

WEB PROGRAMMING PROJECT REPORT

STUDENT 1: SHUBHAM SHARMA RA1711003011301

STUDENT 2: TUSHYA TRIVEDI RA1711003010937

15IT304J – WEB PROGRAMMING

FACULTY: Ms. G. K. SANDHIA

PROJECT NAME: CHAT APPLICATION

INTRODUCTION

In this application we will be using languages such as HTML, CSS, PHP, AJAX and JAVASCRIPT to create a chat application where a user can chat between two browsers for demonstration purposes. Some of the key concepts used are Portable data objects in PHP, JAVASCRIPT validation functions, adding CSS to HTML pages.

Home-page, signup page, login page, and chat pages are created.

Multipurpose Internet Mail Extensions (MIME) used to upload images.

MODULES

HTML

- HTML stands for Hyper Text Markup Language.
- HTML is the standard markup language for creating Web pages.
- HTML describes the structure of a Web page.
- HTML consists of a series of elements.
- HTML elements tell the browser how to display the content.
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

CSS

CSS is the language for describing the presentation of Web pages, including colors, layout, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers. **CSS** is independent of HTML and can be **used with** any XML-based markup language.

JavaScript

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.

PHP

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP files can contain text, HTML, CSS, JavaScript, and PHP code

MySQL

MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Oracle Corporation. A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

AJAX

AJAX stands for **A**synchronous **J**avaScript and **X**ML. AJAX is a new technique for creating better, faster, and more interactive web applications with the help of XML, HTML, CSS, and JavaScript.

Ajax uses XHTML for content, CSS for presentation, along with Document Object Model and JavaScript for dynamic content display.

Code

Chat Application Home Page

```
<?php
?>

<html>

<head>

<link rel="stylesheet" type="text/css" href="homepage.css" />

<title> Chat Room </title>


<style type="text/css">

a:link{

text-decoration:none;

}      <!-- underline/none -->

a:visited{color:lightYellow;

}

a:hover{background-color:Tomato;

color:white;

text-decoration:none;

font-weight:bold;

}

a:active{background-color:PaleGreen;

}
```

```
img{ margin-top:0px;
height:153px;
width:22%; }

.your-centered-div{ position: absolute;
margin-right:0px;
top: 62%;
left: 79%;
transform: translate(-50%, -50%); }

.navbar{ font-family:lato;
width:100%;
background-color:Yellow;
overflow:auto;
}

.footer{ text-align:center;
position:fixed;
left:0;
bottom:0;
width:100%;
font-size:23px;
font-weight:bold;
background-color:MediumVioletRed;
color:black;
}
```

```
#cf { position:absolute;

top: 38%;

right: 99.5%; }

#cf img { position:absolute;

left:0;

-webkit-transition: opacity 1s ease-in-out;

-moz-transition: opacity 1s ease-in-out;

-o-transition: opacity 1s ease-in-out;

transition: opacity 1s ease-in-out;

}

#cf img.top:hover {

opacity:0;

}

.bottom,.top{

width:560px;

height:315px;

}

section{

color:blue;

height:3%;

}

h2{

color:navy;

}
```

```
body {  
  
background-image:  
url('https://cdn.pizap.com/pizapfiles/images/photo_backgrounds_textures_app05.jpg');  
  
background-attachment: fixed;  
  
background-size: cover;  
  
}  
  
</style>  
  
<body>  
  
<div class="navbar">  
  
<a href="ChatRoomHomePage.php"> Home </a>  
  
<a href="signup.php"> Signup </a>  
  
<a href="login.php"> Login </a>  
  
</div>  
  
<section align="center">  
  
<p><h2> The Internet: transforming society and shaping the future through Chat- "Dave  
Barry"</h2></p>  
  
</section>  
  
<div class="para">  
  
<p>  
  
  
  
</p>
```

```
</div>
```

```
<div id="cf">
```

```

```

```

```

```
</div>
```

```
<iframe class="your-centered-div" width="560" height="315"
src="https://www.youtube.com/embed/4CJxMV-P5sc" frameborder="0"
allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-
picture" allowfullscreen></iframe>
```

```
<div class="footer">
```

```
<p>
```

```
Thank You for Visiting.<br>
```

```
<a href="mailto:shubham066sharma@gmail.com"> Click here to Contact Us </a>
```

```
</p>
```

```
</div>
```

```
</body>
```

```
</html>
```


