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Perceptual Video Quality Assessment Tool

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Abstract

Subjective video quality is a subjective characteristic of video quality. It is concerned with how a video is perceived by the viewer and designates his or her opinion on the particular video sequence. Subjective video quality tests are quite expensive in terms of time (preparation and running) and human resources. The main objectives of this testing is how the human observes the video quality since they are the ultimate end user.

There are many ways of testing the quality of the videos. We have used ITU-T Recommendation P.910.

1. Introduction

Digital pictures are progressively finding their path into the daily lives of people via the explosion of video applications such as digital television, digital film, internet videos, video teleconference, video sharing services such as YouTube, Video on Demand (VoD), and home televisions and then along. Digital videos typically pass through various processing stages before they reach the end user of the video. Most often, this end user is a human observer. The effect of most processing stages is to degrade the quality of the video that passes through it, although certain processing stages (for example, in consumer devices) attempt to improve quality. Methods for evaluating a video quality plays a critical role in quality monitoring to maintain Quality of Service (QoS) requirements; performance evaluation of video acquisition and display devices; evaluation of video processing systems for compression, enhancement, error concealment and so on; and finally, perceptually optimal design of video processing systems.
The only reliable method to access the video quality perceived by a human observer is to ask human subjects for their opinion, which is termed subjective video quality assessment (VQA). Subjective VQA is impractical for most applications due to the human involvement in the process.
However, subjective VQA studies provide valuable data to assess the performance of objective or automatic methods of quality assessment.
In this paper, we first present a study that we conducted to assess the subjective quality of video. Our study included 10 uncompressed reference quality of the video that is downloaded from YouTube and were of random qualities. Each video is assessed by the available number of human subjects (one video after another). The subjects scored are stored in the database on the local server.

2. Objectives

The thesis was undertaken with the objective to develop a tool to test the subjective perceived quality of video sequences. Absolute Category Rating (ACR, explained on page 8) is the ultimate method to carry such test in PHP environment because of the hidden reference. For test video sequences MPEG-4 videos were uploaded to the server. The objectives of our research include:

- Study of subjective video quality measurement requirements
- Study of PHP and its application on quality assessment
- Develop a Quality Assessment Tool in PHP, HTML and JavaScript.
- Generating and uploading test videos with different parameters as frame rate, resolution, bit rate, etc.
- Use the test videos in conducting surveys in the developed Quality Assessment Tool.
- Gather results, conclusions and suggestions based on the survey.

3. Experimental Setup

In this paper; PHP, HTML5, MYSQL, CSS and JavaScript are used to play the video on the webpage and store the score provided by the subjects in the database.

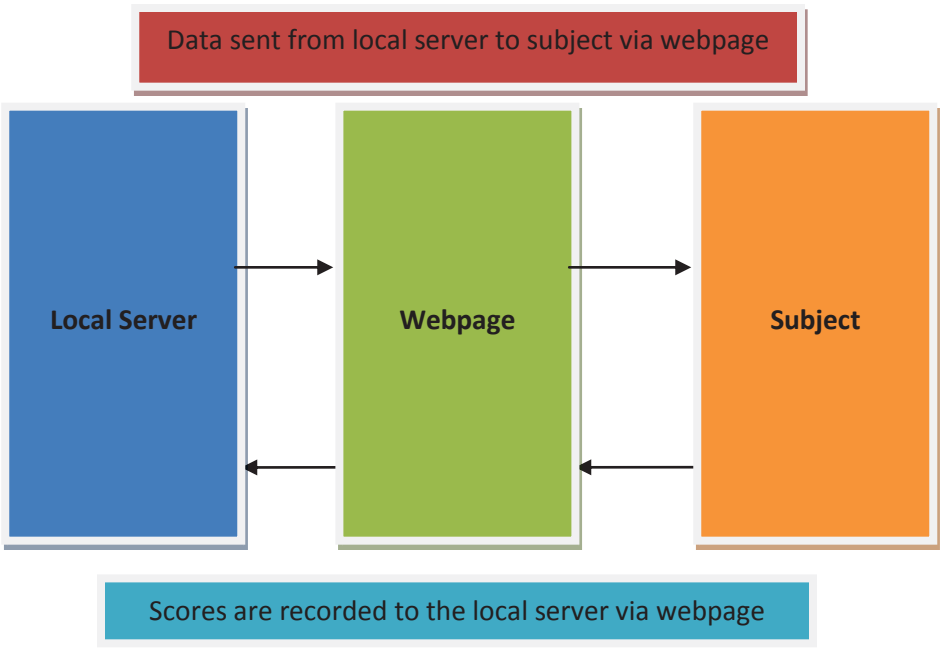


Fig. 1 the process of recording the opinion of a subject in the database

4. Theory

This section shows, video quality factors in video services and the typical subjective quality assessment techniques used for digital video content.

4.1. Factors affecting the video quality

There are wide varieties of factors that affect the quality of video communication services. These ranges of quality factors associated with the source video, to quality factors associated with the user terminal on which the video content is viewed.
Quality factors relating to the source video include the shooting conditions (focus, brightness, contrast, etc.) and camera performance. Next, this source video is coded, and the quality of the coded video varies depending on the choice of codec (MPEG2, MPEG4, H.264, etc.), the coding parameters and so on. Specific examples of coding parameters include the coded bit rate, the

spatial resolution (VGA, QVGA, CIF, QCIF, etc.), and the temporal resolution (frame rate). When the coded video data is transmitted over an IP network, the transmission delay of IP packets can fluctuate depending on how congested the network is, and some IP packets may loss, resulting in further degradation of video quality. Finally, the video quality is affected by factors such as the ability of the user's terminal to decode and display the coded video data.

4.2. International standardization of subjective assessment methods

Subjective quality assessment methods are the most fundamental way of assessing the quality of experience (QoE) of video communication services. Subjective quality assessment involves visual, psychological tests where human evaluators are subjected to a video stimulus and assess its quality based on their own subjective judgment. Specialist knowledge and evaluation equipment are needed to plan and implement the tests, including the selection of a video presentation method and a suitable way of measuring the assessments, and adjusting the viewing conditions.s

The International Telecommunication Union (ITU) is an international standards organization that has published recommendations relating to the subjective assessment of video quality to regulate the viewing environments and viewing criteria with the aim of obtaining repeatable quality assessment results. The principal ITU-T/R recommendations relating to video quality assessment methods are listed in Table Below. The BT series of recommendations published by ITU-R (Radiocomunication Sector) relate to subjective quality assessment methods for TV pictures, and the J/P series of recommendations by ITU-T (Telecommunication Standardization Sector) are also applicable to telecommunication applications (cable TV and multimedia).

Recommendation No.	Title
BT.500	Methodology for the subjective assessment of the quality of television pictures
P.910	Subjective video quality assessment methods for multimedia applications
J.140	Subjective picture quality assessment of digital cable television systems
BT.710 HDTV	Subjective assessment methods for image quality in high-definition television
BT.1129 SDTV	Subjective assessment of standard definition digital television (SDTV) systems
BT.802/BT.1210	Test materials to be used in subjective assessment

Table. Principal ITU-T/R recommendations relating to subjective video quality assessment methods

In our paper while performing subjective video quality assessment, we chose P.910 because of its effectiveness, which is in turn is because of its simplicity.

4.3. Subjective assessment test conditions

To obtain repeatable quality assessment results, it is necessary to regulate the test conditions such as the assessment video. Here, we describe the assessment video and test subjects. The assessment method is discussed in the following section.

4.3.1. Assessment video

The quality of coded video varies with the pattern (detail) of the video content and the amount of movement in the picture. It is therefore important to use the same assessment video to enable a fair comparative assessment of, for example, the quality achieved by various different coding schemes. For this purpose, a set of assessment video content has been prescribed as an international standard. This standard video content takes numerous video characteristics into consideration, including the picture detail, movement and camera work.

4.3.2. Test subjects

The quality experienced by subjects (subjective quality) can vary widely, even when they are watching the same video. To reduce the variability of the assessment results, a single video sample must be scored by a large number of subjects. ITU-R recommendation BT.500 stipulates that the subjects should consist of at least 15 non-experts (people who are not routinely involved in work relating to the quality of TV pictures and have not had much experience of assessment tests.

4.4. Typical subjective assessment methods

The typical methods used for subjective assessment of digital video quality are described here.

1. ACR method (Absolute Category Rating)
2. ACR-HR (Absolute category rating with hidden reference)
3. DCR (Degradation Category Rating)
4. PC (Pair Comparison)
5. DSCQS (Double Stimulus Continuous Quality Scale)
6. SSCQE (Single Stimulus Continuous Quality Evaluation)
7. SAMVIQ (Subjective Assessment Methodology for Video Quality)

Note: We use the ACR method in our thesis for the subjective video assessment.

4.4.1. ACR method (Absolute Category Rating)

The ACR method set forth in ITU-T recommendation P.910 (also known as the single stimulus method) is one of the most widely used methods for assessing the quality of telecommunication services. As shown in Fig. Below, in the ACR method the subjects watch the assessment video for about 10 seconds, and during the subsequent interval of up to 10 seconds they assess the video on the five-grade quality scale shown in Table Below. In the assessment results, the number of votes by the subjects in each category is weighted by the assessment scores and expressed as a mean opinion score (MOS). Since there is known to be a sequence effect whereby the video quality assessment scores are affected by the quality of the video viewed previously (a video with slight quality degradation tends to achieve a higher evaluation score when it is viewed after a video with very poor quality compared with when it is viewed after a video of very high quality), it is also necessary to negate this effect by, for example, changing the presentation sequence of the assessment video randomly for each evaluator, or repeating the evaluation with the same videos in a different sequence.

Since there is no quality assessment standard in the ACR method, the assessment results are strongly affected by the scope of variation in the quality of the video being assessed in the test (the framework of the assessment test). Consequently, care must be taken when comparing the assessment results of different tests.

The ACR scale is evaluated based on numbers that are assigned to the individual items, where Excellent equals to 5 and Bad equals to 1. The average numeric score over all experiment participants, for each test condition that was shown, is called the Mean Opinion Score.

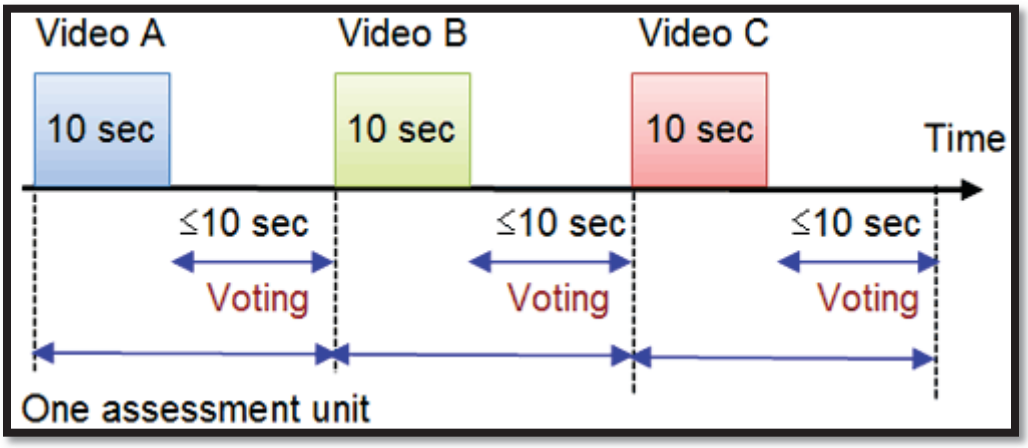


Fig 2. Stimulus presentation in the ACR method (Src: NTT Network Technologies)

Score	Assessment
5	Excellent
4	Good
3	Fair
2	Poor
1	Bad

Table 5-grade quality scale

4.5 Architecture Design of Subjective Video Quality Assessment Tool

The architecture design corresponds with all the elements embedded as a set to perform a required process (i.e. ACR). The entire software prototype is developed in PHP language. The software elements included in this tool comprises of database elements, process control elements, HTML 5 player integration files with relevant packages for the entire process of ACR setup.

5. Design of the database

The database is named as 'final' and it consists of four tables. It is designed according to the requirement.
The list of the designed database tables is as follows:

- Admin Table
- Members Table
- Video Table
- Ratings Table

The names of the tables are given corresponding to the data to be stored in them while the system is running. During the session**,** these tables are created, accessed and updated. Tables are created for data to be stored, e.g. username, age, gender must be saved in Members Table. The data can then be retrieved from the table and employed for further processing like adding survey results to particular user from the Rating Table. The tables can also be updated.

5.1. Admin table

Admin Table		
id	Integer (15)	PRIMARY KEY
username	varchar (255)	NOT NULL
password	varchar (255)	NOT NULL

- id is auto increment of primary key in integer type.
- username is pre specified username of the admin to be entered.
- password is the key to authenticate for admin to give complete privileges to use the tool.

5.2. Members Table

Members Table		
Id	integer (15)	PRIMARY KEY
Username	varchar (255)	NOT NULL
Password	varchar (255)	NOT NULL

FName	varchar (255)	NOT NULL
LName	varchar (255)	NOT NULL
Address	varchar (255)	NOT NULL
DOB	varchar (255)	NOT NULL
Gender	varchar (255)	NOT NULL

- id is auto increment of primary key in integer type.
- username is the name of the user to be entered.
- password is the key to authenticate for the user to give complete privileges to use the tool.
- FName and LName the first and last name of the user respectively.

5.3. Videos Table

Videos Table		
id	integer (15)	PRIMARY KEY
vidname	varchar (255)	NOT NULL
url	varchar (255)	NOT NULL
size	varchar (255)	NOT NULL

- id is auto increment of primary key in integer type.
- The name of the uploaded video will be saved in vidname column.
- url column consists the random number generated for the video file once it is uploaded.
- size column consists the size of the uploaded file.

5.4. Ratings Table

Rating Table		
id	integer (15)	PRIMARY KEY
rating	varchar (255)	NOT NULL
vidname	varchar (255)	NOT NULL
vidurl	varchar (255)	NOT NULL
username	varchar (255)	NOT NULL

- id is auto increment of primary key in integer type.
- The ratings given by the users will be saved in rating column.
- The name of the video that is being tested will be saved in vidname column.
- vidurl is the random number of the video file which the user is playing.

6. Modes of the Tools

There are two interface modes in this tool - Admin and User.

6.1. Admin Mode

For admin to log in, click on the log in link, which consists of login form for the user, the link to register for the new user and the link, log in for the admin.
To log in as the admin, click on the admin log in link after clicking there the new window will open with the username and password form for the admin. When the admin logs in successfully, the new page adds videos will appear. This page consists of the link to upload new videos and the uploaded videos will appear just below the list of uploaded files.
Admin also has the access to watch the ratings given by the user for each video. After everything is done admin should click the log out link to end the session. The pages to which an admin has access to are:

- Home
- Admin login
- Add video(s)
- View Data
- Log out

6.2. User Mode

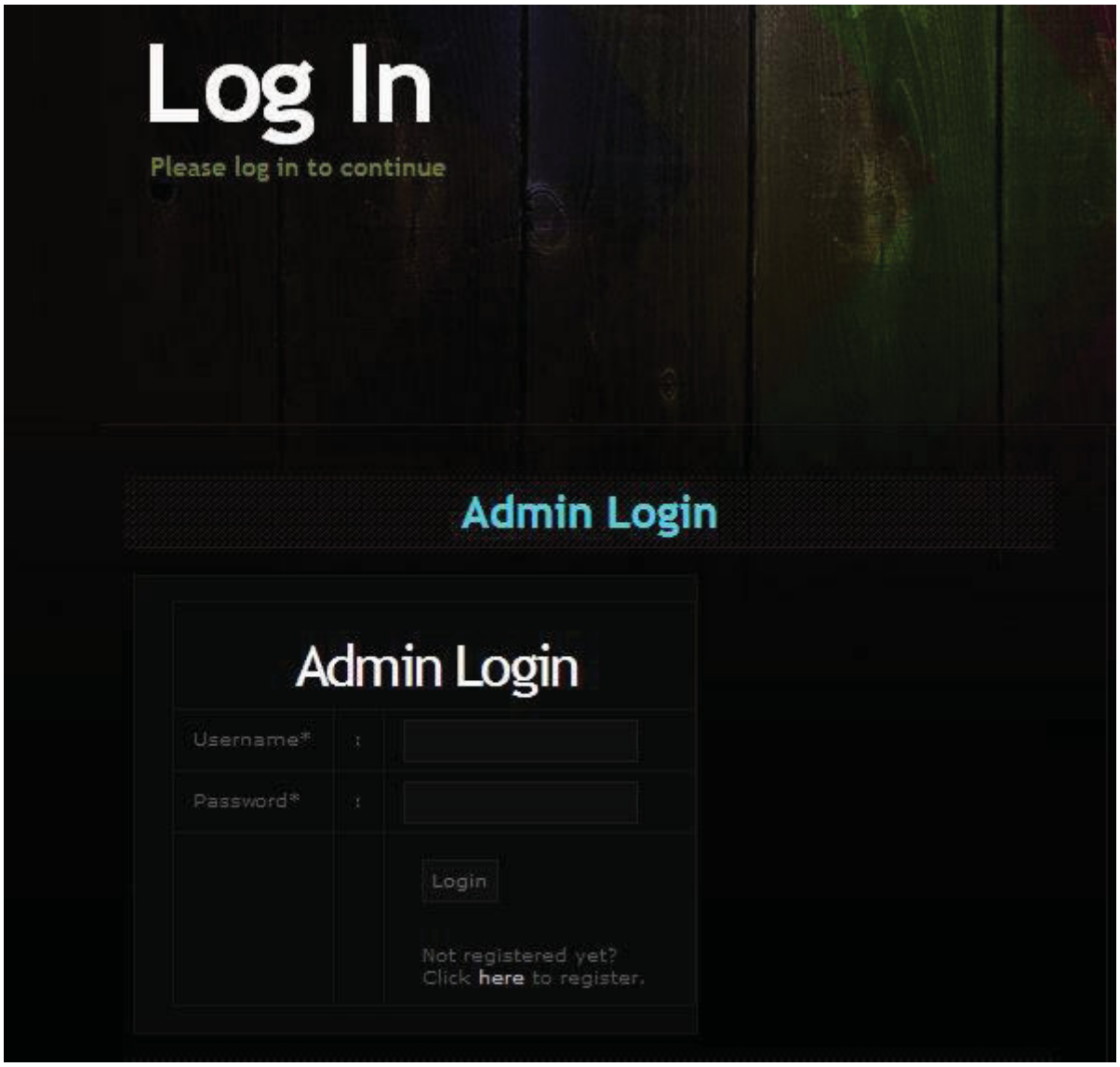
To start the survey, click on the log in link if you are the member, but if you are not click on the register link. The register page consists the form which the user should fill after filling it click on register. If everything goes well, 'user registration successful' message will appear. After that the user should go to the log in link, click it and fill the form. When you log in successfully the members' page appear which consists of 5 point table look at the table and understand the rating point.
To view the list of the videos click on the video link and to start watching them click on the view video link. After that the video starts playing, when the video finishes give the rating to it for its quality between 1 to 5. When the user gives the rating for the first video after a few seconds interval the new video from the list starts playing, do the same with this video also till 'thank you' message appears which means the previous video which was played was the last one. After this click on the log out link, this will end the session for the user. The pages a user access are:

