

Simple Mail Transfer Protocol (SMTP)

Email is emerging as one of the most valuable services on the internet today. Most of the internet systems use SMTP as a method to transfer mail from one user to another. SMTP is a push protocol and is used to send the mail whereas POP (post office protocol) or IMAP (internet message access protocol) are used to retrieve those mails at the receiver's side.

SMTP Fundamentals

SMTP is an application layer protocol. The client who wants to send the mail opens a TCP connection to the SMTP server and then sends the mail across the connection. The SMTP server is always on listening mode. As soon as it listens for a TCP connection from any client, the SMTP process initiates a connection on that port (25). After successfully establishing the TCP connection the client process sends the mail instantly.

SENDING EMAIL:

Mail is sent by a series of request and response messages between the client and a server. The message which is sent across consists of a header and the body. A null line is used to terminate the mail header. Everything which is after the null line is considered as the body of the message which is a sequence of ASCII characters. The message body contains the actual information read by the receipt.

RECEIVING EMAIL:

The user agent at the server side checks the mailboxes at a particular time of intervals. If any information is received it informs the user about the mail. When the user tries to read the mail it displays a list of mails with a short description of each mail in the mailbox. By selecting any of the mail user can view its contents on the terminal.

Password Reset System

Password Reset System is the action of invalidating the current password for an account on a website, service, or device, and then creating a new one. A password may be reset using the settings of the software or service or through OTP system, or by contacting the customer service department.

If you need your password reset, most services have a forgot password service that can send you a OTP in an e-mail to reset your password to something new.

Snapshots & Snippets

//User has to fill his/her credentials to login,and then press login button.

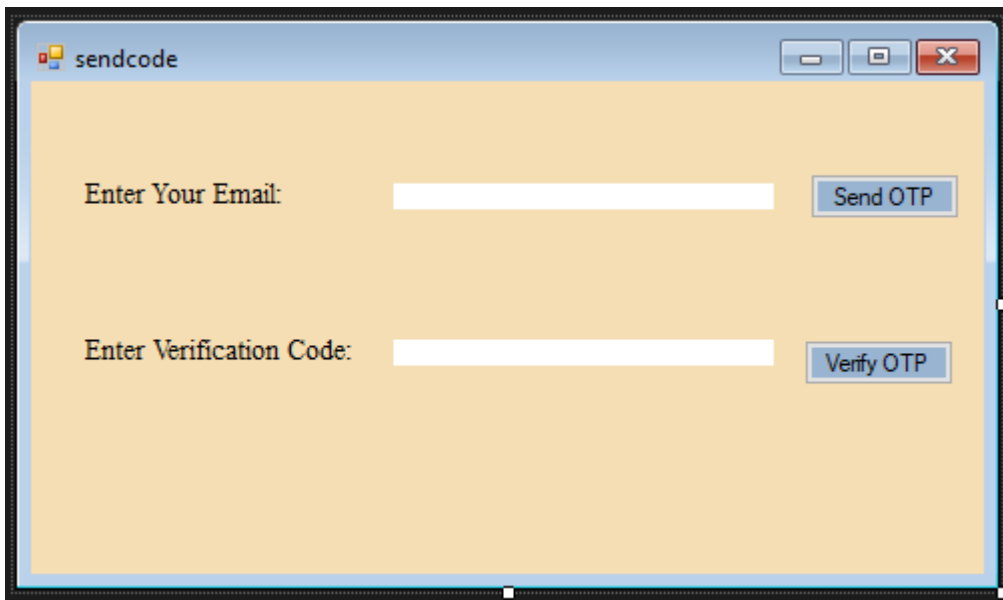
//Login button has been configured as below:

```
/*
private void button1_Click(object sender, EventArgs e)
{
    SqlConnection con = new SqlConnection(@"DataSource=ME20198\SQL123;InitialCatalog=userdetails;Integrated
Security=True");
    SqlDataAdapter adp = new SqlDataAdapter("select * from tblForgetpass where userEmail='" + txtuser.Text + "' and
Password='"+txtpass.Text+"'", con);
    con.Open();
    DataTable dt = new DataTable();
    adp.Fill(dt);
    if (dt.Rows.Count > 0)
    {
        MessageBox.Show("Login Sucessful");
    }
    else
    {
        MessageBox.Show("Login fail Error..try again");
    }
}
*/
```

//If user Forgets his/her password ,then there's a Forget Password option

// Forget password label has been configured as below:

```
/*
private void label3_Click(object sender, EventArgs e)
{
    sendcode sc = new sendcode();
    this.Hide();
    sc.Show();
}
*/
```