Chat Application Signup Page

```
<?php
session_start();

require_once "pdo.php";

if(isset($_POST['cancel'])){

header('Location:ChatRoomHomePage.php');

return;

}

if (isset($_POST['name']) && isset($_POST['email']) && isset($_POST['pass'])&&
isset($_POST['pass2']) )

{

if ( strlen($_POST['name']) < 1 || strlen($_POST['email']) < 1 || strlen($_POST['pass']) < 1 )

{

$_SESSION['error']="Name,Email and Password are required";

}

else

{

$name= htmlentities($_POST['name']);

$pass = htmlentities($_POST['pass']);

$email = htmlentities($_POST['email']);

if ((strpos($email, '@') === false))

{

$_SESSION['error']= "Email must have an at-sign (@)";

}

}
```

```
if ($_POST['pass']!= $_POST['pass2']) {  
    $_SESSION['error']="Passwords do not match."  
}  
  
}  
  
if(isset($_SESSION["error"])){  
    header("Location:signup.php");  
  
    return;  
  
}  
  
elseif (!isset($_SESSION["error"])) {  
    $sql = "INSERT INTO users (name, email, password)  
VALUES (:name, :email, :password)";  
  
    echo("<pre>\n".$sql."\n</pre>\n");  
  
    $stmt = $pdo->prepare($sql);  
  
    $stmt->execute(array(  
        ':name' => $name,  
        ':email' => $email,  
        ':password' => $pass));  
  
    header("Location:login.php");  
  
    return;  
  
}  
  
}  
  
?>
```

```
<!DOCTYPE html>

<html>

<head>

<style>

body {

background-image:
url('https://c4.wallpaperflare.com/wallpaper/828/185/282/background-android-4k-orange-
wallpaper-preview.jpg');

background-attachment: fixed;

background-size: cover; }

div {

border: 1px solid gray;

padding: 8px;

}

h1 {

text-align: center;

text-transform: uppercase;

font-family:lato;

}

p {

text-indent: 50px;

text-align: justify;

letter-spacing: 3px;

}
```

```
a {  
text-decoration:none;  
color:Black;  
font-weight:bold;  
font-size:27px;  
}  
</style>  
<script>  
function validateForm() {  
var x = document.forms["myForm"]["name"].value;  
if (x == "") {  
alert("Name must be filled out");  
return false;  
}  
}  
</script>  
<title>CHAT APP</title>  
<link href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css"  
rel="stylesheet" integrity="sha384-  
BVYiISiFeK1dGmJRAkycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K68vbdEjh4u"  
crossorigin="anonymous">  
</head>
```

```
<body >

<div style="background-color:yellow;" class='header'>

<a style="text-decoration:none;" href="ChatRoomHomePage.php"> Home </a>

<a style="text-decoration:none;" href="login.php"> Login </a>

<h1 style="color:Black;"> Chat Room </h1>

</div>

<div style="color:Black;" class="container">

<h1>Please SIGN UP If New User</h1>

<?php

if ( isset($_SESSION["error"]) ) {

echo('<p style="color:red">'. $_SESSION["error"]. "</p>\n");

unset($_SESSION["error"]);

}

?>

<form name="myForm" onsubmit="return validateForm()" method="post" class="form-
horizontal">

<div class="form-group">

<label style="color:Black;" class="control-label col-sm-2" for="name">Name:</label>

<div class="col-sm-3">

<input class="form-control" type="text" name="name" id="name">

</div>

</div>

</div>
```

```
<div style="color:Black;" class="form-group">

<label class="control-label col-sm-2" for="email">Email:</label>

<div class="col-sm-3">

<input class="form-control" type="text" name="email" id="email">

</div> </div>

<div style="color:Black;" class="form-group">

<label class="control-label col-sm-2" for="pass">Password:</label>

<div class="col-sm-3">

<input class="form-control" type="password" name="pass" id="pass">

</div> </div>

<div style="color:Black;" class="form-group">

<label class="control-label col-sm-2" for="pass">Confirm Password:</label>

<div class="col-sm-3">

<input class="form-control" type="password" name="pass2" id="pass2">

</div> </div>

<div style="color:Black;" class="form-group">

<div class="col-sm-2 col-sm-offset-2">

<input class="btn btn-primary" type="submit" value="Sign UP">

<input class="btn" type="submit" name="cancel" value="Cancel">

</div> </div>

</form> </div>

</body>

</html>
```

Chat Application Login Page

```
<?php
session_start();
require_once "pdo.php";
if ( isset($_POST['logout']) ) {
header("Location:login.php");
return;
}
if ( isset($_POST['email']) && isset($_POST['pass']) )
{
if ( strlen($_POST['email']) < 1 || strlen($_POST['pass']) < 1 )
{
$_SESSION['error']="Email and password are required";
}
else
{
$pass = htmlentities($_POST['pass']);
$email = htmlentities($_POST['email']);
if ((strpos($email, '@') === false))
{
$_SESSION['error']= "Email must have an at-sign (@)";
}
}
```

```
else
{
$sql = "SELECT name FROM users WHERE email = :em AND password = :pw";
$pass = htmlentities($_POST['pass']);
$email = htmlentities($_POST['email']);
$stmt = $pdo->prepare($sql);
$stmt->execute(array( ':em' =>$email ,
':pw' => $pass));
$row = $stmt->fetch(PDO::FETCH_ASSOC);
$_SESSION['name']=$row;
var_dump($row);
if ( $row === FALSE ) {
$_SESSION['error']= "Incorrect password";
} else {
header("Location: index.php");
return;
} }
if(isset($_SESSION["error"])){
header("Location: login.php");
return;
}
}

// Fall through into the View
?>
```



```
<!DOCTYPE html>

<html>

<head>

<title>CHAT APP</title>

<link href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
BVYiISiFeK1dGmJRAkycuHAHRg32OmUcww7on3RYdg4Va+PmSTsz/K68vbdEjh4u"
crossorigin="anonymous">

<style>

body {

background-image: url("https://venngage-
wordpress.s3.amazonaws.com/uploads/2018/09/Colorful-Geometric-Simple-Background-
Image.jpg");

background-color: #cccccc; }

div { border: 1px solid gray;

padding: 8px; }

h1 { text-align: center;

text-transform: uppercase;

color: Black;

font-family:lato; }

p {

text-indent: 50px;

text-align: justify;

letter-spacing: 3px;

}
```

```
a {
text-decoration: none;
color: Black;
font-weight:bold;
font-size:27px; }

a:link{
text-decoration:none;
}      <!-- underline/none -->
a:hover{background-color:skyblue;
color:white;
text-decoration:none;
font-weight:bold; }
a:active{background-color:orange;
text-decoration:none; }

</style>

</head> <body>

<div style="background-color:orange;" class='header'>
<a href="ChatRoomHomePage.php"> Home </a>
<a href="signup.php"> Signup </a>

<h1> Chat Room </h1>

</div>

<div class="container">

<h1>Please Log In</h1>
```

```
<?php
if ( isset($_SESSION["error"]) ) {
echo('<p style="color:red">'. $_SESSION["error"]."</p>\n");
unset($_SESSION["error"]); }
?>

<form method="post" class="form-horizontal">

<div class="form-group">

<label class="control-label col-sm-2" for="email">Email:</label>

<div class="col-sm-3">

<input class="form-control" type="text" name="email" id="email">

</div> </div>

<div class="form-group">

<label class="control-label col-sm-2" for="pass">Password:</label>

<div class="col-sm-3">

<input class="form-control" type="password" name="pass" id="pass">

</div> </div>

<div class="form-group">

<div class="col-sm-2 col-sm-offset-2">

<input class="btn btn-primary" type="submit" value="Log In">

<input class="btn" type="submit" name="logout" value="Clear">

</div> </div> </form> </div> <footer>

<p>Developer: TUSHYA TRIVEDI AND SHUBHAM SHARMA</p>

</footer> </body>

</html>
```