- Home
- Log in
- Register
- Members' area
- Video(s)
- Video Playback
- Log out

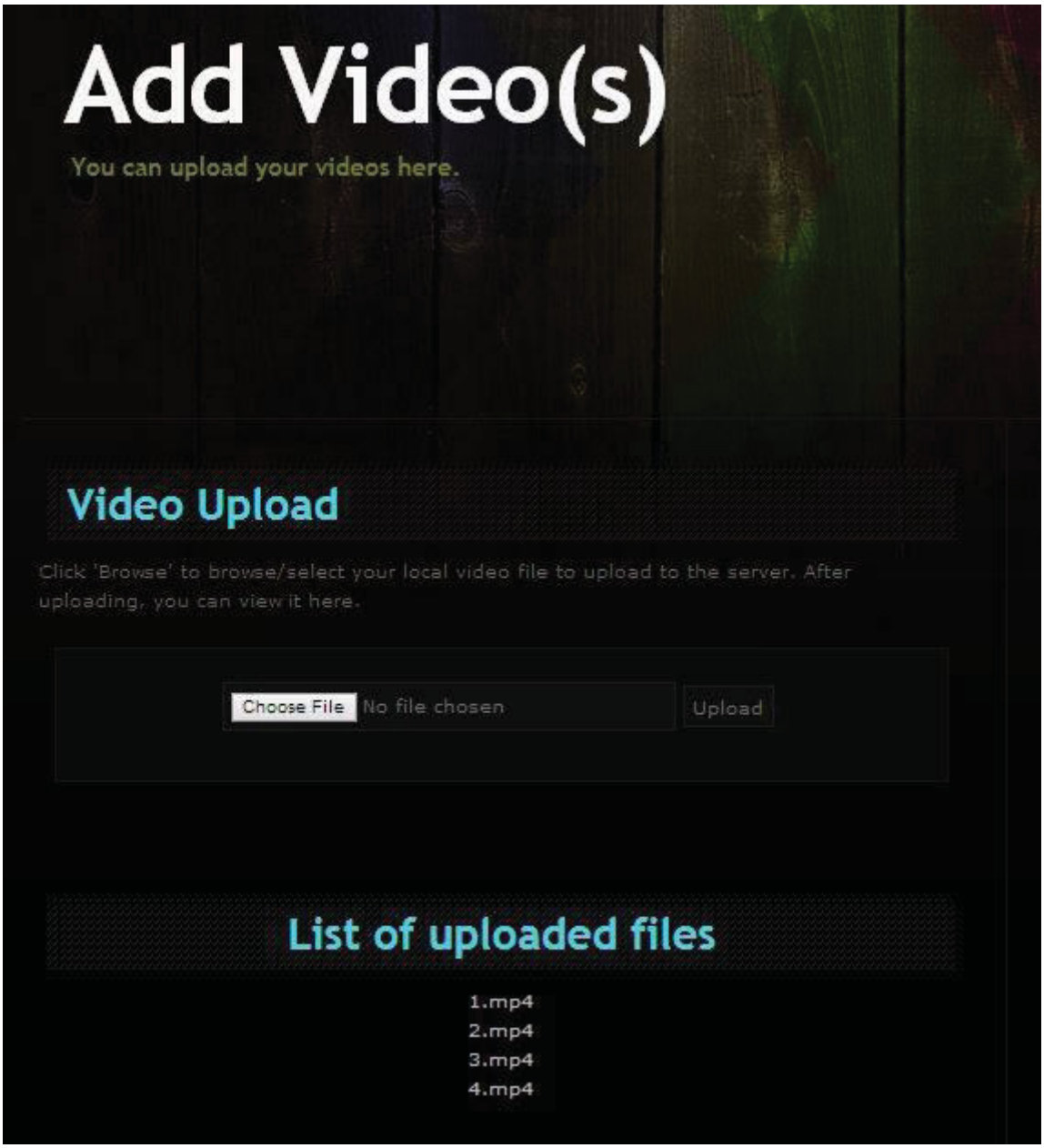
7. GUI Implementation

7.1. Home page

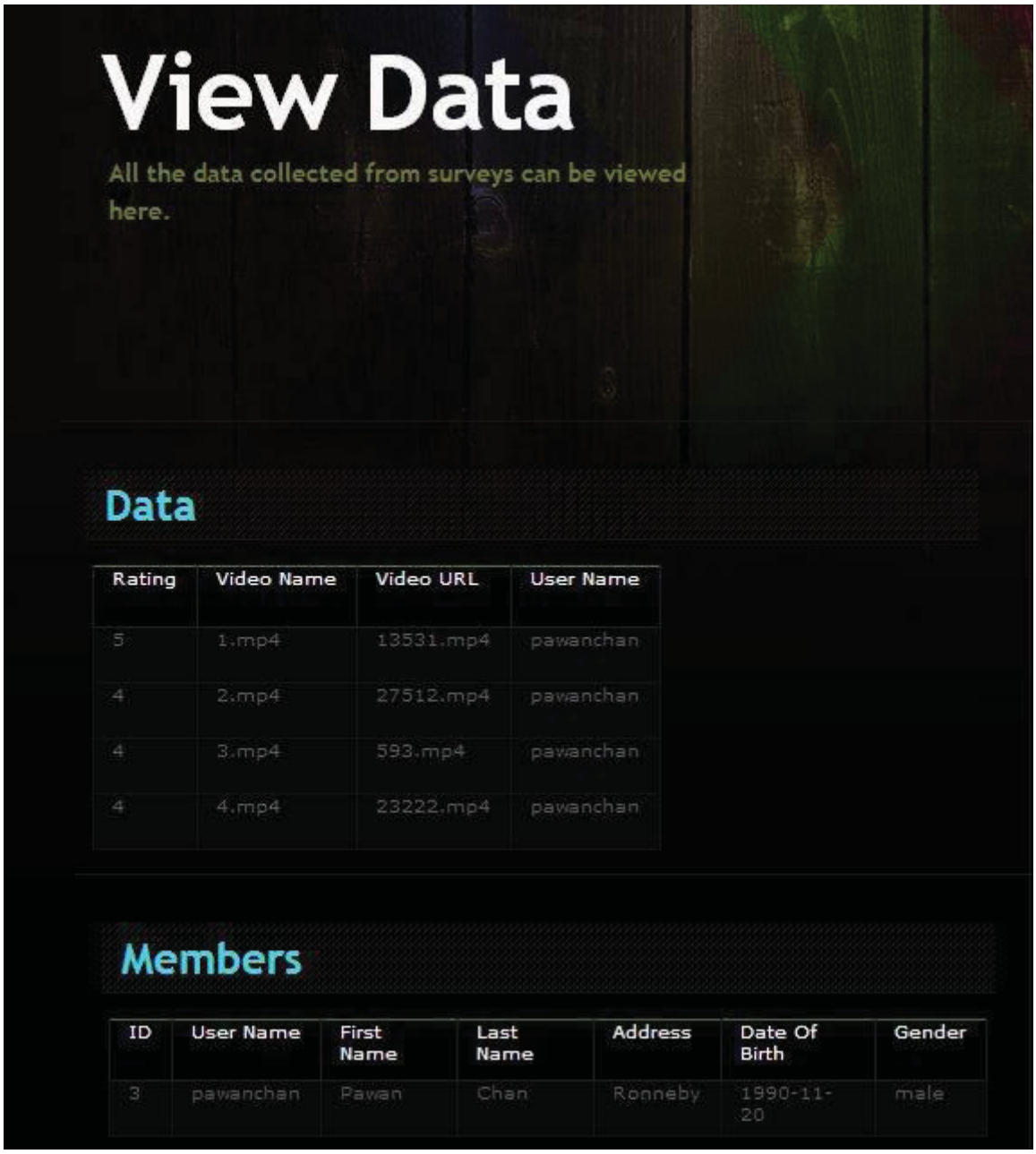
7.2. Admin Login Page



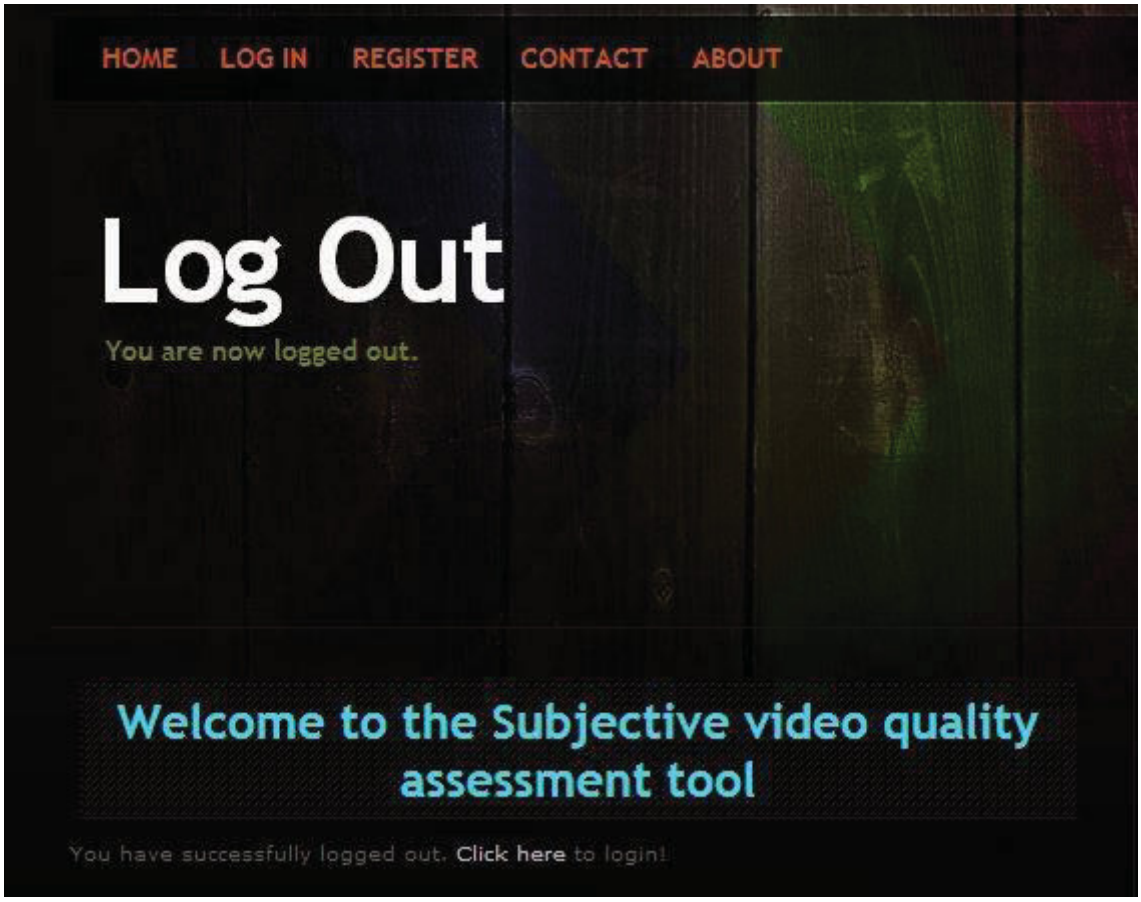
7.2. Video uploads page



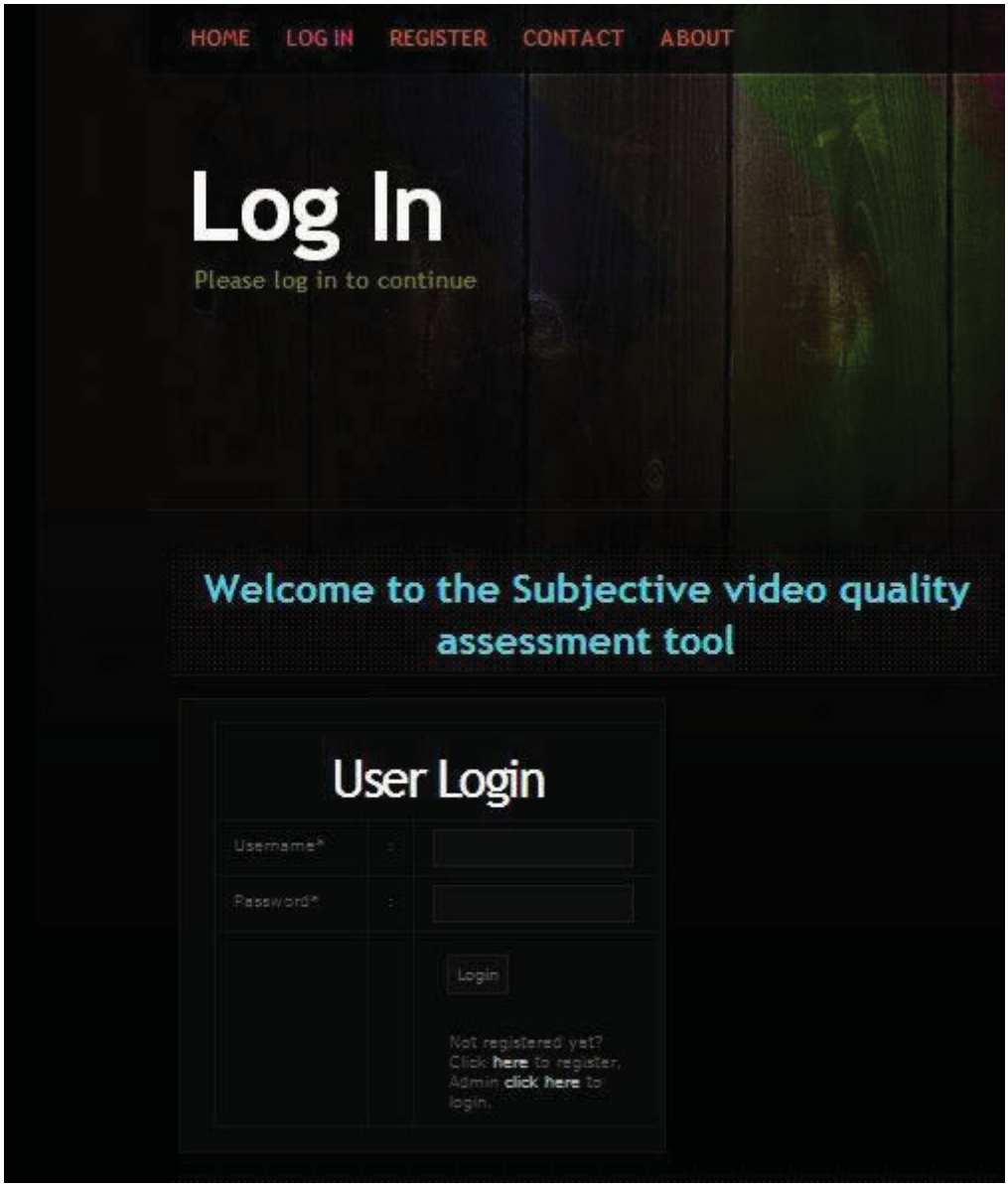
7.3. Data viewing page



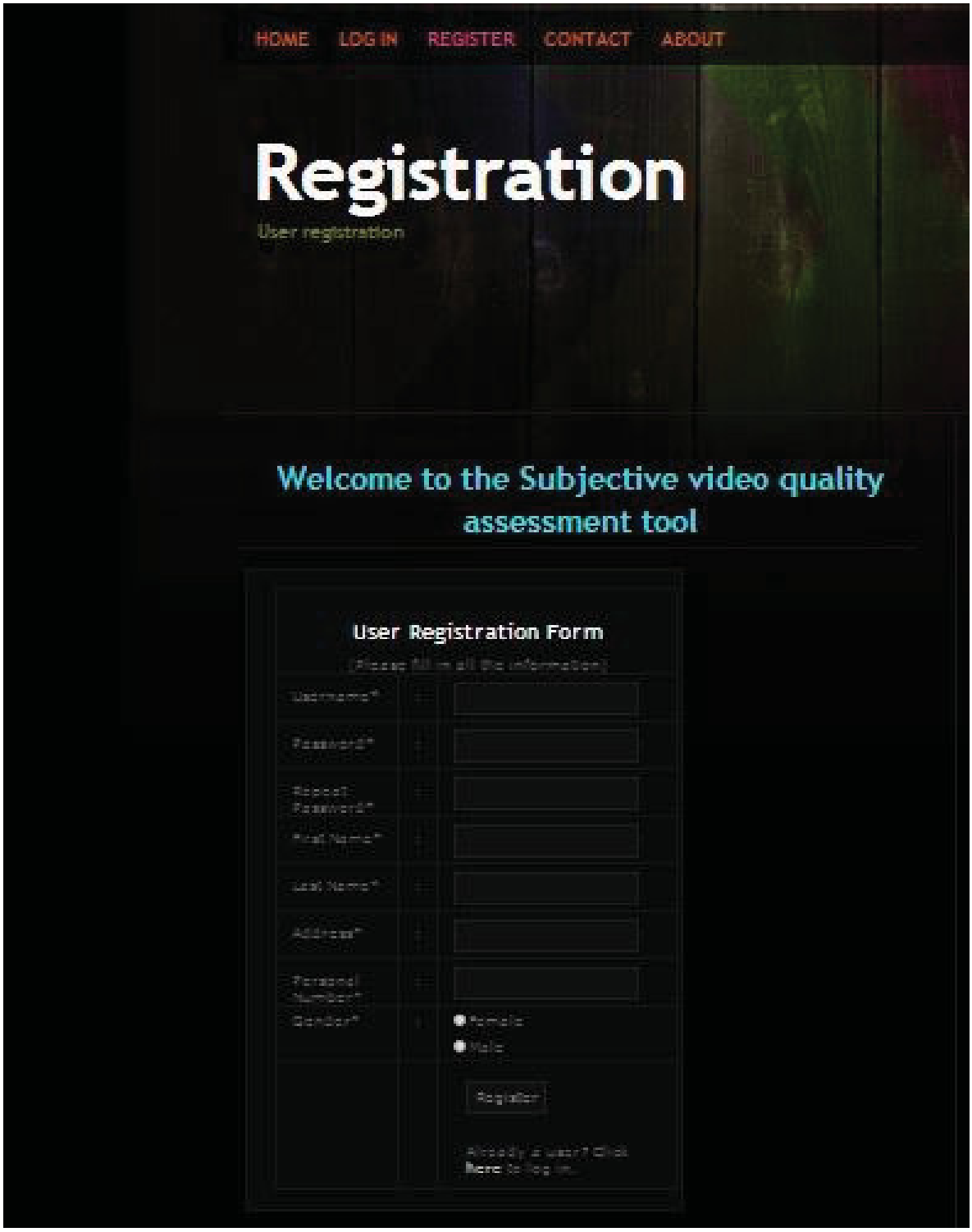
7.4. Log out page



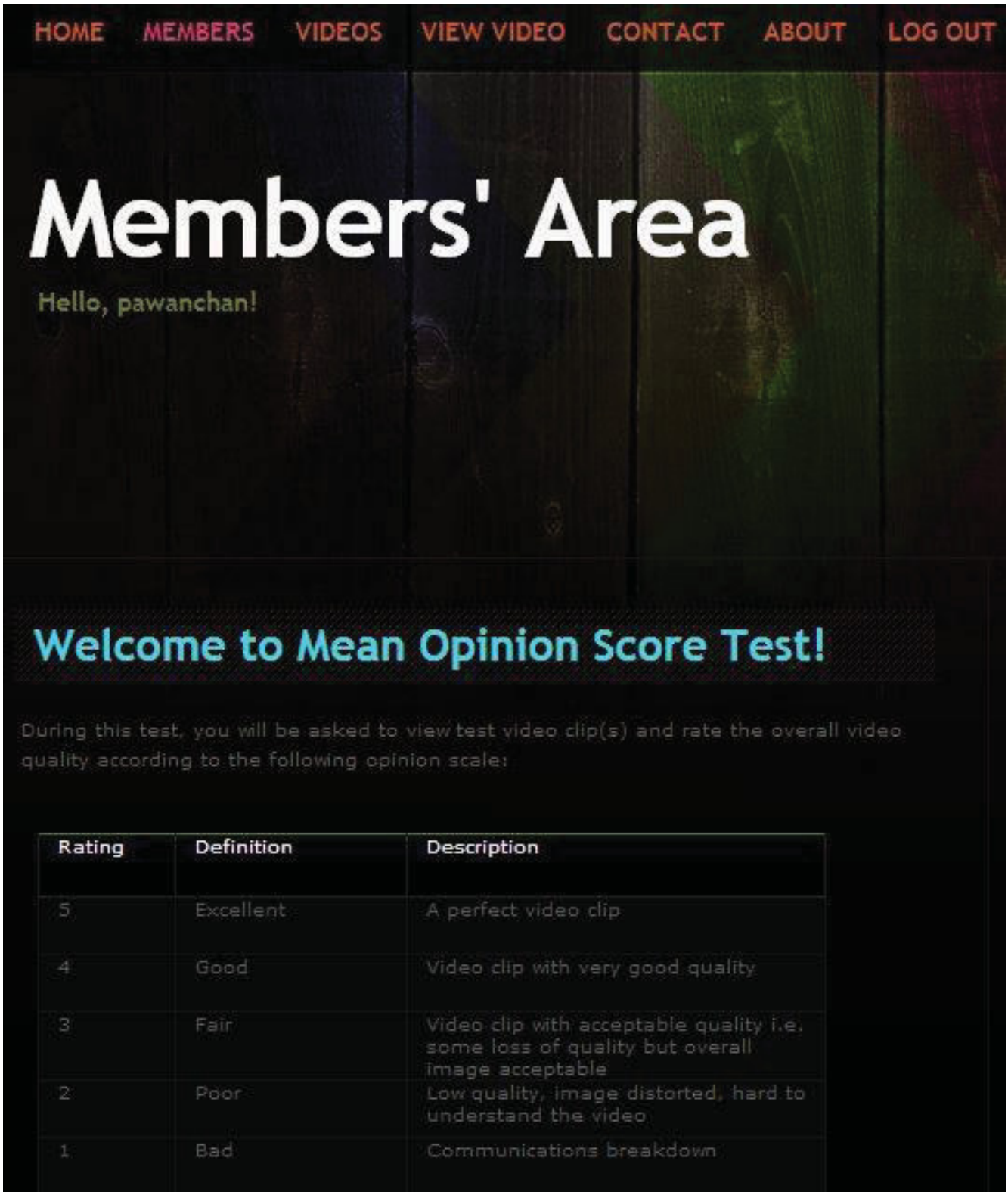
