User

User Login

Username:

Password:

Fig 7:User login page. It includes the user name and password.



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Login

Admin

User

Compose Mail

Catagory: ● Desired ○ Undesired

To Mailid: sathiyamar24@gmail.com

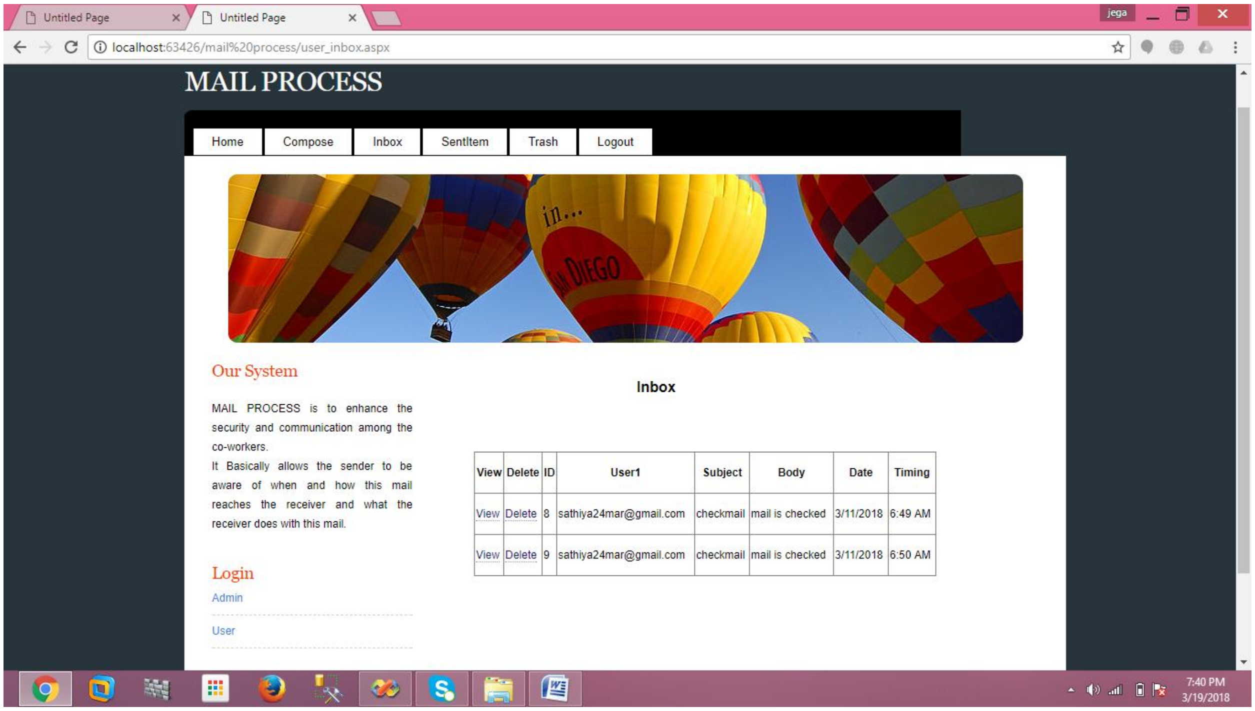
Username: devi

Subject: mail process report

Body: report work is finished.

Upload File: Choose File report.docx

Fig 8: Compose mail



MAIL PROCESS

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Login

Admin

User

Inbox

View	Delete	ID	User1	Subject	Body	Date	Timing
View	Delete	8	sathiya24mar@gmail.com	checkmail	mail is checked	3/11/2018	6:49 AM
View	Delete	9	sathiya24mar@gmail.com	checkmail	mail is checked	3/11/2018	6:50 AM

Fig 9: User inbox.

6. Conclusion:

It provides security to the member's personal information by giving a user id. This site has further enhancement facility, and subscribers can feel free to use this site. This package developed is tested with sample data, which were to provide satisfactory results. After the system has been implemented, the system's maintenances should be very easy so that the forthcoming changes can be made quickly. This has been developed is so flexible that the change can be made promptly.

7. References:

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