Chat Application Index Page

```
<?php
session_start();

//Create a session of username and logging in the user to the chat room
if(isset($_POST['username'])){
    $_SESSION['username']=$_POST['username'];
}    //Unset session and logging out user from the chat room
if(isset($_GET['logout'])){
    unset($_SESSION['username']);
    header('Location:login.php');
} ?>

<html>

<head>

<title>Chat Application</title>

<link href='http://fonts.googleapis.com/css?family=Open+Sans:300italic,400italic,400,300'
rel='stylesheet' type='text/css'>

<link rel="stylesheet" href="css/style.css" />

<script type="text/javascript" src="js/jquery-1.10.2.min.js" ></script>

<script type="text/javascript" src="js/pubnub-3.7.13.min.js" ></script>

</head>

<body style="background-color: powderblue;">

<div class='header'>
```


Chat Room

```
<?php // Adding the logout link only for logged in users ?>
```

```
<?php if(isset($_SESSION['username']))
```

 $\{$

```
?> &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;
```

[illegible][illegible][illegible]

Welcome

```
<?php echo $_SESSION['username'] ?><a class='logout' href="?logout"> Logout</a>
```

```
<?php } ?>
```


<div class='main'>

```
<?php //Check if the user is logged in or not ?>
```

```
<?php if(isset($_SESSION['username'])) { ?>
```

<div id='result'></div>

<div class='chatcontrols'>

```
<form method="post" onsubmit="return submitchat();">
```

```
<input type='text' name='chat' id='chatbox' autocomplete="off" required  
placeholder="ENTER CHAT HERE" />
```

```
<input type='submit' name='send' id='send' class='btn btn-send' value='Send' />
```

```
<input type='button' name='clear' class='btn btn-clear' id='clear' value='X' title="Clear Chat"
/>
```

</form>

```

<script>

// Javascript function to submit new chat entered by user

function submitchat(){

if($('#chat').val()==' ' || $('#chatbox').val()==' ') return false;

$.ajax({

url:'chat.php',

data:{chat:$('#chatbox').val(),ajaxsend:true},

method:'post',

success:function(data){

$('#result').html(data); // Get the chat records and add it to result div

$('#chatbox').val(''); //Clear chat box after successful submission

document.getElementById('result').scrollTop=document.getElementById('result')

.scrollHeight; // Bring the scrollbar to bottom of the chat resultbox in case of long chatbox

} })

return false; }; // Function to continuously check the some has submitted any new chat

setInterval(function(){

$.ajax({ url:'chat.php',

data:{ajaxget:true},

method:'post',

success:function(data){

$('#result').html(data);

}}}

,1000);

```

```

// Function to chat history

$(document).ready(function(){

$('#clear').click(function(){

if(!confirm('Are you sure you want to clear chat?'))

return false;

$.ajax({

url:'chat.php',

data:{username:"<?php echo $_SESSION['username']

?>",ajaxclear:true},

method:'post',

success:function(data){

$('#result').html(data);

}}}}))

</script>

<?php } else { ?>

<div class='userscreen'>

    <form method="post">

        <input type='text' class='input-user' required placeholder="ENTER YOUR
NAME HERE" name='username' />

        <input type='submit' class='btn btn-user' value='START CHAT' />

    </form></div>

<?php } ?>

</div></div>