7.5. User login page



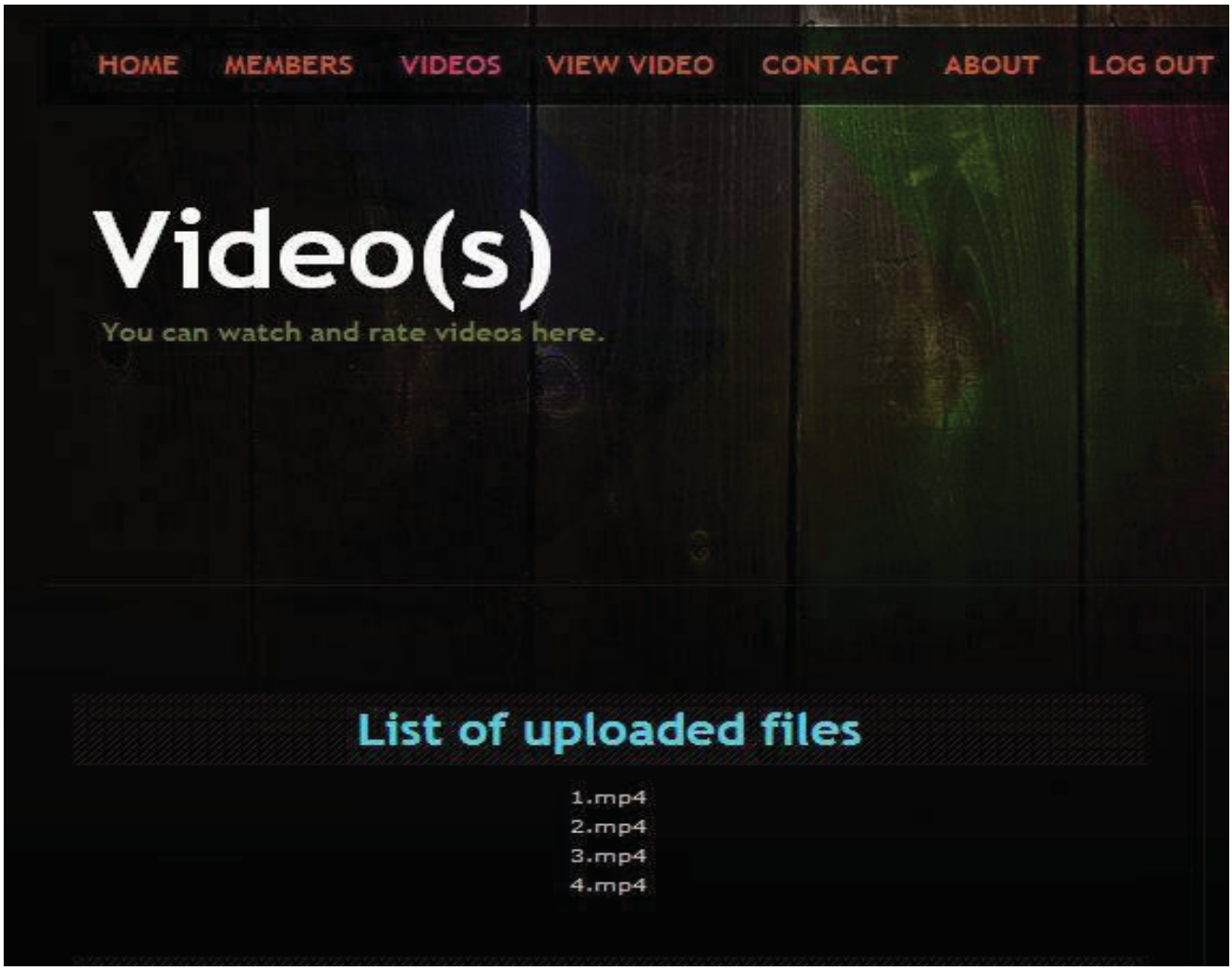
7.6. User registration page



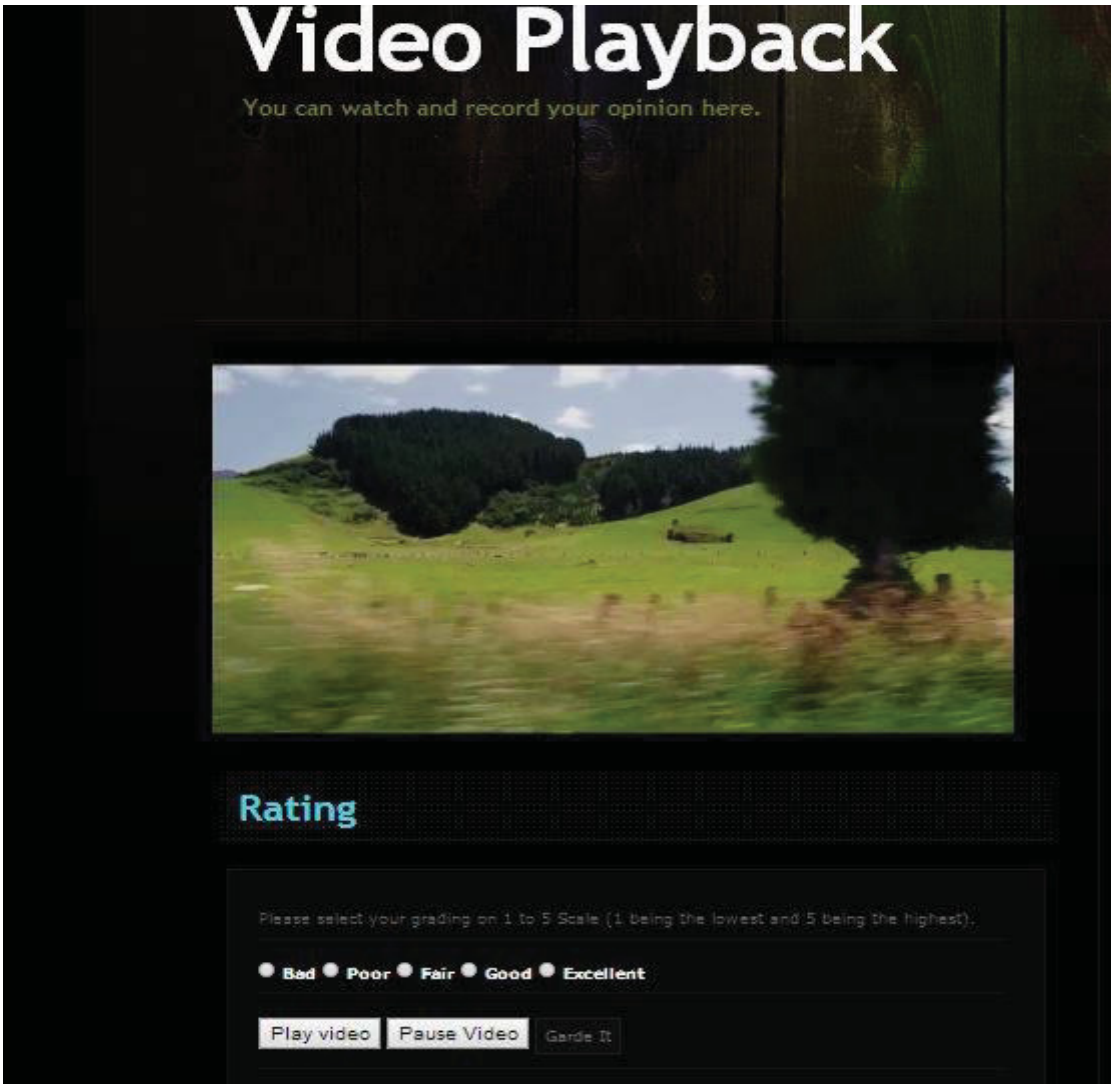
7.7. Members' page



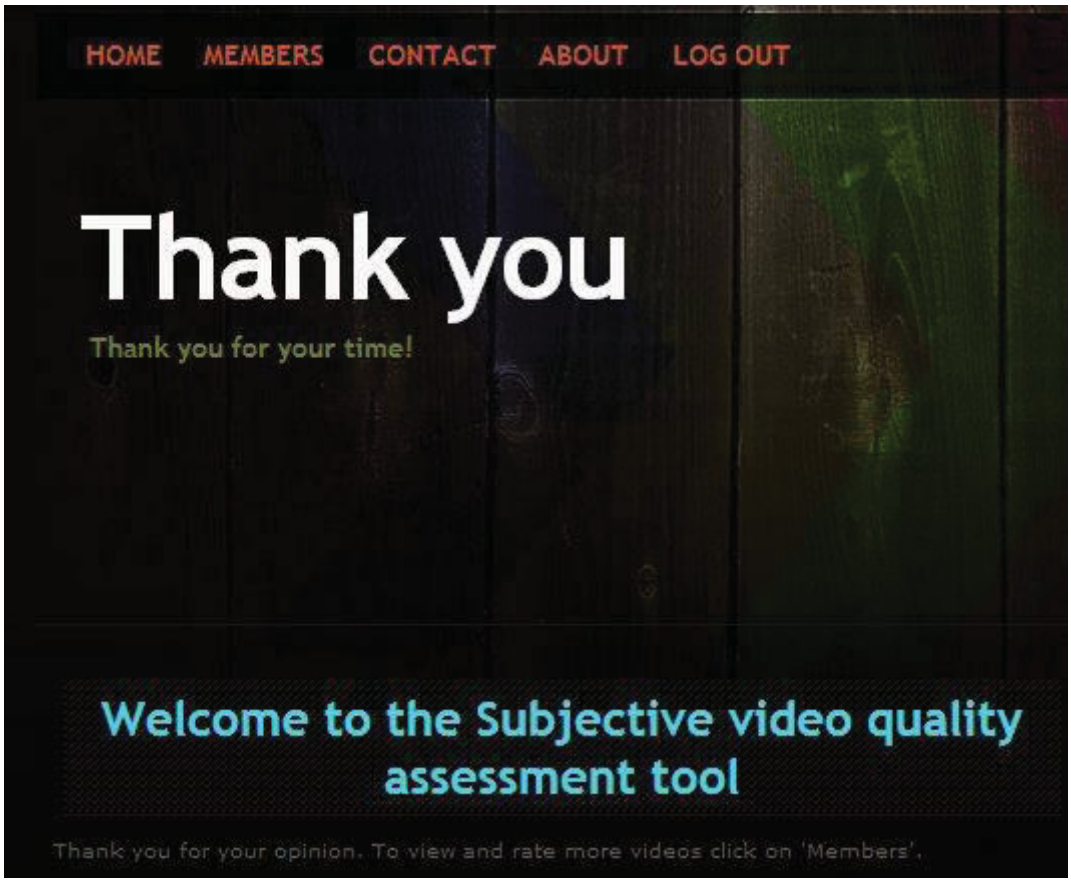
7.8. Videos list page



7.9. Video playback and rating page

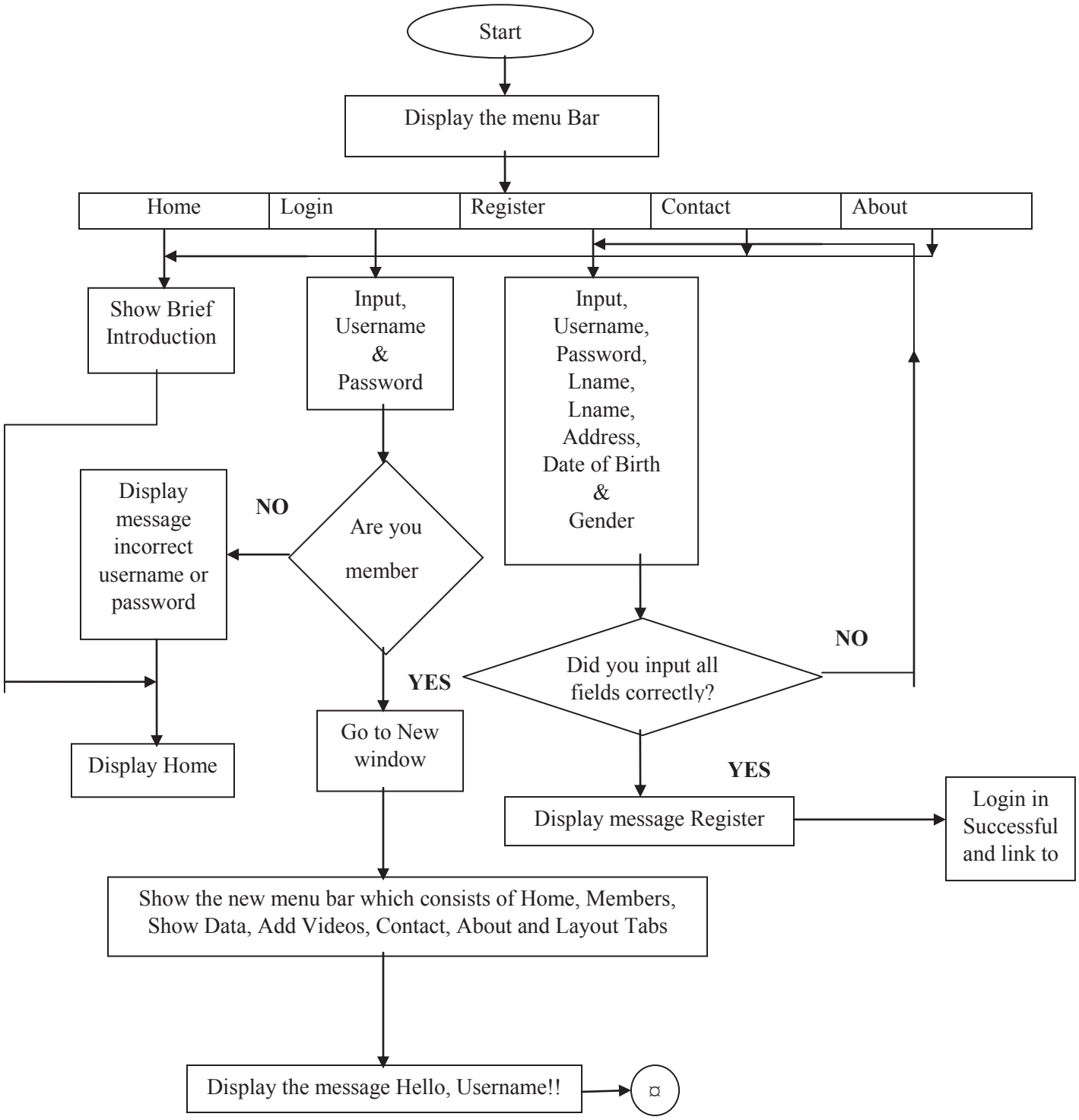


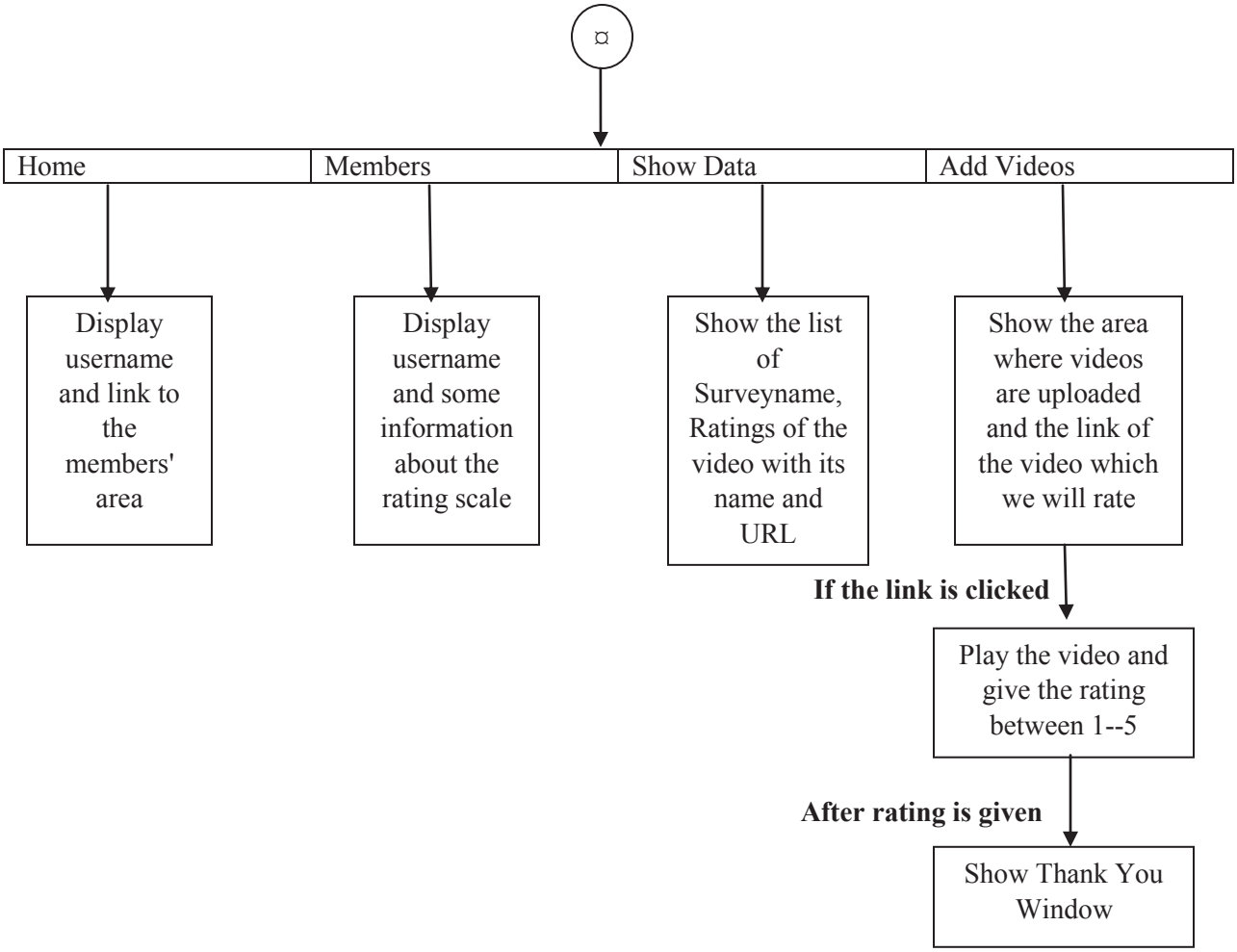
7.10. Thank you page



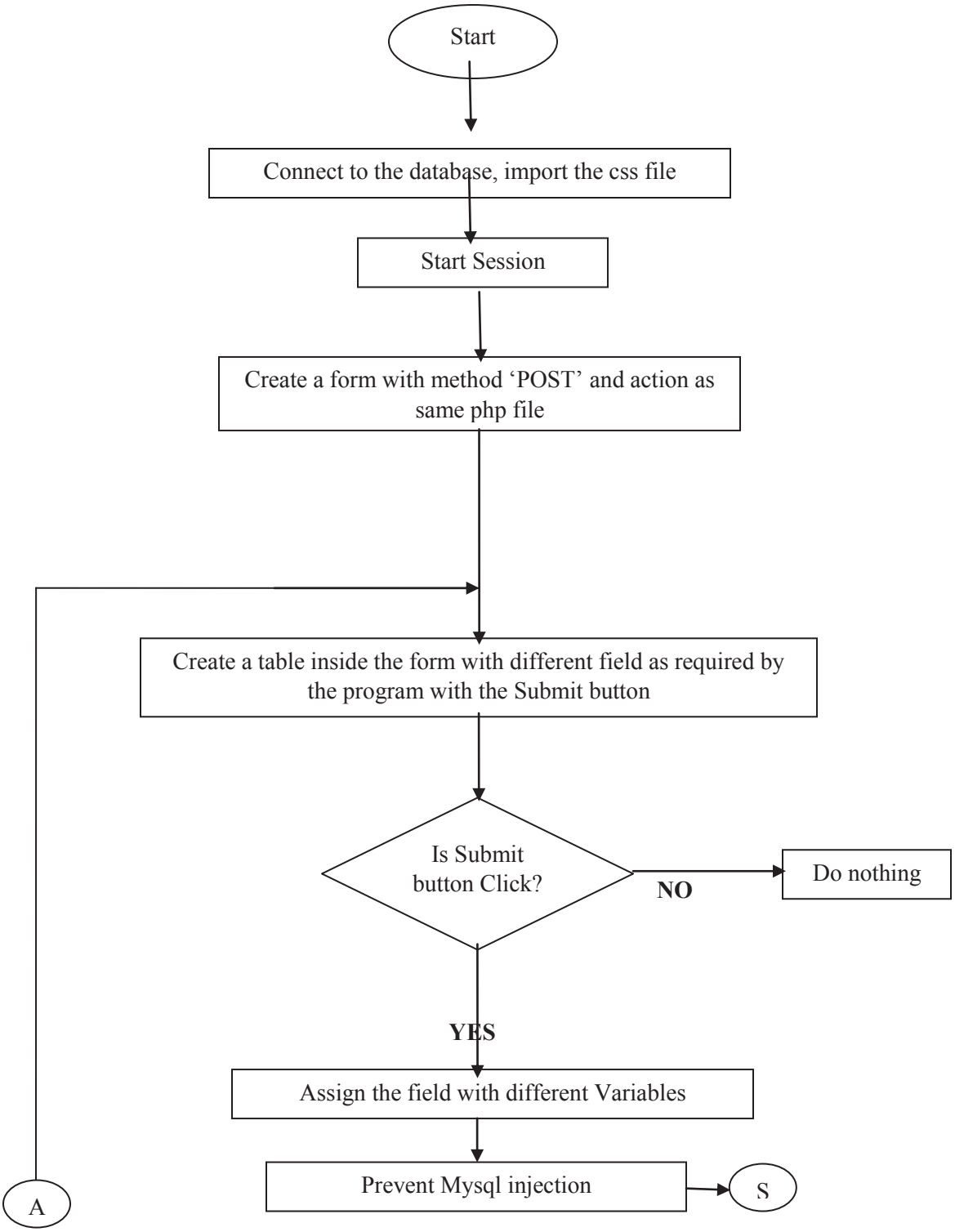
8. Flow Chart

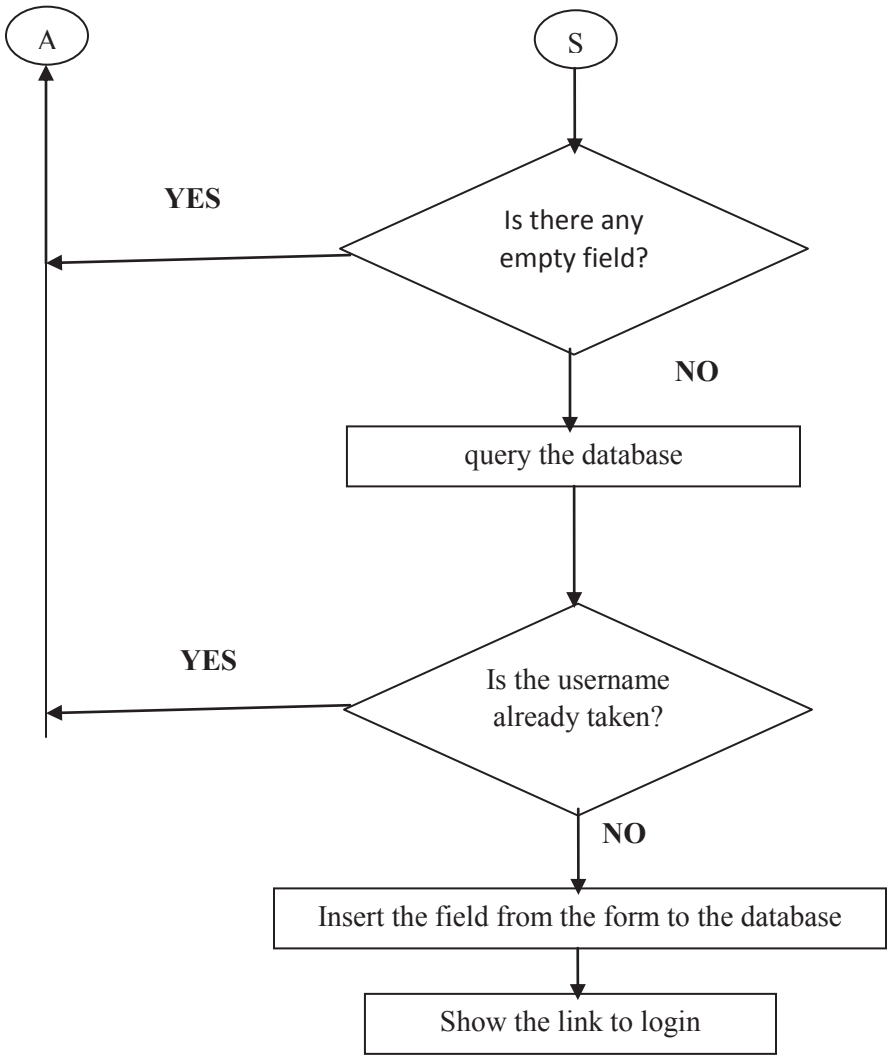