//User has to enter his/her E-mail address on which they desire to get OTP for verification and then click “Send OTP” button
 //Send OTP button has been configured as below

```
/*
private void btnsendotp_Click(object sender, EventArgs e)
{
    string from, pass, messagebody;
    Random ran = new Random();
    otpcode = (ran.Next(999999)).ToString();
    MailMessage msg = new MailMessage();
    to = (txtemail.Text).ToString();
    from = "onestopsolutions8182@gmail.com";
    pass = "1Js17cs08182";
    messagebody = "To Reset your Password , Verification code is " + otpcode;
    msg.To.Add(to);
    msg.From = new MailAddress(from);
    msg.Body = messagebody;
    msg.Subject = "Password Reset OTP";

    //networking part
    SmtpClient smtp = new SmtpClient("smtp.gmail.com");
    smtp.EnableSsl = true;
    smtp.Port = 587;
    smtp.DeliveryMethod = SmtpDeliveryMethod.Network;
    smtp.Credentials = new NetworkCredential(from, pass);

    SqlConnection con = new SqlConnection(@"Data Source=ME20198\SQL123;Initial Catalog=userdetails;Integrated
Security=True");
    SqlDataAdapter adp = new SqlDataAdapter("select * from tblForgetpass where UserEmail='" + txtemail.Text
+ "'", con);
    con.Open();
    DataTable dt = new DataTable();
    adp.Fill(dt);
    if (dt.Rows.Count > 0)
    {
        try
        {
            smtp.Send(msg);
            MessageBox.Show("Code sent successfully");

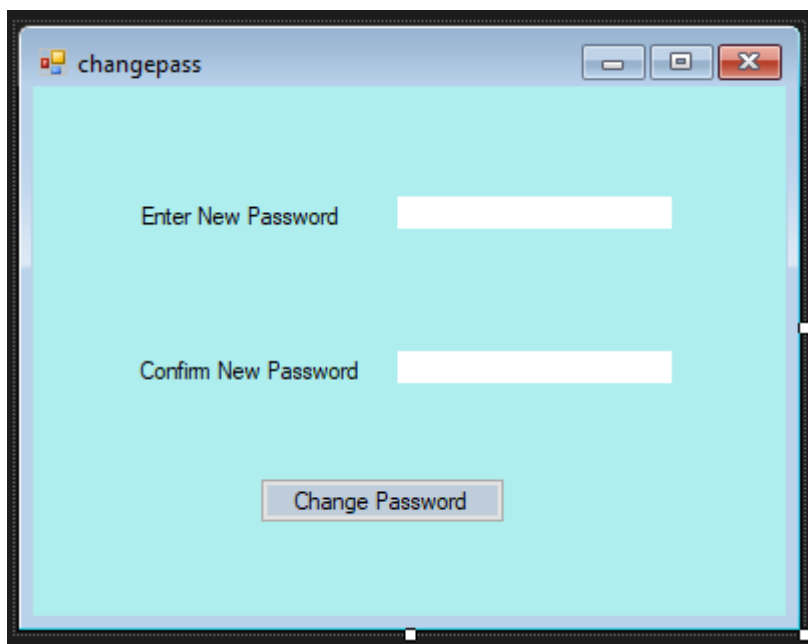
        }
        catch (Exception ex)
        {
            MessageBox.Show(ex.Message);
        }
    }
    else
    {
        MessageBox.Show("E-mail not registered!");
    }
}
}

*/
```

//once user gets OTP in their respective mail they have to enter received OTP and tap “verifyOTP” button

//Verify OTP button is configured as below:

```
/*
private void btnverifyotp_Click(object sender, EventArgs e)
{
    if (otpcode == (txtotp.Text).ToString())
    {
        to = txtemail.Text;
        changepass cp = new changepass();
        this.Hide();
        cp.Show();
    }
    else
    {
        MessageBox.Show("otp incorrect");
    }
}
*/
```



//Once OTP is verified ,user will be directed to next window ,to set new Password.

//This new password will be updated in the database, so that user can login via this new Password next time.

//Change password button is configured as below:

```
private void button1_Click(object sender, EventArgs e)
{
    if(newpass.Text==confirmpass.Text)
    {
        SqlConnection con = new SqlConnection(@"Data Source=ME20198\SQL123;Initial
        Catalog=userdetails;Integrated Security=True");
        SqlCommand cmd = new SqlCommand("update tblForgetpass set Password='"+confirmpass.Text+"' where
        UserEmail='"+username+"'", con);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
        MessageBox.Show("Password Reset successfully");
        Form1 f1 = new Form1();
        this.Hide();
        f1.Show();
    }
    else
    {
        MessageBox.Show("the new password do not match ,Please Try Again!!");
    }
}
```