```

```
<script>

<?php

$count = 0;

$myFile = "chatdata.txt";

$fh = fopen($myFile, 'r');

while(!feof($fh)){

$fr = fread($fh, 8192);

$count += substr_count($fr, 'br');}

fclose($fh); ?>

setInterval(function()

{ <?php

$count2 = 0;

$myFile = "chatdata.txt";

$fh = fopen($myFile, 'r');

while(!feof($fh)){

$fr = fread($fh, 8192);

$count2 += substr_count($fr, 'br'); }

fclose($fh);

if($count2<$count) { ?>

alert("under construction");

<?php } ?>

}, 3000);

</script>

</body>
```


<style>

.sidenav { height: 100%;

width: 186px;

position: fixed;

z-index: 1;

top: 0;

right: 0;

background-color: #008080;

overflow-x: hidden;

padding-top: 20px; }

.sidenav a { padding: 6px 8px 6px 8px;

text-decoration: none;

font-size: 20px;

color: Black;

display: block; }

.sidenav a:hover {

color: #f1f1f1;

font-size: 20px; }

```
.sidenav form { padding: 6px 8px 6px 8px;
text-decoration: none;
font-size: 20px;
color: white;
display: block; }

</style>

<div class="sidenav">

<form action="upload.php" method="post" enctype="multipart/form-data">

Upload:

<input type="file" name="fileToUpload" id="fileToUpload">

<input type="submit" value="Upload" name="submit">

</form>

<?php
$files = scandir('./uploads');
sort($files); // this does the sorting
foreach($files as $file){
echo'<a href="uploads/' . $file . '"><br>' . $file . '</a>';
}
?>

</div>

</html>
```

Chat Application Chat Page

```
<?php
session_start();

if(isset($_POST['ajaxsend']) && $_POST['ajaxsend']==true){
    // Code to save and send chat

    $chat = fopen("chatdata.txt", "a");

    $data="<b>".$_SESSION['username'].':</b> '.$_POST['chat']."<br>";

    fwrite($chat,$data);

    fclose($chat);

    $chat = fopen("chatdata.txt", "r");

    echo fread($chat,filesize("chatdata.txt"));

    fclose($chat);
} else if(isset($_POST['ajaxget']) && $_POST['ajaxget']==true){
    // Code to send chat history to the user

    $chat = fopen("chatdata.txt", "r");

    echo fread($chat,filesize("chatdata.txt"));

    fclose($chat);
} else if(isset($_POST['ajaxclear']) && $_POST['ajaxclear']==true){
    // Code to clear chat history

    $chat = fopen("chatdata.txt", "w");

    $data="<b>".$_SESSION['username'].':</b> cleared chat<br>';

    fwrite($chat,$data);

    fclose($chat);
}
```

Chat Application Home Page CSS

```
.navbar{ font-family:lato;
width:100%;
background-color:#191970;
overflow:auto;
}
.navbar a{ font-family:lato;
float:left;
padding:12px;
color:Black;
text-decoration:none;
font-size:27px;
}
h1{ color:Black;
font-size:50px;
margin-top:1%;
padding-left:40%;
font-family: lato;
}
```

```
.footer{  
    text-align:center;  
    position:fixed;  
    left:0;  
    bottom:0;  
    width:100%;  
    font-size:17px;  
    font-weight:bold;  
    background-color: MediumVioletRed;  
    height:79px;  
    color:black;  
}  
.footer a{ color:white;  
}  
  
.para{  
    text-align:center;  
  
}
```