8.1. Home Page



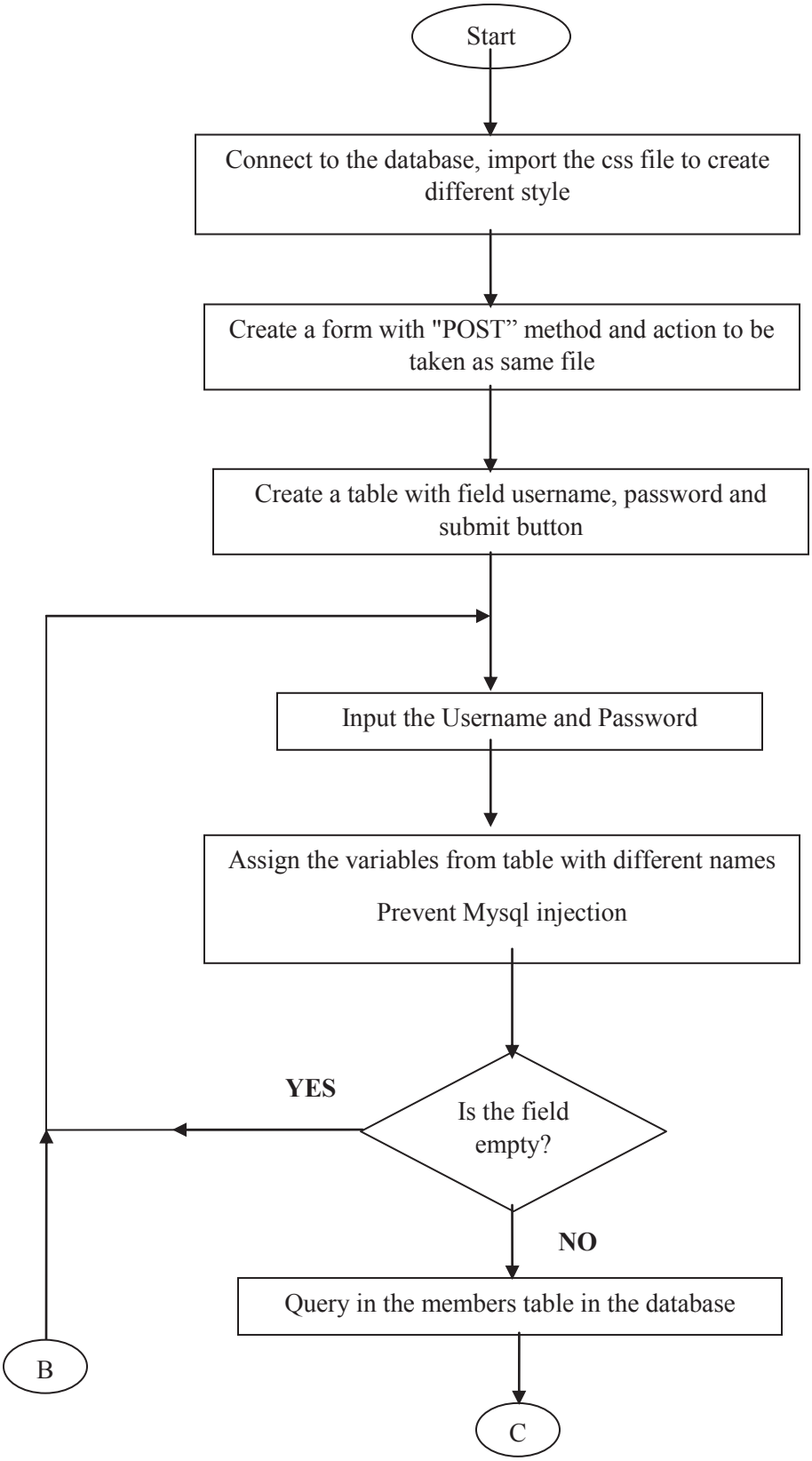

¤
Home
Members
Show Data
Add Videos
Display username and link to the members' area
Display username and some information about the rating scale
Show the list of Surveyname, Ratings of the video with its name and URL
Show the area where videos are uploaded and the link of the video which we will rate
If the link is clicked
Play the video and give the rating between 1--5
After rating is given
Show Thank You Window

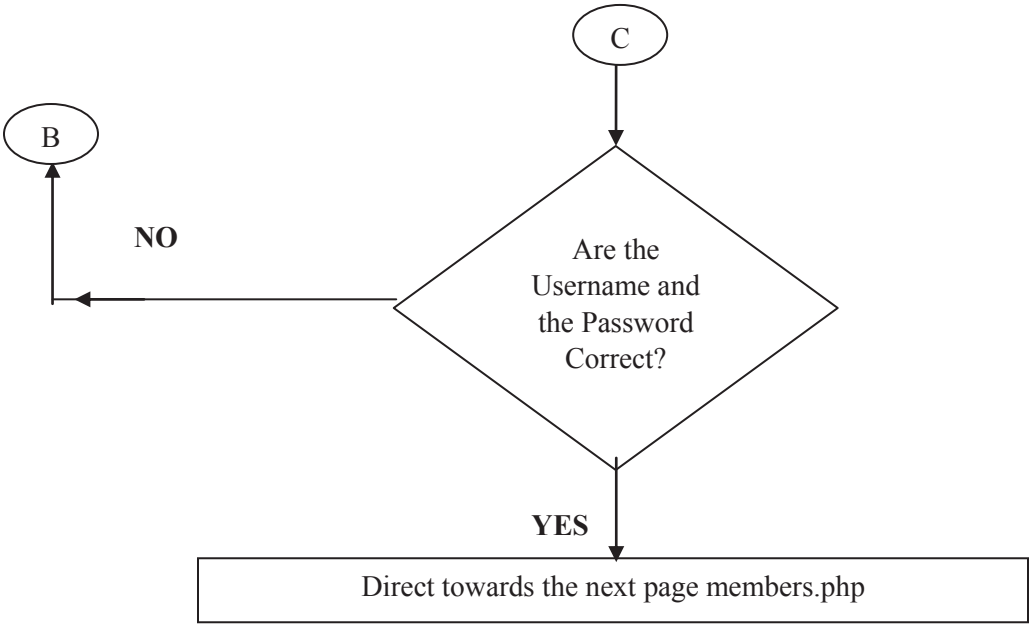
8.2. User Registration



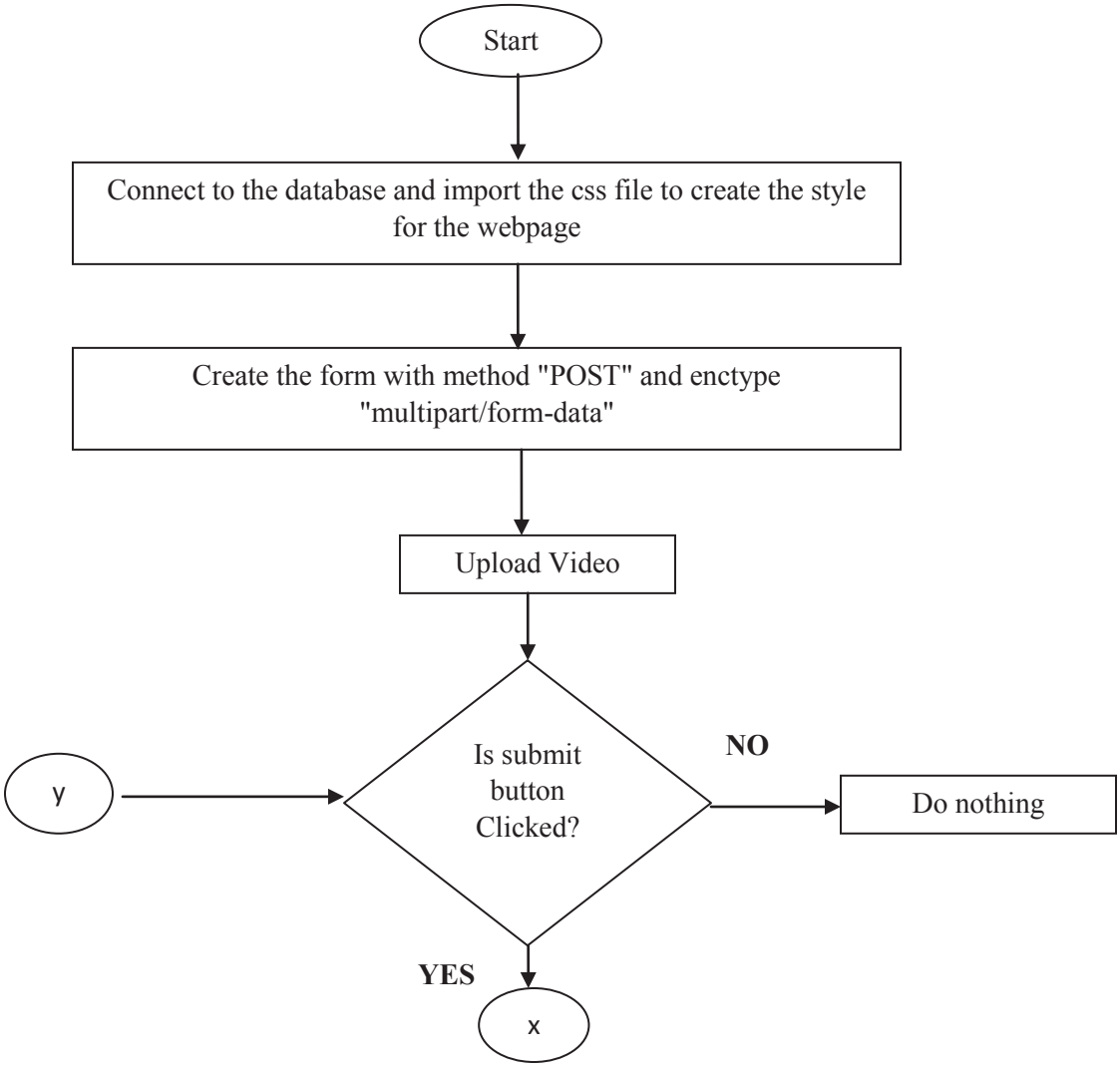

A
S
YES
Is there any empty field?
NO
query the database
YES
Is the username already taken?
NO
Insert the field from the form to the database
Show the link to login