Chat Application Index Page CSS

```
body{margin:0; padding: 0; font-family: 'Open Sans', sans-serif, arial; font-size: 14px; background:
black; overflow: hidden;}

.main{max-width:1024px; width:100%; margin:auto; }

.header{background: #3B5898}

.header h1{max-width:1024px; width:100%; margin:0 auto; padding:10px 0; font-size: 20px; color:
#fff; text-align: left; font-weight: 300}

.userscreen{margin: auto; text-align: center; margin-top: 24%}

.input-user { padding: 10px;
border: solid 2px #c9c9c9;
transition: border 0.3s;
width:250px; }

.input-user:focus,
.input-user.focus {
border: solid 2px #726da5; }

.btn {

-moz-box-shadow:inset 0px 1px 0px 0px #7a8eb9;
-webkit-box-shadow:inset 0px 1px 0px 0px #7a8eb9;
box-shadow:inset 0px 1px 0px 0px #7a8eb9;

background:-webkit-gradient(linear, left top, left bottom, color-stop(0.05, #637aad), color-stop(1,
#5972a7));

background:-moz-linear-gradient(top, #637aad 5%, #5972a7 100%);
background:-webkit-linear-gradient(top, #637aad 5%, #5972a7 100%);
background:-o-linear-gradient(top, #637aad 5%, #5972a7 100%);
background:-ms-linear-gradient(top, #637aad 5%, #5972a7 100%);