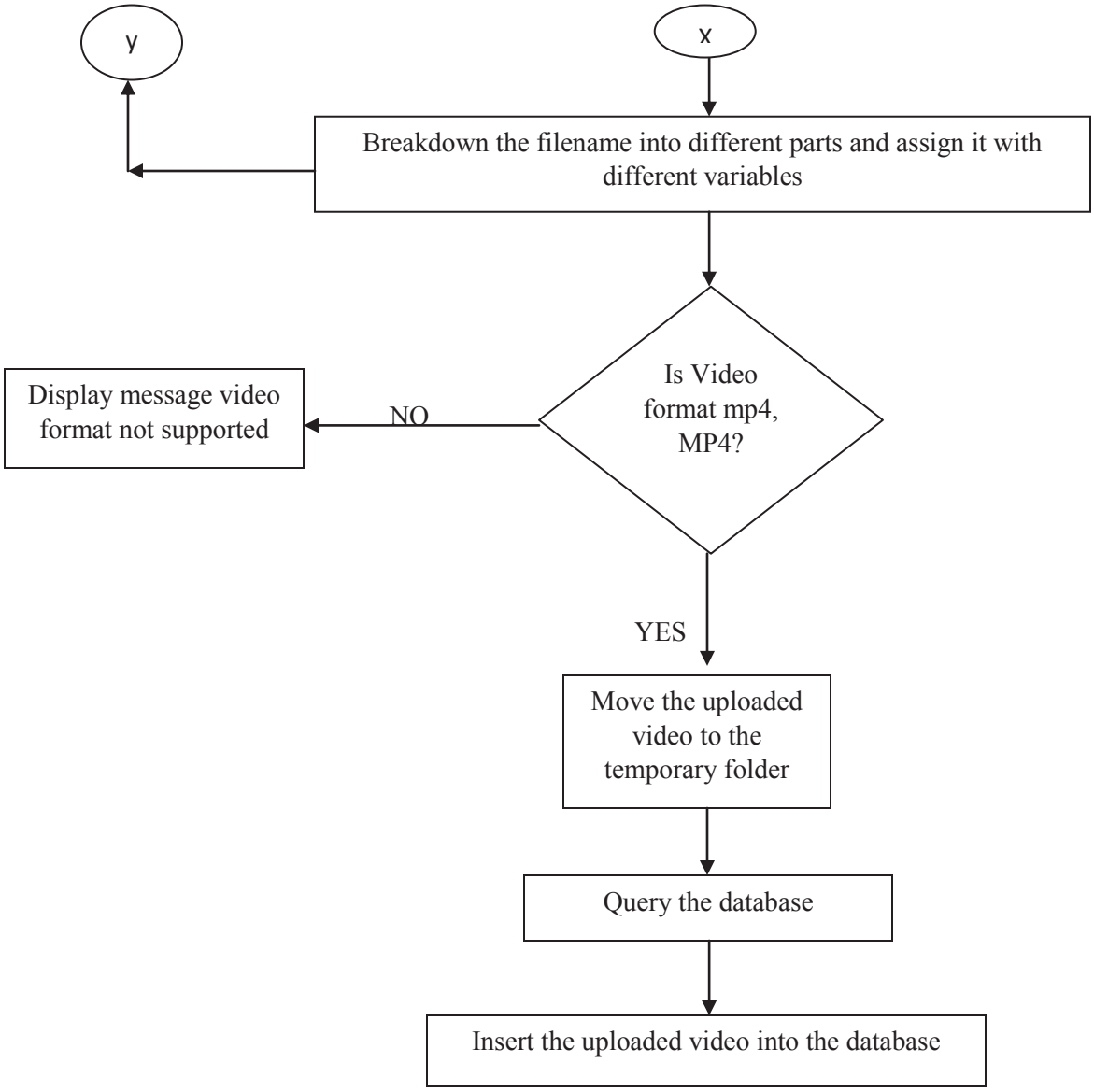
8.3. Login Page



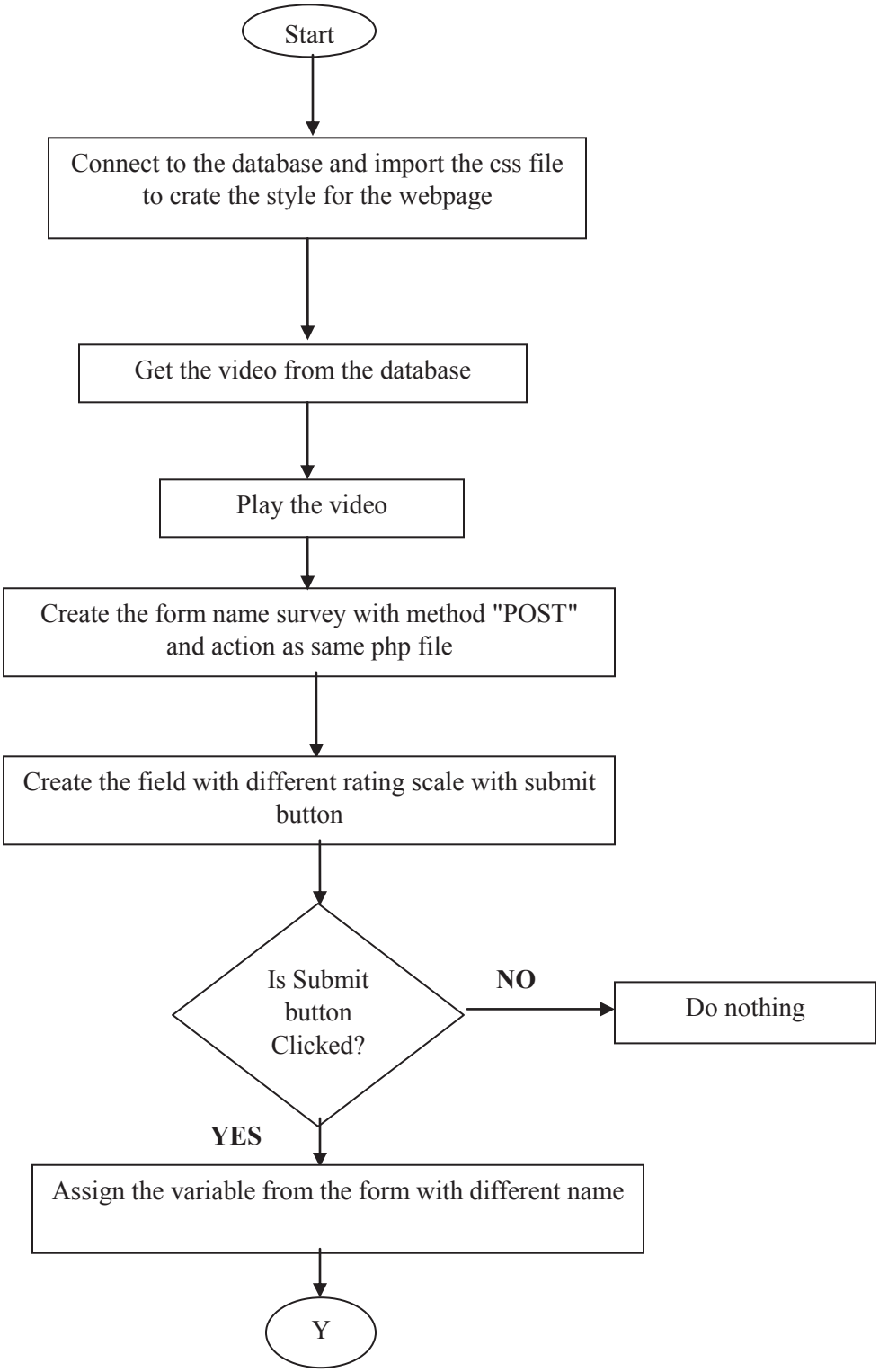


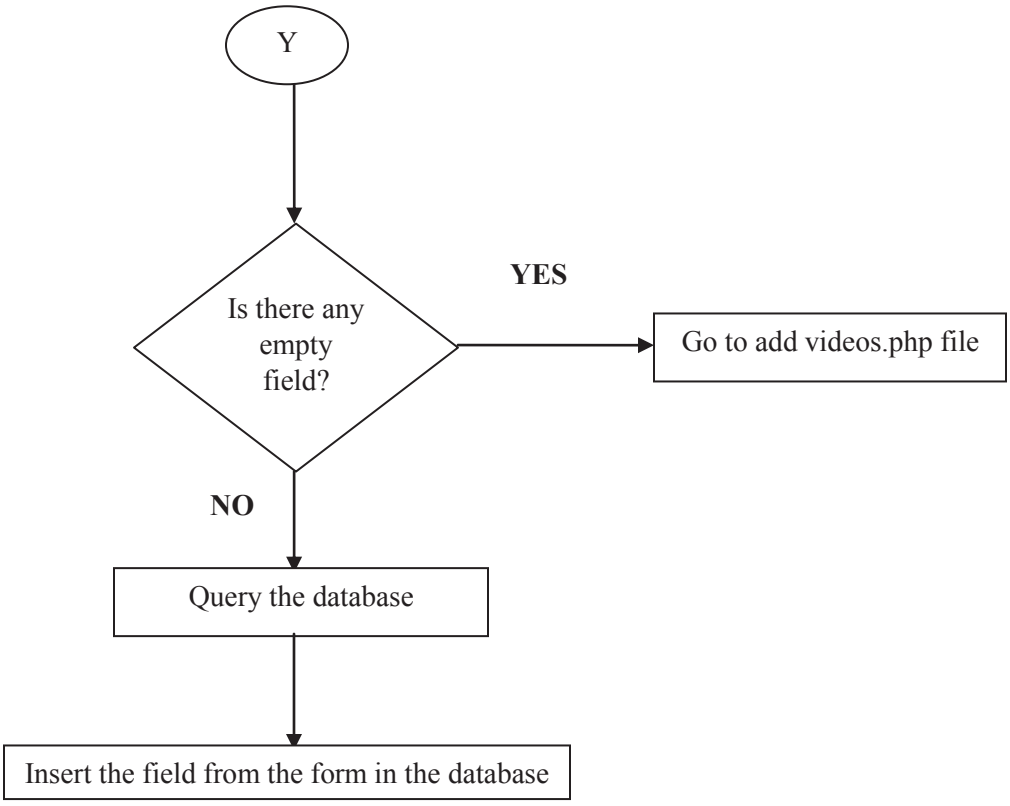
8.4. Video Uploading Page



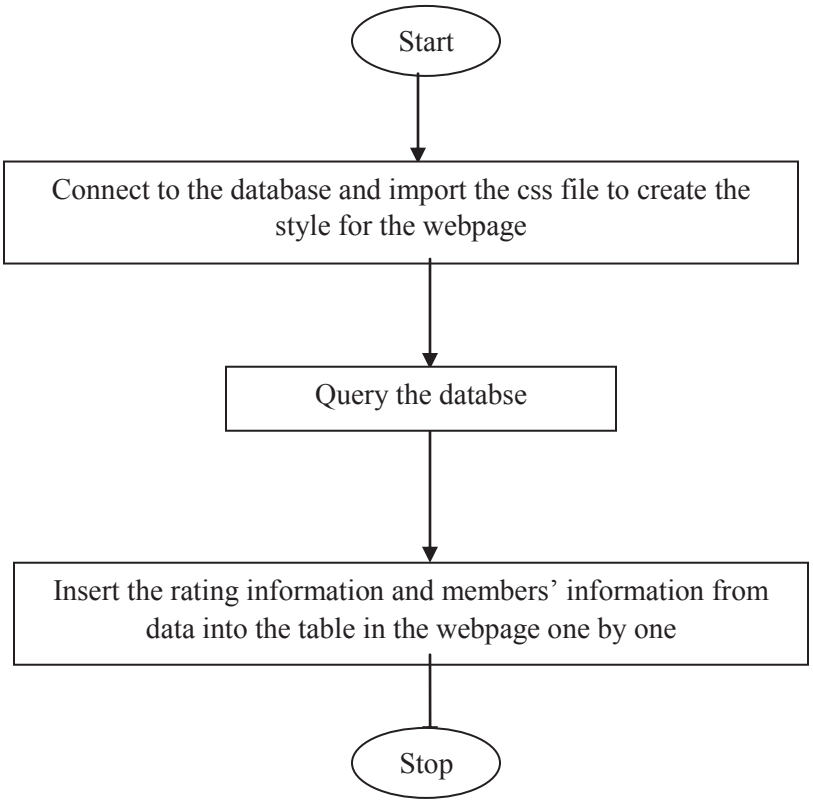

y
x
Breakdown the filename into different parts and assign it with different variables
Is Video format mp4, MP4?
NO
Display message video format not supported
YES
Move the uploaded video to the temporary folder
Query the database
Insert the uploaded video into the database

8.5. Viewing and Rating the Video




Y
Is there any empty field?
YES
Go to add videos.php file
NO
Query the database
Insert the field from the form in the database

8.6. Viewing the data and the list of users



\

9. Test outputs

After conducting the subjective test using Quality Assessment Tool (QAT) in the standard environment, the survey data can be stored in a local or remote server. The tool is designed in a way that after the user grades a video sequence, the ratings of the videos per each subjective test will be updated in the server database when the current session is finished. The data then can be exported in various formats according to the need and requirements like CSV, excel sheet, etc. These files give complete track of the conducted survey. The data can then be processed according to needs and requirements like applying confidence intervals, calculating standard deviation, calculating the average mean opinion score, etc.

10. Conclusion

In our research work, we have designed the tool that can be used to conduct a mass-scale level survey or subjective tests. ACR is the only method used to carry out the subjective video assessment.
The test is very useful in the context of a video streaming quality. The survey can be used in various countries and sectors with low internet speeds to determine the kind of video or the compression technique, bit rate, or format that gives the best quality.

11. References

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- http://www.ntt.co.jp
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- "Digital Video Quality: Vision Models and Metrics" by Stefan Winkler (2005)
- "Subjective video quality assessment methods for multimedia applications" Recommendation ITU-T P.910 (2008)
- "Methodology for the subjective assessment of the quality of television pictures" Recommendation ITU-R BT.500-13 (2012)

12. Appendix of Codes (Page-wise)

12.1. Index.php

```
<?php
session_start();  //Must Start a session.
require "config.php"; //Connection Script, must be included in every file! ?>
<html> <!--<![endif]-->
<head>
   <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1"/>
   <meta charset="utf-8"/>
   <meta name="description" content="">
   <meta name="author" content="">
   <title>Home - PPP</title>
   <link rel="stylesheet" type="text/css" media="screen" href="css/screen.css" />
   <!--[if lt IE 9]>
         <script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script>
   <![endif]-->
</head>
<body>
<!-- wrap starts here -->
<div id="wrap">
       <!--header -->
       <div id="header">
              <h1 id="logo-text"><a href="index.php" title="">Home</a></h1>
 <p id="intro">
<?php
if(isset($_SESSION['username'])){
  echo "Hello, ".$_SESSION['username']."! You are logged in. Click <a
href='members.php'>here </a>to go to the Member's page.";
}
else {          echo "Please login or register." ;
       }
              ?>
            </p>
              <div  id="nav">
                     <ul>
                            <li id="current"><a href="index.php">Home</a></li>
          <li><a href="login.php">Log In</a></li>
                            <li><a href="register.php">Register</a></li>
           <li><a href="contact.php">Contact</a></li>
           <li><a href="about.php">About</a></li>
          </ul>
              </div>
       <!--header ends-->
```

```
</div>
<!-- content-wrap starts -->
<div id="content-wrap">
        <div id="main">
                <a name="TemplateInfo"></a>
                <h2>Introduction</h2>
                <p class="post-info">Posted by <a
href="http://facebook.com/prawesh2000">prabesh</a>
 <p><strong>Subjective Assessment </strong>is the most decisive way of
evaluating the quality of a video, for humans are the eventual beneficiary in most
applications. Subjective video quality is related with how video is observed by a viewer
and nominates his or her opinion on a particular video sequence. The fundamental
concept of measuring Subjective video quality is same as the Mean Opinion Score
(MOS) for audio. And this task is done in a group by
   by <a href="https://www.facebook.com/prawesh2000">Prabesh Dhakal</a>, <a
href="https://www.facebook.com/thakuri.pawan">Pawan Chan</a> and <a
href="https://www.facebook.com/prabhat.tiwari1">Prabhat Tiwari</a>.
   </p>
   <p>
   You can go through our work on this website and for more information, please,
contact one of us. This website design has been inspired by <a
href="http://www.styleshout.com/">Style Shout</a>.
                <p>
   <h2 align="center">Welcome to the Subjective video quality assessment
tool</h2>
  <h4><a href='login.php'>LOG IN</a> </h4>
  <h4>  <a href='register.php'>REGISTER</a></h4>
   <blockquote>
                <p>To be yourself in a world that is constantly trying to make you
something else is the greatest accomplishment.
                </p>
                <p class="align-right"> - Ralph Waldo Emerson</p>
                </blockquote>
        <!-- main ends -->
        </div>
        <!-- sidebar starts -->
 <div id="sidebar">
                <h3>About</h3>
                <p> <img src="images/thumb.jpg" width="40" height="40"
alt="firefox" class="float-left" />We are  carrying out this task in PHP since it uses less
memory than  other programming tools to carry out video testing.</p>
                <h3>Sidebar Menu</h3>
                <ul class="sidemenu">
                        <li><a href="index.php">Home</a></li>
                        <li><a href="login.php">Log In</a></li>
```

```
                        <li><a href="register.php">Register</a></li>
            <li><a href="contact.php">Contact</a></li>
            <li><a href="about.php">About</a></li>
                    </ul>
                    <h3>Links</h3>
                    <ul class="sidemenu">
                        <li><a href="http://ekantipur.com/">Kantipur</a></li>
                        <li><a href="http://facebook.com">Facebook</a></li>
                        </ul>
                    <h3>Tutors</h3>
                    <ul class="sidemenu">
        <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=7770026B0E2D1B2EC125
6871004667BD&lang=en" title="Benny">Benny Lovstrom<br />
          <span>Senior Lecturer, BTH</span></a>
        </li>
        <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C1257
75A00670FFA&lang=sv" title="4Templates">Muhammad Shahid <br />
          <span>Project Assistant, BTH</span></a>
        </li>
        </ul>
                  <h3>Wise Words</h3>
                    <p>&amp;quot;To be yourself in a world that is constantly trying to
make you
                      something else is the greatest accomplishment.&amp;quot; </p>
                    <p class="align-right">- Ralph Waldo Emerson</p>
                    <h3>Contact Us</h3>
                    <p>If you are interested in our work, you are welcome to contact
us - it will surely be appreciated.</p>
            <!-- sidebar ends -->
            </div>
    <!-- content-wrap ends-->
    </div>
    <!-- footer starts here -->
    <div id="footer">
            <div id="footer-left">
                    <p>
                    &amp;copy; Copyright      Blekinge Tekniska Hogskola 2014&amp;nbsp;
                    Design by @NepalStudent</p>
            </div>
            <div id="footer-right">
                    <p class="align-right">
                    <a href="index.php">Home</a></p>
            </div>
    </div>
```

```
        <!-- footer ends here -->
    <!-- wrap ends here -->
    </div>
    </body>
    </html>
```

12.2. Adminlogin.php

```
<html>
<head>
   <title>Log In - PPP</title>
   <link rel="stylesheet" type="text/css" media="screen" href="css/screen.css" />
</head>
<body>
<!-- wrap starts here -->
<div id="wrap">
        <!--header -->
        <div id="header">
          <h1 id="logo-text"><a href="login.php" title="">Log In</a></h1>
                <p id="intro">
                Please log in to continue</p>
                <div  id="nav">
                        <ul>
                                <li><a href="index.php">Home</a></li>
                                <li id="current"><a href="login.php">Log In</a></li>
                                <li><a href="register.php">Register</a></li>
            <li><a href="contact.php">Contact</a></li>
            <li><a href="about.php">About</a></li>
                        </ul>
                </div>
        <!--header ends-->
        </div>
        <!-- content-wrap starts -->
        <div id="content-wrap">
                <div id="main">
                        <a name="TemplateInfo"></a>
                        <h2 align="center">Admin Login</h2>
<?php
session_start();
require "config.php";
//Check to see if the user is logged in.
if(isset($_SESSION['username'])){
  header("location: addvids.php"); //isset check to see if a variables has been 'set'
}
```

```
if(isset($_POST['submit']))
{
  //Variables from the table
  $user  = $_POST['user'];
  $pass  = $_POST['pass'];
  //$seckey  = $_POST['seckey'];
  //Prevent MySQL Injections
  $user  = stripslashes($user);
  $pass  = stripslashes($pass);
  //$seckey  = stripslashes($seckey);
  $user  = mysqli_real_escape_string($con, $user);
  $pass  = mysqli_real_escape_string($con, $pass);
   //Check to see if the user left any space empty!
  if($user == "" || $pass == "" )
  {
    echo'<script language="javascript">';
                echo'alert("Oops! Username or Password  is empty! TRY AGAIN!")';
                echo'</script>';
  }
  //Check to see if the username AND password MATCHES the username AND password in the
DB
  else
  {
    $query = mysqli_query($con,"SELECT * FROM admin WHERE username = '$user' and
password = '$pass'  ") or die("Can not query DB.");
    $count = mysqli_num_rows($query);
    if($count == 1){
      //YES WE FOUND A MATCH!
      $_SESSION['username'] = $user; //Create a session for the user!
      header ("location: addvids.php");
    }
    else{
      echo'<script language="javascript">';
                echo'alert("Oops! Username, Password and Security Key do not match! TRY
AGAIN!")';
                echo'</script>';
    }
  }
}
?>
        <table width="300" align="center" cellpadding="0" cellspacing="1" border="1px solid
black">
<tr>
<form name="register" method="post" action="adminlogin.php">
<td>
<table width="100%" border="0" cellpadding="3" cellspacing="1" bgcolor="#FFFFFF">
```

```
<tr>
<td colspan="3"><strong><center>
  <h1>Admin Login
  </h1>
</center></strong></td>
</tr>
<tr>
<td width="78">Username*</td>
<td width="6">:</td>
<td width="294"><input name="user" type="text" id="user"></td>
</tr>
<tr>
<td>Password*</td>
<td>:</td>
<td><input name="pass" type="password" id="pass"></td>
</tr>
<tr>
<td></td>
<td></td>
<td><p>
  <input type="submit" name="submit" value="Login">
</p>
  <p>Not registered yet? Click <a href="register.php">here</a> to register.</p></td>
</tr>
</table>
</td>
</form>
</tr>
</table>
          <h2>Introduction</h2>
                              <p class="post-info">Posted by <a
href="http://facebook.com/prawesh2000">prabesh</a>
         <p><strong>Subjective Assessment </strong>is the most decisive way of evaluating the
quality of a video, for humans are the eventual beneficiary in most applications. Subjective video
quality is related with how video is observed by a viewer and nominates his or her opinion on a
particular video sequence. The fundamental concept of measuring Subjective video quality is
same as the Mean Opinion Score (MOS) for audio. And this task is done in a group by
          by <a href="https://www.facebook.com/prawesh2000">Prabesh Dhakal</a>, <a
href="https://www.facebook.com/thakuri.pawan">Pawan Chan</a> and <a
href="https://www.facebook.com/prabhat.tiwari1">Prabhat Tiwari</a>.
          </p>
          <p>
          You can go through our work on this website and for more information, please, contact
one of us. This website design has been inspired by <a href="http://www.styleshout.com/">Style
Shout</a>.
                              <p>
```

```
<blockquote>
                    <p>To be yourself in a world that is constantly trying to make you
something else is the greatest accomplishment.
                    </p>
                    <p class="align-right"> - Ralph Waldo Emerson</p>
                    </blockquote>
                <!-- main ends -->
                </div>
                <!-- sidebar starts -->
            <div id="sidebar">
                    <h3>About</h3>
                    <p> <img src="images/thumb.jpg" width="40" height="40" alt="firefox"
class="float-left" />We are  carrying out this task in PHP since it uses less memory than  other
programming tools to carry out video testing.</p>
                    <h3>Sidebar Menu</h3>
                    <ul class="sidemenu">
                            <li><a href="index.php">Home</a></li>
                            <li><a href="login.php">Log In</a></li>
                            <li><a href="register.php">Register</a></li>
              <li><a href="contact.php">Contact</a></li>
              <li><a href="about.php">About</a></li>
                    </ul>
                    <h3>Links</h3>
                    <ul class="sidemenu">
                            <li><a href="http://ekantipur.com/">Kantipur</a></li>
                            <li><a href="http://facebook.com">Facebook</a></li>
                </ul>
                    <h3>Tutors</h3>
                    <ul class="sidemenu">
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A0067
0FFA&lang=sv" title="Benny">Benny Lovstrom<br />
            <span>Senior Lecturer, BTH</span></a>
          </li>
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A0067
0FFA&lang=sv" title="4Templates">Muhammad Shahid <br />
            <span>Project Assistant, BTH</span></a>
          </li>
          </ul>
                    <h3>Wise Words</h3>
                    <p>&amp;quot;To be yourself in a world that is constantly trying to make you
                      something else is the greatest accomplishment.&amp;quot; </p>
                    <p class="align-right">- Ralph Waldo Emerson</p>
                    <h3>Contact Us</h3>
```

```
                        <p>If you are interested in our work, you are welcome to contact us - it
will surely be appreciated.</p>
                <!-- sidebar ends -->
                </div>
        <!-- content-wrap ends-->
        </div>
        <!-- footer starts here -->
        <div id="footer">
                <div id="footer-left">
                        <p>
                        &copy; Copyright       Blekinge Tekniska Hogskola 2014 
                        Design by @NepalStudent</p>
                </div>
                <div id="footer-right">
                        <p class="align-right">
                        <a href="index.php">Home</a></p>
                </div>
        </div>
        <!-- footer ends here -->
<!-- wrap ends here -->
</div>
</body>
</html>
```

12.3. Register.php

```
<?php
session_start();  //Must Start a session.
require "config.php"; //Connection Script, must be included in every file!
//Check to see if the user is logged in.
//'isset' check to see if a variables has been 'set'
if(isset($_SESSION['username'])){
  header("location: members.php");
}
?>
<html>
<head>
   <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1"/>
   <meta charset="utf-8"/>
   <meta name="description" content="">
   <meta name="author" content="">
   <title>Register - PPP</title>
   <link rel="stylesheet" type="text/css" media="screen" href="css/screen.css" />
   <!--[if lt IE 9]>
          <script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script>
```

```
   <![endif]-->
</head>
<body>
<!-- wrap starts here -->
<div id="wrap">
        <!--header -->
        <div id="header">
          <h1 id="logo-text"><a href="register.php" title="">Registration</a></h1>
          <p id="intro">
                User registration</p>
                <div  id="nav">
                        <ul>
                                <li><a href="index.php">Home</a></li>
                                <li><a href="login.php">Log In</a></li>
                                <li id="current"><a href="register.php">Register</a></li>
            <li><a href="contact.php">Contact</a></li>
            <li><a href="about.php">About</a></li>
                        </ul>
                </div>
        <!--header ends-->
        </div>
        <!-- content-wrap starts -->
        <div id="content-wrap">
                <div id="main">
                        <a name="TemplateInfo"></a>
                        <h2 align="center">Welcome to the Subjective video quality assessment
tool</h2>
       <?php
                 //Check to see if the user click the button
if(isset($_POST['submit']))
{
  //Variables from the table
  $user                 = $_POST['user'];
  $pass                 = $_POST['pass'];
  $rpass                = $_POST['rpass'];
  $Fname                = $_POST['FName'];
  $LName                = $_POST['LName'];
  $Address      = $_POST['Address'];
  //$Age        = $_POST['age'];
  $Gender               = $_POST['Gender'];
  //Prevent MySQL Injections
  $user  = stripslashes($user);
  $pass  = stripslashes($pass);
  $rpass = stripslashes($rpass);
  $Fname  =stripslashes($Fname);
  $LName  = stripslashes($LName );
```

```
  $Address = stripslashes( $Address );
  //$PersonalNum  = stripslashes($Age);
  $Gender = stripslashes($Gender);
  $user  = mysqli_real_escape_string($con, $user);
  $pass  = mysqli_real_escape_string($con, $pass);
  $rpass = mysqli_real_escape_string($con, $rpass);
  $Fname  =mysqli_real_escape_string($con,$Fname);
  $LName  =mysqli_real_escape_string($con,$LName );
  $Address = mysqli_real_escape_string($con, $Address );
  // $PersonalNum  = mysqli_real_escape_string($con,$Age);
  $Gender = mysqli_real_escape_string($con,$Gender);
  //Check to see if the user left any space empty!
  if($user == "" || $pass == "" || $rpass == "" ||$Fname=="" || $LName=="" || $Address=="")
  {
    echo "Please fill in all the information!";
  }
     else
  {
    //Check too see if the user's passwords match!
    if($pass != $rpass)
    {
      echo "Passwords do not match! Try Again.";
    }
    //CHECK TO SEE IF THE USERNAME IS TAKEN, IF NOT THEN ADD USERNAME
AND PASSWORD INTO THE DB
    else
    {
      //Query the DB
      $query = mysqli_query($con,"SELECT * FROM members WHERE username = '$user'")
or die("Can not query the TABLE!");
      //Count the number of rows. If a row exist, then the username exist!
      $row = mysqli_num_rows($query);
      if($row == 1)
      {
        echo "Sorry, the username is already taken! Try again.";
      }
            //Add the username to the database
      else
      {
        $add = mysqli_query($con,"INSERT INTO members (id, username, password, FName,
LName, Address, Gender) VALUES (null, '$user' , '$pass','$Fname','$LName',' $Address
','$Gender') ") or die("Can't Insert! ");
                        header("location: login.php");
        //echo "Registration Successful! <a href='login.php'> Click Here </a> to log In.";
      }
    }
```

```
  }
}
?>
        <table width="300" align="center" cellpadding="0" cellspacing="1" border="1px solid
black">
<tr>
<form name="register" method="post" action="register.php">
<td>
<table width="100%" border="0" cellpadding="3" cellspacing="1" bgcolor="#FFFFFF">
<tr>
<td colspan="3"><strong><center>
  <h3>User Registration Form
  </h3>
  <h5>(Please fill in all the information) </h5>
</center></strong></t
d>
</tr>
<tr>
<td width="90">Username*</td>
<td width="3">:</td>
<td width="187"><input name="user" type="text" id="user"></td>
</tr>
<tr>
<td>Password*</td>
<td>:</td>
<td><input name="pass" type="password" id="pass"></td>
</tr>
<tr>
<td>Repeat Password*</td>
<td>:</td>
<td><input name="rpass" type="password" id="rpass"></td>
</tr>
<tr>
<td>First Name*</td>
<td>:</td>
<td><input name="FName" type="FName" id="FName"></td>
</tr>
<tr>
<td>Last Name*</td>
<td>:</td>
<td><input name="LName" type="LName" id="LName"></td>
</tr>
<tr>
<td>Address*</td>
<td>:</td>
<td><input name="Address" type="Address" id="Address"></td>
```

```
</tr>
<tr>
<td>Personal Number*</td>
<td>:</td>
<td><input name="PersonalNum" type="PersonalNum" id="PersonalNum"></td>
</tr>
<tr>
<td>Gender*</td>
<td>:</td>
<td>
<input name="Gender" id="Gender"  type="radio" value="female">Female <br>
<input name="Gender" id="Gender"  type="radio" value="male">Male </td>
</tr>
<tr>
<td></td>
<td></td>
<td> <p>
  <input type="submit" name="submit" value="Register">
</p>
  <p>Already a user? Click <a href="login.php">here</a> to log in. </p></td>
</tr>
</table>
</td>
</form>
</tr>
</table>
                        <h2>Introduction</h2>
                        <p class="post-info">Posted by <a
href="http://facebook.com/prawesh2000">prabesh</a>
        <p><strong>Subjective Assessment </strong>is the most decisive way of evaluating the
quality of a video, for humans are the eventual beneficiary in most applications. Subjective video
quality is related with how video is observed by a viewer and nominates his or her opinion on a
particular video sequence. The fundamental concept of measuring Subjective video quality is
same as the Mean Opinion Score (MOS) for audio. And this task is done in a group by
          by <a href="https://www.facebook.com/prawesh2000">Prabesh Dhakal</a>, <a
href="https://www.facebook.com/thakuri.pawan">Pawan Chan</a> and <a
href="https://www.facebook.com/prabhat.tiwari1">Prabhat Tiwari</a>.
          </p>
          <p>
          You can go through our work on this website and for more information, please, contact
one of us. This website design has been inspired by <a href="http://www.styleshout.com/">Style
Shout</a>.
                        <p>
        <blockquote>
                        <p>To be yourself in a world that is constantly trying to make you
something else is the greatest accomplishment.
```

```
                    </p>
                    <p class="align-right"> - Ralph Waldo Emerson</p>
                    </blockquote>
                <!-- main ends -->
                </div>
                <!-- sidebar starts -->
            <div id="sidebar">
                    <h3>About</h3>
                    <p> <img src="images/thumb.jpg" width="40" height="40" alt="firefox"
class="float-left" />We are  carrying out this task in PHP since it uses less memory than  other
programming tools to carry out video testing.</p>
                <h3>Sidebar Menu</h3>
                    <ul class="sidemenu">
                        <li><a href="index.php">Home</a></li>
                        <li><a href="login.php">Log In</a></li>
                        <li><a href="register.php">Register</a></li>
             <li><a href="contact.php">Contact</a></li>
             <li><a href="about.php">About</a></li>
                    </ul>
                    <h3>Links</h3>
                <ul class="sidemenu">
                        <li><a href="http://ekantipur.com/">Kantipur</a></li>
                        <li><a href="http://facebook.com">Facebook</a></li>
                        </ul>
                    <h3>Tutors</h3>
                    <ul class="sidemenu">
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A0067
0FFA&lang=sv" title="Benny">Benny Lovstrom<br />
              <span>Senior Lecturer, BTH</span></a>
          </li>
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A0067
0FFA&lang=sv" title="4Templates">Muhammad Shahid <br />
              <span>Project Assistant, BTH</span></a>
          </li>
          </ul>
                    <h3>Wise Words</h3>
                    <p>&amp;quot;To be yourself in a world that is constantly trying to make you
                      something else is the greatest accomplishment.&amp;quot; </p>
                    <p class="align-right">- Ralph Waldo Emerson</p>
                    <h3>Contact Us</h3>
                    <p>If you are interested in our work, you are welcome to contact us - it
will surely be appreciated.</p>
                <!-- sidebar ends -->
            </div>
```

```
        <!-- content-wrap ends-->
        </div>
        <!-- footer starts here -->
        <div id="footer">
                <div id="footer-left">
                        <p>
                        &copy; Copyright      Blekinge Tekniska Hogskola 2014 
                        Design by @NepalStudentt</p>
                </div>
                <div id="footer-right">
                        <p class="align-right">
                        <a href="index.php">Home</a></p>
                </div>
        </div>
        <!-- footer ends here -->
<!-- wrap ends here -->
</div>
</body>
</html>
```

12.4. Addvids.php (Uploading Video)

```
          <?php
session_start();
require "config.php";
//Check to see if the user is logged in.
if(!isset($_SESSION['username'])){
  header("location: login.php"); //isset check to see if a variables has been 'set'
}
?>
<?php
if  (isset($_POST['submit']))
{
        $name = $_FILES['file']['name'];
        $type=explode('.',$name);
        $type=end($type);
        $size=$_FILES['file']['size'];
        $random_name=rand();
        $tmp = $_FILES['file']['tmp_name'];
        if($type !='mp4' && $type !='MP4'){
                        $message="Video format not supported";
                        }
                        else{
move_uploaded_file($tmp, "uploads/".$random_name.'.'.$type);
        $url = "http://localhost/web/uploads/$random_name.$type";
```

```
                        }
        $add = mysqli_query($con,"INSERT INTO videos (id, vidname, url, size) VALUES
(null, '$name' , '$random_name.$type', '$size') ") or die("Can't Insert! ");
                }
  ?>
<html> <!--<![endif]-->
<head>
   <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1"/>
   <meta charset="utf-8"/>
   <meta name="description" content="">
   <meta name="author" content="">
   <title>Add Video(s) - PPP</title>
   <link rel="stylesheet" type="text/css" media="screen" href="css/screen.css" />
   <!--[if lt IE 9]>
          <script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script>
   <![endif]-->
</head>
<body>
<!-- wrap starts here -->
<div id="wrap">
        <!--header -->
        <div id="header">
                <h1 id="logo-text"><a href="addvids.php" title="">Add Video(s)</a></h1>
                  <p id="intro">
                You can upload your videos here.</p>
                <div  id="nav">
                        <ul>
                                <li><a href="index.php">Home</a></li>
                                <li><a href="showdata.php">Show Data</a></li>
           <li id="current"><a href="addvids.php">Add Video(s)</a></li>
           <li><a href="logout.php">Log Out</a></li>
                        </ul>
                </div>
        <!--header ends-->
        </div>
        <!-- content-wrap starts -->
        <div id="content-wrap">
                <div id="main">
                        <a name="TemplateInfo"></a>
                        <h2>Video Upload</h2>
        <h4>Click 'Browse' to browse/select your local video file to upload to the server. After
uploading, you can view it here.</h4>
        <div id='box' align="center">
<form action="addvids.php" method="POST" enctype="multipart/form-data">
    <input type="file" name="file">
    <input type="submit" name="submit" value="Upload">
```

```
  </form>
    <?php
    if (isset($_POST['submit'])) {
          echo "<br />".$name." has been uploaded!";
          }
?>
</br></br>
<h2> List of uploaded files </h2>
<?php
$query=mysqli_query($con,"SELECT * FROM videos");
while($run=mysqli_fetch_array($query)){
                                    $video_id=$run['id'];
                                    $video_name=$run['vidname'];
                                    $video_url=$run['url'];
                                    $video_size=$run['size'];
                ?>
      <a href='playback.php?video=<?php echo $video_url;
                //$_SESSION['url'] = $video_url;
                //$_SESSION['vidname'] = $video_name;
                ?>'>
      <div id='url' align="center">
      <?php echo $video_name; ?>
      </div>
      </a>
      <?php
                          }
                ?>
</div></p>
        <h2>Introduction</h2>
                        <p class="post-info">Posted by <a
href="http://facebook.com/prawesh2000">prabesh</a>
       <p><strong>Subjective Assessment </strong>is the most decisive way of evaluating the
quality of a video, for humans are the eventual beneficiary in most applications. Subjective video
quality is related with how video is observed by a viewer and nominates his or her opinion on a
particular video sequence. The fundamental concept of measuring Subjective video quality is
same as the Mean Opinion Score (MOS) for audio. And this task is done in a group by
         by <a href="https://www.facebook.com/prawesh2000">Prabesh Dhakal</a>, <a
href="https://www.facebook.com/thakuri.pawan">Pawan Chan</a> and <a
href="https://www.facebook.com/prabhat.tiwari1">Prabhat Tiwari</a>.
        </p>
        <p>
        You can go through our work on this website and for more information, please, contact
one of us. This website design has been inspired by <a href="http://www.styleshout.com/">Style
Shout</a>.
       <blockquote>
```

```
                        <p>To be yourself in a world that is constantly trying to make you
something else is the greatest accomplishment.
                        </p>
                        <p class="align-right"> - Ralph Waldo Emerson</p>
                        </blockquote>
                <!-- main ends -->
                </div>
                <!-- sidebar starts -->
          <div id="sidebar">
                        <h3>About</h3>
                        <p> <img src="images/thumb.jpg" width="40" height="40" alt="firefox"
class="float-left" />We are  carrying out this task in PHP since it uses less memory than  other
programming tools to carry out video testing.</p>
                        <h3>Sidebar Menu</h3>
                        <ul class="sidemenu">
                                <li><a href="index.php">Home</a></li>
                                <li><a href="showdata.php">Show Data</a></li>
            <li id="current"><a href="addvids.php">Add Video(s)</a></li>
            <li><a href="logout.php">Log Out</a></li>
                        </ul>
                        <h3>Links</h3>
                        <ul class="sidemenu">
                                <li><a href="http://ekantipur.com/">Kantipur</a></li>
                                <li><a href="http://facebook.com">Facebook</a></li>
                                </ul>
                        <h3>Tutors</h3>
                        <ul class="sidemenu">
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=7770026B0E2D1B2EC1256871004
667BD&lang=en" title="Benny">Benny Lovstrom<br />
            <span>Senior Lecturer, BTH</span></a>
          </li>
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A0067
0FFA&lang=sv" title="4Templates">Muhammad Shahid <br />
            <span>Project Assistant, BTH</span></a>
          </li>
          </ul>
                        <h3>Wise Words</h3>
                        <p>&amp;quot;To be yourself in a world that is constantly trying to make you
                          something else is the greatest accomplishment.&amp;quot; </p>
                        <p class="align-right">- Ralph Waldo Emerson</p>
                        <h3>Contact Us</h3>
                        <p>If you are interested in our work, you are welcome to contact us - it
will surely be appreciated.</p>
                <!-- sidebar ends -->
```

```
                </div>
        <!-- content-wrap ends-->
        </div>
        <!-- footer starts here -->
        <div id="footer">
                <div id="footer-left">
                        <p>
                        &copy; Copyright       Blekinge Tekniska Hogskola 2014 
                        Design by @NepalStudent</p>
                </div>
                <div id="footer-right">
                        <p class="align-right">
                        <a href="index.php">Home</a></p>
                </div>
        </div>
        <!-- footer ends here -->
<!-- wrap ends here -->
</div>
</body>
</html>
```