```

```
background:linear-gradient(to bottom, #637aad 5%, #5972a7 100%);

filter:progid:DXImageTransform.Microsoft.gradient(startColorstr='#637aad',
endColorstr='#5972a7',GradientType=0);

background-color:#637aad;

border:1px solid #314179;

display:inline-block;

cursor:pointer;

color:#ffffff;

font-family: 'Open Sans', sans-serif, arial;

font-size:13px;

padding:6px 12px;

text-decoration:none; }

.btn:hover { background:-webkit-gradient(linear, left top, left bottom, color-stop(0.05, #5972a7),
color-stop(1, #637aad));

background:-moz-linear-gradient(top, #5972a7 5%, #637aad 100%);

background:-webkit-linear-gradient(top, #5972a7 5%, #637aad 100%);

background:-o-linear-gradient(top, #5972a7 5%, #637aad 100%);

background:-ms-linear-gradient(top, #5972a7 5%, #637aad 100%);

background:linear-gradient(to bottom, #5972a7 5%, #637aad 100%);

filter:progid:DXImageTransform.Microsoft.gradient(startColorstr='#5972a7',
endColorstr='#637aad',GradientType=0);

background-color:#5972a7; }

.btn:active {

position:relative;

top:1px;

}
```

```
.btn-user{padding:9px 30px; position: relative; top: 0px; font-size: 16px; font-weight: 300}

#result{max-width:1024px; width:100%; padding:10px; background: #f1f1f1; max-height: 80%;
overflow-y:auto;}

.chatcontrols{position: fixed; bottom: 0; width: 100%}

.chatcontrols form{margin: 0}

#chatbox { background: none repeat scroll 0 0 #FCFCFC;

border: 1px solid #777;

border-radius: 2px 2px 2px 2px;

color: #6C6C6C;

height: 35px;

margin-top: 10px;

outline: medium none;

padding: 10px 10px;

width: 65.5%;

height: 60px;

font-size: 20px;

font-weight: 300 }

#chatbox:focus{ background: none repeat scroll 0 0 white;

border-color: Black;

box-shadow: 0 0 2px rgba(0, 0, 0, 0.3) inset;

color: Black;

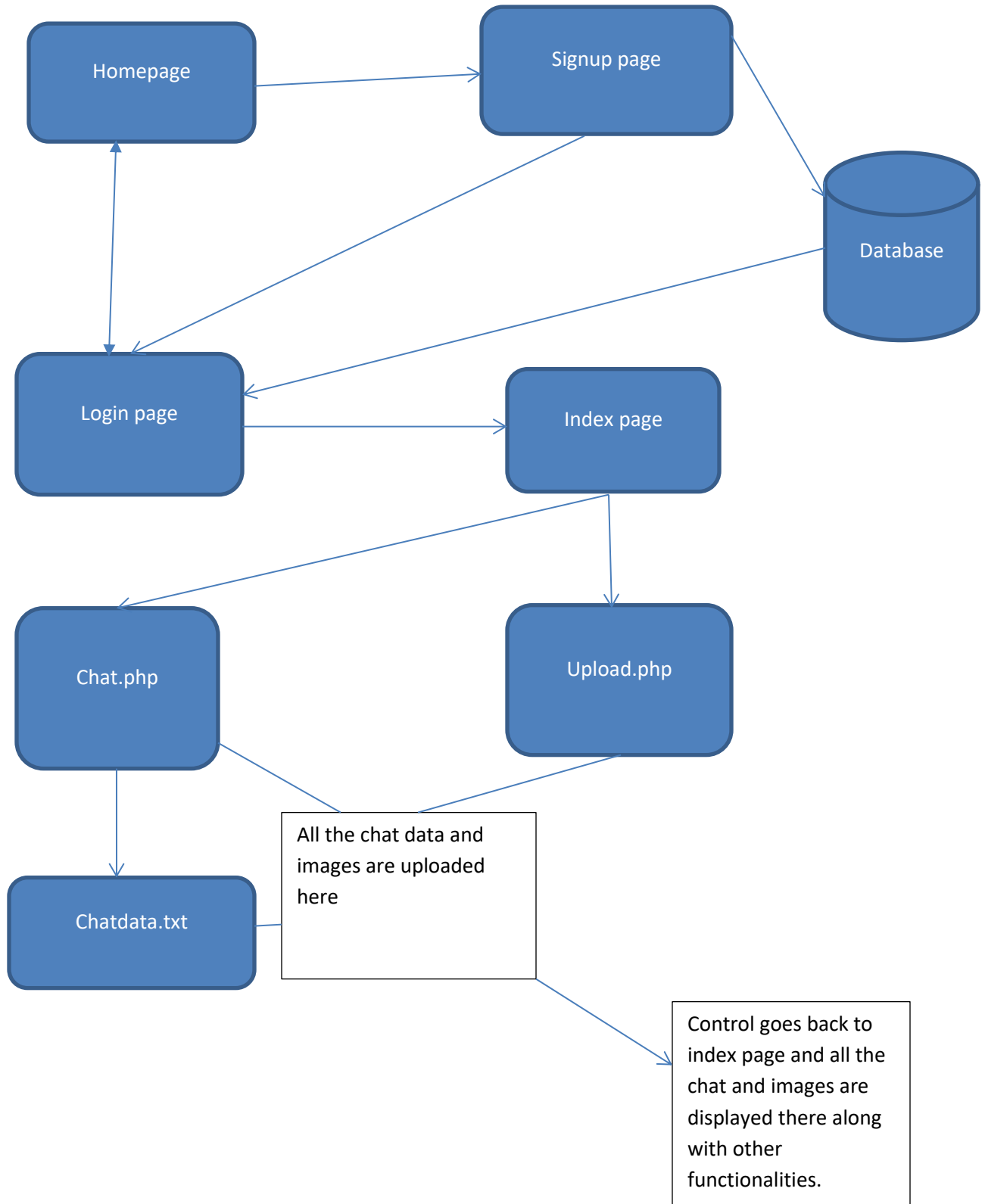
content:""; }

.btn-send{font-size: 20px; padding: 15px 10px; font-weight: 300}

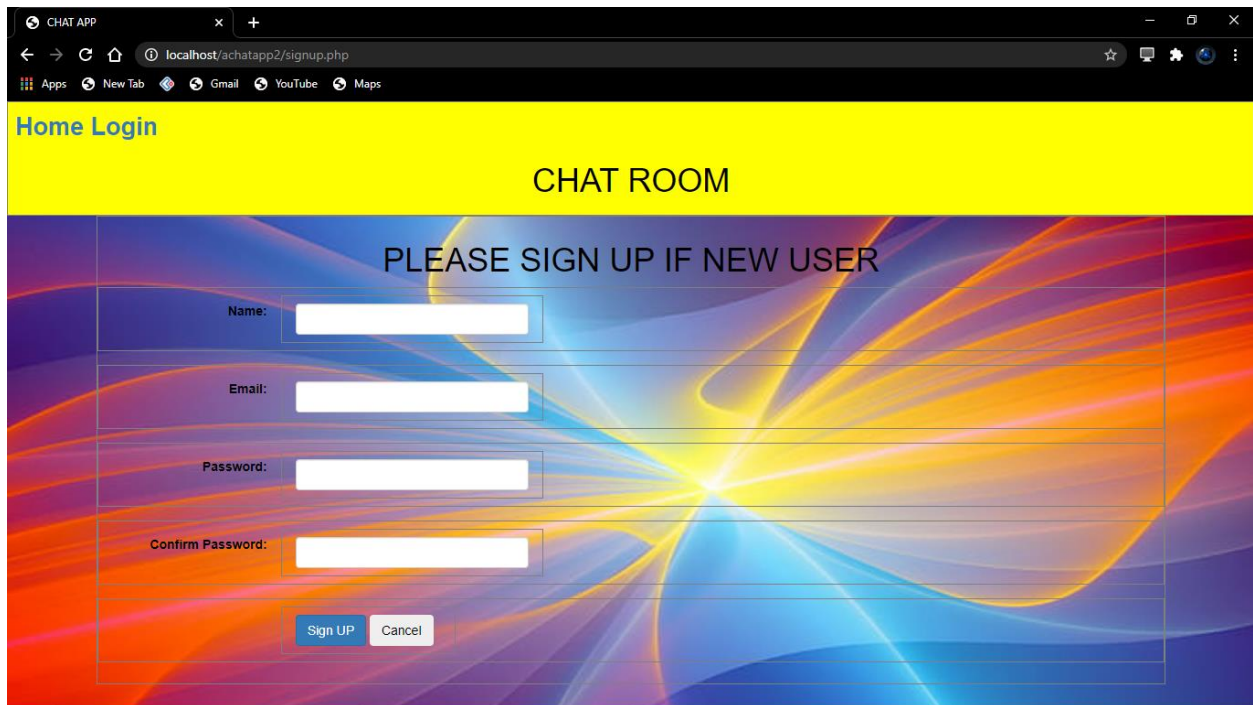
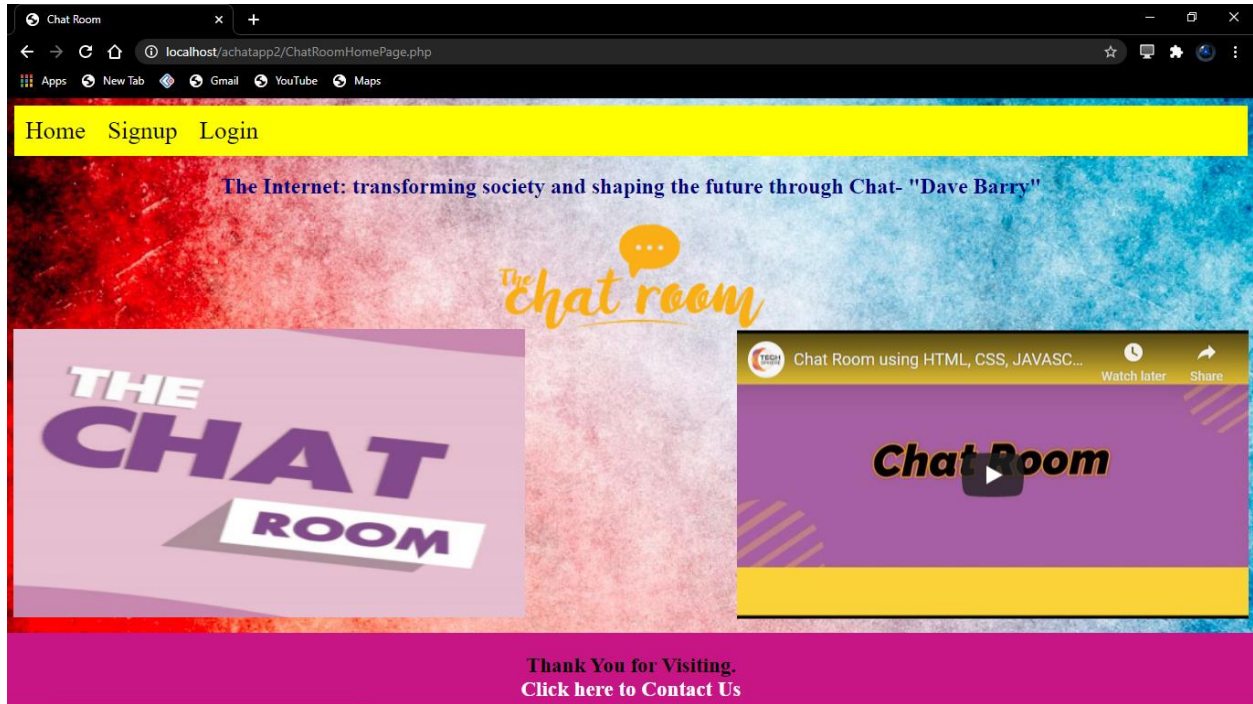
.btn-clear{padding: 15px 15px; font-size: 20px; font-weight: 300}

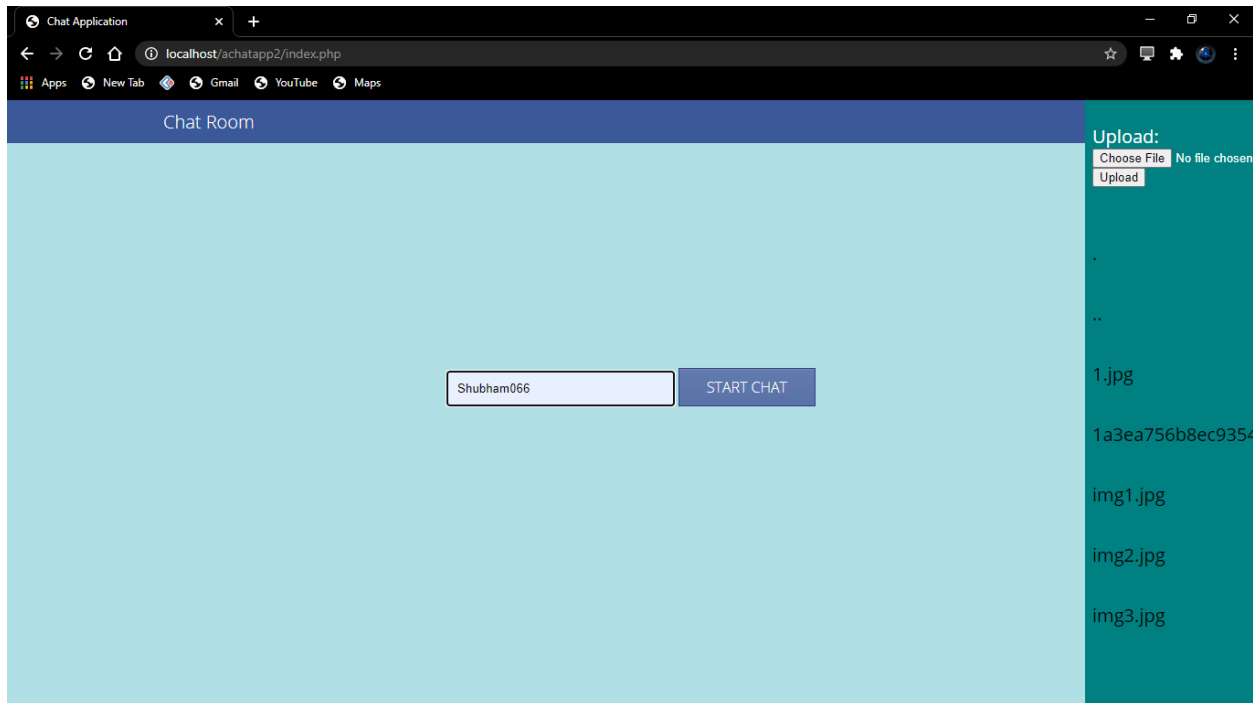
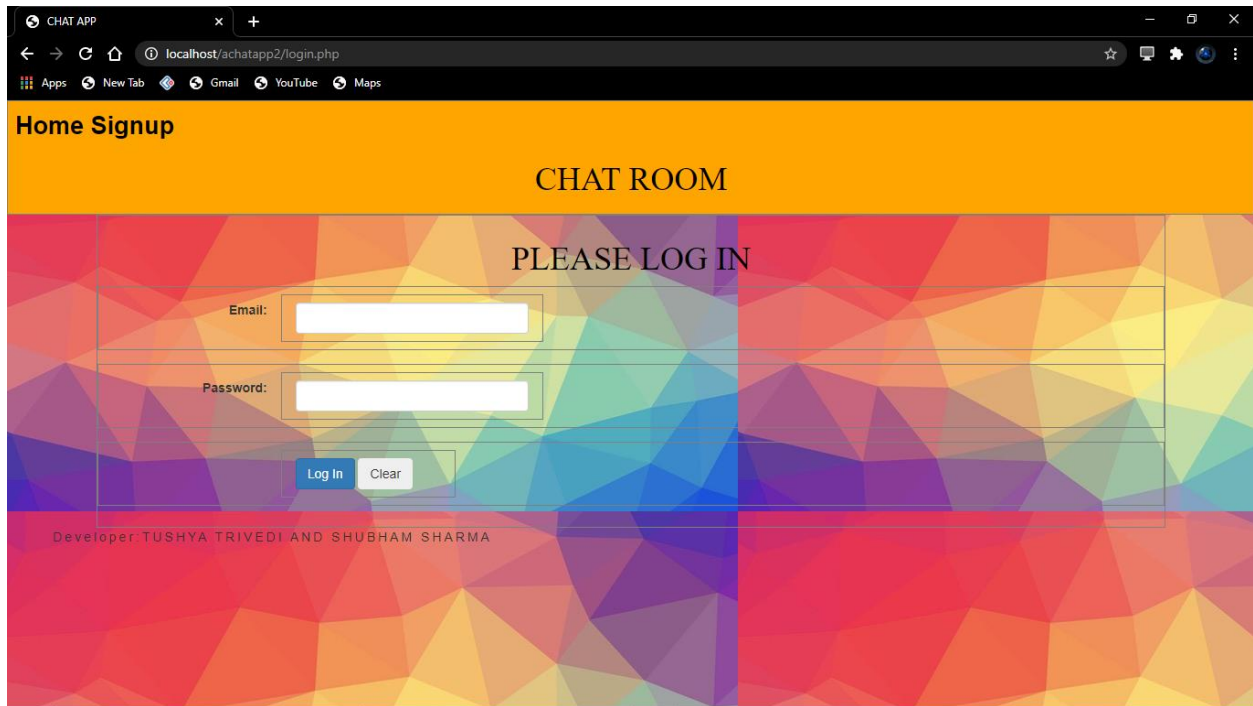
.logout{float: right; color: #fff; text-decoration: none; font-size: 20px; margin-right: 30px;}
```

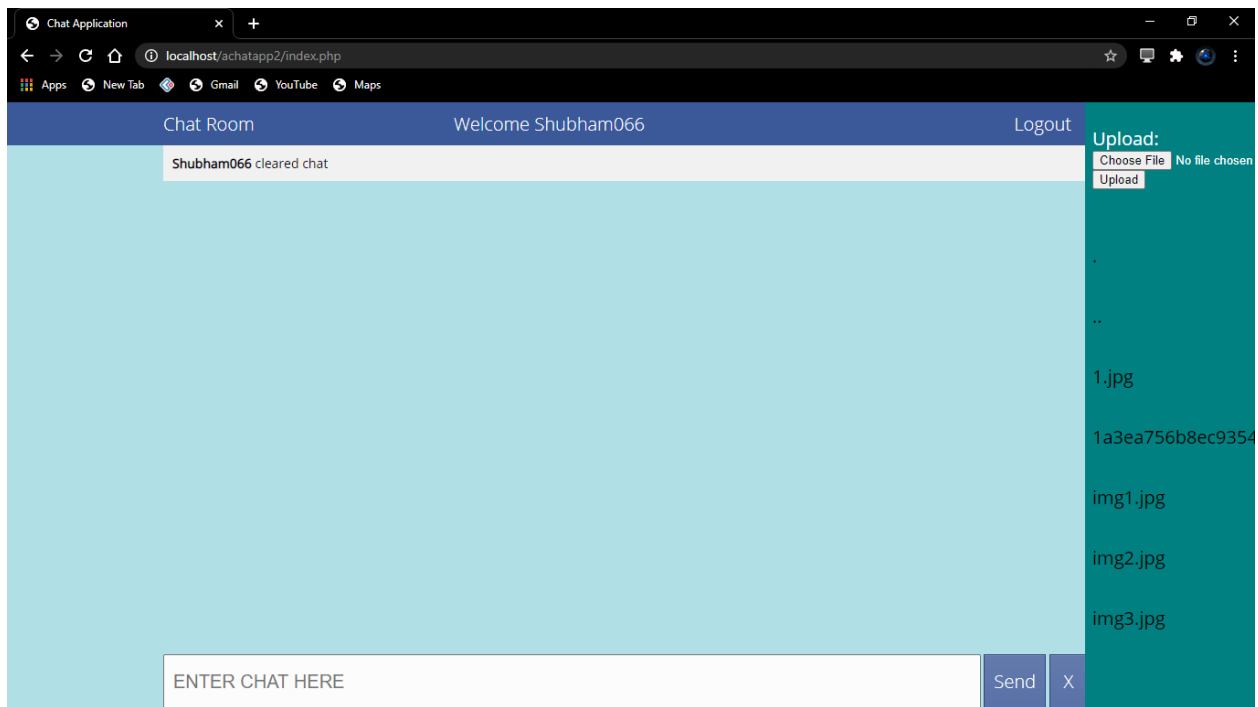

SYSTEM ARCHITECTURE



Output







Conclusion

WE HAVE DEVELOPED A SIMPLE CHAT APPLICATION THAT IS RUN ON A LOCAL SERVER, WE CAN ALSO BUY A DOMAIN OF OUR OWN AND THIS APPLICATION WOULD WORK ON TWO DIFFERENT DEVICES THEN. CURRENTLY THERE IS AN OPTION OF UPLOADING IMAGES ONLY. THIS APPLICATION DEMONSTRATES CHATROOM.

Future Work

MODIFY CODE TO UPLOAD AUDIO, VIDEO AND BUY DOMAIN TO RUN ON TWO OR MORE DIFFERENT DEVICES.

References

https://www.w3schools.com/js/js_intro.asp

<https://www.w3schools.com/css/default.asp>

<https://www.w3schools.com/html/default.asp>

<https://www.w3schools.com/php/default.asp>

https://www.w3schools.com/js/js_ajax_intro.asp