12.5. Showdata.php(Viewing the video ratings and list of user)

```
<?php
session_start();
require "config.php";
//Check to see if the user is logged in.
if(!isset($_SESSION['username'])){
  header("location: login.php"); //isset check to see if a variables has been 'set'
}
?>
<html> <!--<![endif]-->
<head>
   <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1"/>
   <meta charset="utf-8"/>
   <meta name="description" content="">
   <meta name="author" content="">
   <title>Show Data - PPP</title>
   <link rel="stylesheet" type="text/css" media="screen" href="css/screen.css" />
   <!--[if lt IE 9]>
          <script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script>
   <![endif]-->
</head>
<body>
<!-- wrap starts here -->
```

```
<div id="wrap">
	<!--header -->
	<div id="header">
		<h1 id="logo-text"><a href="showdata.php" title="">View Data</a></h1>
	  <p id="intro">
	All the data collected from surveys can be viewed here.</p>
		<div  id="nav">
			<ul>
				<li><a href="index.php">Home</a></li>
				<li id="current"><a href="showdata.php">Show Data</a></li>
	   <li><a href="addvids.php">Add Video(s)</a></li>
	   <li><a href="logout.php">Log Out</a></li>
			</ul>
		</div>
	<!--header ends-->
	</div>
	<!-- content-wrap starts -->
	<div id="content-wrap">
		<div id="main">
			<a name="TemplateInfo"></a>
			<h2>Data</h2>
			<?php
$con=mysqli_connect("localhost","root","123","final");
// Check connection
if (mysqli_connect_errno()) {
  echo "Failed to connect to MySQL: " . mysqli_connect_error();
}
$result = mysqli_query($con,"SELECT * FROM ratings");
echo "<table border='2'>
<tr>
<th>Rating</th>
<th>Video Name</th>
<th>Video URL</th>
<th>User Name</th>
</tr>";
while($row = mysqli_fetch_array($result)) {
  echo "<tr>";
  echo "<td>" . $row['rating'] . "</td>";
  echo "<td>" . $row['vidname'] . "</td>";
  echo "<td>" . $row['vidurl'] . "</td>";
  echo "<td>" .$row['username'] ."</td>";
  echo "</tr>";
}
echo "</table>";
mysqli_close($con);
?>
```

```
<!-- content-wrap starts -->
        <div id="content-wrap">
                <div id="main">
                        <a name="TemplateInfo"></a>
                        <h2>Members</h2>
                        <?php
$con=mysqli_connect("localhost","root","123","final");
// Check connection
if (mysqli_connect_errno()) {
  echo "Failed to connect to MySQL: " . mysqli_connect_error();
}
$result = mysqli_query($con,"SELECT * FROM members");
echo "<table border='2'>
<tr>
<th>ID</th>
<th>User Name</th>
<th>First Name</th>
<th>Last Name</th>
<th>Address</th>
<th>Date Of Birth</th>
<th>Gender</th>
</tr>";
while($row = mysqli_fetch_array($result)) {
  echo "<tr>";
  echo "<td>" . $row['id'] . "</td>";
  echo "<td>" . $row['username'] . "</td>";
  echo "<td>" . $row['FName'] . "</td>";
  echo "<td>" . $row['LName'] . "</td>";
  echo "<td>" .$row['Address'] ."</td>";
   echo "<td>" . $row['DOB'] . "</td>";
  echo "<td>" .$row['Gender'] ."</td>";
  echo "</tr>";
}
echo "</table>";
mysqli_close($con);
?>
        <h2>Introduction</h2>
        <p class="post-info">Posted by <a href="http://facebook.com/prawesh2000">prabesh</a>
        <p><strong>Subjective Assessment </strong>is the most decisive way of evaluating the
quality of a video, for humans are the eventual beneficiary in most applications. Subjective video
quality is related with how video is observed by a viewer and nominates his or her opinion on a
particular video sequence. The fundamental concept of measuring Subjective video quality is
same as the Mean Opinion Score (MOS) for audio. And this task is done in a group by
          by <a href="https://www.facebook.com/prawesh2000">Prabesh Dhakal</a>, <a
href="https://www.facebook.com/thakuri.pawan">Pawan Chan</a> and <a
href="https://www.facebook.com/prabhat.tiwari1">Prabhat Tiwari</a>. </p>
```

```
<p> You can go through our work on this website and for more information, please, contact one of us. This website design has been inspired by <a href="http://www.styleshout.com/">Style Shout</a>.
<p> </p>
<blockquote>
<p>To be yourself in a world that is constantly trying to make you something else is the greatest accomplishment.
</p>
<p class="align-right"> - Ralph Waldo Emerson</p>
</blockquote>
<!-- main ends -->
</div>
<!-- sidebar starts -->
<div id="sidebar">
<h3>About</h3>
<p> <img src="images/thumb.jpg" width="40" height="40" alt="firefox" class="float-left" />We are  carrying out this task in PHP since it uses less memory than  other programming tools to carry out video testing.</p>
<h3>Sidebar Menu</h3>
<ul class="sidemenu">
<li><a href="index.php">Home</a></li>
<li id="current"><a href="showdata.php">Show Data</a></li>
<li><a href="addvids.php">Add Video(s)</a></li>
<li><a href="logout.php">Log Out</a></li>
</ul>
<h3>Links</h3>
<ul class="sidemenu">
<li><a href="http://ekantipur.com/">Kantipur</a></li>
<li><a href="http://facebook.com">Facebook</a></li>
</ul>
<h3>Tutors</h3>
<ul class="sidemenu">
<li><a href="http://www.bth.se/for/address-book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A00670FFA&lang=sv" title="Benny">Benny Lovstrom<br />
<span>Senior Lecturer, BTH</span></a>
</li>
<li><a href="http://www.bth.se/for/address-book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A00670FFA&lang=sv" title="4Templates">Muhammad Shahid <br />
<span>Project Assistant, BTH</span></a>
</li>
</ul>
<h3>Wise Words</h3>
<p>&quot;To be yourself in a world that is constantly trying to make you something else is the greatest accomplishment.&quot; </p>
```

```
                        <p class="align-right">- Ralph Waldo Emerson</p>
                        <h3>Contact Us</h3>
                        <p>If you are interested in our work, you are welcome to contact us - it
will surely be appreciated.</p>
                <!-- sidebar ends -->
                </div>
        <!-- content-wrap ends-->
        </div>
        <!-- footer starts here -->
        <div id="footer">
                <div id="footer-left">
                        <p>
                        &copy; Copyright      Blekinge Tekniska Hogskola 2014 
                        Design @NepalStudent</p>
                </div>
                <div id="footer-right">
                        <p class="align-right">
                        <a href="index.php">Home</a></p>
                </div>
        </div>
        <!-- footer ends here -->
<!-- wrap ends here -->
</div>
</body>
</html>
```

12.6. Playback.php (viewing and rating the video)

```
<html> <!--<![endif]-->
<head>
   <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1"/>
   <meta charset="utf-8"/>
   <meta name="description" content="">
   <meta name="author" content="">
   <title>Playback - PPP</title>
   <link rel="stylesheet" type="text/css" media="screen" href="css/screen.css" />
   <!--[if lt IE 9]>
            <script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script>
   <![endif]-->
</head>
<body>
<!-- wrap starts here -->
<div id="wrap">
        <!--header -->
        <div id="header">
```

```
                <h1 id="logo-text"><a href="addvids.php" title="">Video Playback</a></h1>
          <p id="intro">
You can watch and record your opinion here.</p>
                <div  id="nav">
                        <ul>
                                <li><a href="index.php">Home</a></li>
                                <li><a href="members.php">Members</a></li>
            <li id="current"><a href="vidlist.php">Videos</a></li>
            <li><a href="contact.php">Contact</a></li>
            <li><a href="about.php">About</a></li>
            <li><a href="logout.php">Log Out</a></li>
                        </ul>
                </div>
        <!--header ends-->
        </div>
        <!-- content-wrap starts -->
        <div id="content-wrap">
                <div id="main">
                        <a name="TemplateInfo"></a>
 <?php
 @session_start();
include 'config.php';
//Check to see if the user is logged in.
if(!isset($_SESSION['username'])){
   header("location: login.php"); //isset check to see if a variables has been 'set'
}
$files = getFiles();
if(!isset($_SESSION['counter'])){
        $_SESSION['counter']=0;
}
if(isset($_POST['submit'])){
        if(!empty($_POST['grade1'])){
                $uname=$_SESSION['username'];
                //print_r($uname);
                //$username = 'pawan';                                  //define username here
                //$vidurl = 'vidname';                  //defint the url thing here
                //echo "$files['vidname']";
                //$survey = 'survey name';
            $rating = $_POST['grade1'];
                $vidname = $files[$_SESSION['counter']]['url'];
                $vidurl=($files[$_SESSION['counter']]['vidname']);
                $conn = connectDB();
                $sql = "INSERT INTO `ratings` (  `rating`, `vidname`, `vidurl`,`username`) ";
                $sql.= "VALUES ( '{$rating}', '{$vidurl}', '{$vidname}','{$uname}') ";
                mysqli_query($conn,$sql);
                if(mysqli_insert_id($conn)){
```

```
                        echo "<p>Thank for your rating. Check another !!</p>";
                        $_SESSION['counter']++;
                        if($_SESSION['counter']>=count($files)){
                                header("Location:thankyou.php");
                        }
                        //$counter = $_SESSION['counter']+1;
                } else {
                        echo "<p>An error occured. Please try again !!</p>";
                }
        } else {
                echo "<p>You must chhose a grade between 0 to 5.</p>";
        }
}
$counter = $_SESSION['counter'];
//echo $counter;
//echo "<br>";
//print_r($files);
$curFile = $files[$counter]['url'];
function connectDB(){
        $db = 'final';
   $host = 'localhost';
   $user = 'root';
   $pass  = '123';
   $conn = mysqli_connect($host,$user,$pass,$db);
        return $conn;
}
function getFiles(){
        $files=array();
        $conn = connectDB();
        if($conn){
                $sql = 'SELECT * FROM videos';
                $res = mysqli_query($conn,   $sql);
                //print_r($res);
                while($rr = mysqli_fetch_assoc($res)){
                        $files[] = $rr;
                        }
        }
        return $files;
}
 ?>
<video id="video1" height="300px" autoplay >
 <source src="uploads/<?php echo $curFile?>" type="video/mp4">
   <embed width="480" height="360" src="trailer.swf">
  </object>
</video>
        <h2> Rating </h2>
```

```
        <form name="survey" method="POST" action="#">
<td>
<p>Please select your grading on 1 to 5 Scale (1 being the lowest and 5 being the highest).</p>
<p>
  <label>
    <input type="radio" name="grade1" value="1" id="rating1">
    Bad</label>
  <label>
    <input type="radio" name="grade1" value="2" id="rating2">
    Poor</label>
  <label>
    <input type="radio" name="grade1" value="3" id="rating3">
    Fair</label>
  <label>
    <input type="radio" name="grade1" value="4" id="rating4">
    Good</label>
  <label>
    <input type="radio" name="grade1" value="5" id="rating5">
    Excellent</label>
  <br>
</p>
<p>
  <button onclick="playvid()" type="button">Play video</button>
   <button onclick="pausevid()" type="button">Pause Video</button>
    <input type="submit" name="submit" value="Garde It">
</p>
<script>
      var myvideo=document.getElementById("video1"),selector,files,count,post=new Object;;
      function playvid(){myvideo.play();}
      function pausevid(){myvideo.pause();}
   </script>
         <h2>Introduction</h2>
                        <p class="post-info">Posted by <a
href="http://facebook.com/prawesh2000">prabesh</a>
        <p><strong>Subjective Assessment </strong>is the most decisive way of evaluating the
quality of a video, for humans are the eventual beneficiary in most applications. Subjective video
quality is related with how video is observed by a viewer and nominates his or her opinion on a
particular video sequence. The fundamental concept of measuring Subjective video quality is
same as the Mean Opinion Score (MOS) for audio. And this task is done in a group by
          by <a href="https://www.facebook.com/prawesh2000">Prabesh Dhakal</a>, <a
href="https://www.facebook.com/thakuri.pawan">Pawan Chan</a> and <a
href="https://www.facebook.com/prabhat.tiwari1">Prabhat Tiwari</a>.
          </p>
          <p>
```

```
You can go through our work on this website and for more information, please, contact one of us. This website design has been inspired by <a href="http://www.styleshout.com/">Style Shout</a>.
	<blockquote>
			<p>To be yourself in a world that is constantly trying to make you something else is the greatest accomplishment.
			</p>
			<p class="align-right"> - Ralph Waldo Emerson</p>
			</blockquote>
		<!-- main ends -->
		</div>
		<!-- sidebar starts -->
	  <div id="sidebar">
			<h3>About</h3>
			<p> <img src="images/thumb.jpg" width="40" height="40" alt="firefox" class="float-left" />We are  carrying out this task in PHP since it uses less memory than  other programming tools to carry out video testing.</p>
			<h3>Sidebar Menu</h3>
			<ul class="sidemenu">
				<li><a href="index.php">Home</a></li>
				<li><a href="members.php">Members</a></li>
		<li><a href="vidlist.php">Videos</a></li>
		<li><a href="contact.php">Contact</a></li>
		<li><a href="about.php">About</a></li>
		<li><a href="logout.php">Log Out</a></li>
			</ul>
			<h3>Links</h3>
			<ul class="sidemenu">
				<li><a href="http://ekantipur.com/">Kantipur</a></li>
				<li><a href="http://facebook.com">Facebook</a></li>
				</ul>
			<h3>Tutors</h3>
			<ul class="sidemenu">
	<li><a href="http://www.bth.se/for/address-book.nsf/Contact.xsp?action=openDocument&documentId=7770026B0E2D1B2EC1256871004667BD&lang=en" title="Benny">Benny Lovstrom<br />
	  <span>Senior Lecturer, BTH</span></a>
	</li>
	<li><a href="http://www.bth.se/for/address-book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A00670FFA&lang=sv" title="4Templates">Muhammad Shahid <br />
	  <span>Project Assistant, BTH</span></a>
	</li>
	</ul>
			<h3>Wise Words</h3>
			<p>&amp;quot;To be yourself in a world that is constantly trying to make you
```

```
                    something else is the greatest accomplishment.&amp;quot; </p>
                    <p class="align-right">- Ralph Waldo Emerson</p>
                    <h3>Contact Us</h3>
                    <p>If you are interested in our work, you are welcome to contact us - it
will surely be appreciated.</p>
                <!-- sidebar ends -->
                </div>
        <!-- content-wrap ends-->
        </div>
        <!-- footer starts here -->
        <div id="footer">
                <div id="footer-left">
                        <p>
                        &copy; Copyright      Blekinge Tekniska Hogskola 2014 
                        Design by @NepalStudent</p>
                </div>
                <div id="footer-right">
                        <p class="align-right">
                        <a href="index.php">Home</a></p>
                </div>
        </div>
        <!-- footer ends here -->
<!-- wrap ends here -->
</div>
</body>

</html>
```

12.7. Logout.php

```
<head>
   <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1"/>
   <meta charset="utf-8"/>
   <meta name="description" content="">
   <meta name="author" content="">
   <title>Log Out - PPP</title>
   <link rel="stylesheet" type="text/css" media="screen" href="css/screen.css" />
   <!--[if lt IE 9]>
          <script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script>
   <![endif]-->
</head>
<body>
<!-- wrap starts here -->
<div id="wrap">
        <!--header -->
```

```
	<div id="header">
		<h1 id="logo-text"><a href="logout.php" title="">Log Out</a></h1>
		<p id="intro">
		You are now logged out.</p>
		<div  id="nav">
			<ul>
				<li><a href="index.php">Home</a></li>
				<li><a href="login.php">Log In</a></li>
				<li><a href="register.php">Register</a></li>
	   <li><a href="contact.php">Contact</a></li>
	   <li><a href="about.php">About</a></li>
			</ul>
		</div>
	<!--header ends-->
	</div>
	<!-- content-wrap starts -->
	<div id="content-wrap">
		<div id="main">
			<a name="TemplateInfo"></a>
			<h2 align="center">Welcome to the Subjective video quality assessment
tool</h2>
  <?php
session_start();
require "config.php";
session_destroy();
echo "You have successfully logged out. <a href='login.php'> Click here </a> to login!";
?>
			<h2>Introduction</h2>
			<p class="post-info">Posted by <a
href="http://facebook.com/prawesh2000">prabesh</a>
	<p><strong>Subjective Assessment </strong>is the most decisive way of evaluating the
quality of a video, for humans are the eventual beneficiary in most applications. Subjective video
quality is related with how video is observed by a viewer and nominates his or her opinion on a
particular video sequence. The fundamental concept of measuring Subjective video quality is
same as the Mean Opinion Score (MOS) for audio. And this task is done in a group by
	 by <a href="https://www.facebook.com/prawesh2000">Prabesh Dhakal</a>, <a
href="https://www.facebook.com/thakuri.pawan">Pawan Chan</a> and <a
href="https://www.facebook.com/prabhat.tiwari1">Prabhat Tiwari</a>.
	</p>
	<p>
	You can go through our work on this website and for more information, please, contact
one of us. This website design has been inspired by <a href="http://www.styleshout.com/">Style
Shout</a>.
	<blockquote>
			<p>To be yourself in a world that is constantly trying to make you
something else is the greatest accomplishment.
```

```
                    </p>
                    <p class="align-right"> - Ralph Waldo Emerson</p>
                    </blockquote>
                <!-- main ends -->
                </div>
                <!-- sidebar starts -->
            <div id="sidebar">
                    <h3>About</h3>
                    <p> <img src="images/thumb.jpg" width="40" height="40" alt="firefox"
class="float-left" />We are  carrying out this task in PHP since it uses less memory than  other
programming tools to carry out video testing.</p>
                    <h3>Sidebar Menu</h3>
                    <ul class="sidemenu">
                            <li><a href="index.php">Home</a></li>
                            <li><a href="login.php">Log In</a></li>
                            <li><a href="register.php">Register</a></li>
             <li><a href="contact.php">Contact</a></li>
             <li><a href="about.php">About</a></li>
                    </ul>
                    <h3>Links</h3>
                    <ul class="sidemenu">
                            <li><a href="http://ekantipur.com/">Kantipur</a></li>
                            <li><a href="http://facebook.com">Facebook</a></li>
                            </ul>
                            <h3>Tutors</h3>
                    <ul class="sidemenu">
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A0067
0FFA&lang=sv" title="Benny">Benny Lovstrom<br />
            <span>Senior Lecturer, BTH</span></a>
          </li>
          <li><a href="http://www.bth.se/for/address-
book.nsf/Contact.xsp?action=openDocument&documentId=0581614F96288379C125775A0067
0FFA&lang=sv" title="4Templates">Muhammad Shahid <br />
            <span>Project Assistant, BTH</span></a>
          </li>
          </ul>
                    <h3>Wise Words</h3>
                    <p>&amp;quot;To be yourself in a world that is constantly trying to make you
                      something else is the greatest accomplishment.&amp;quot; </p>
                    <p class="align-right">- Ralph Waldo Emerson</p>
                    <h3>Contact Us</h3>
                    <p>If you are interested in our work, you are welcome to contact us - it
will surely be appreciated.</p>
                <!-- sidebar ends -->
                </div>
```

```
        <!-- content-wrap ends-->
        </div>
        <!-- footer starts here -->
        <div id="footer">
                <div id="footer-left">
                        <p>
                        &copy; Copyright      Blekinge Tekniska Hogskola 2014 
                        Design by @NepalStudent</p>
                </div>
                <div id="footer-right">
                        <p class="align-right">
                        <a href="index.php">Home</a></p>
                </div>
        </div>
        <!-- footer ends here -->
<!-- wrap ends here -->
</div>
</body>
</html>
```

12.8. Config.php (connecting to the database)

```
<?php
//Information to connect to MySQL Server and Database
$host     = "localhost";
$username = "root";
$password = "123";
$db       = "final";
//Connect to MySQL Server
$con = mysqli_connect($host,$username,$password,$db) or die("Can not connect to Server.")
```

---------- THE END ----------