The Website provides following functionalities to the users:

Administrator :

- Login/Logout
- View student information
- Edit Student Information
- Enable/disable student accounts
- Search students

Student:

- Login/Logout
- o View profile
- Edit profile
- Change password
- o Register new profile

Source Code

Index.php

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
k rel="stylesheet" href="Style.css" type="text/css"/>
<title>Home Page</title>
</head>
```

```
<body>
<?php include 'Header.php';?>
<a href="index.php" class="stylelink" style="text-
decoration:none">Home</a>
     <a href="Student_login.php" class="stylelink"
style="text-decoration:none">Student Login</a>
        
        href="Admin login.php"
                     class="stylelink"
                              style="text-
     <a
decoration:none">Administrator Login</a>
  
   
  
   
 <?php include 'Footer.php';?>
</body>
</html>
```

Student_login.php

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<title>Login Page</title>
k rel="stylesheet" href="Style.css" type="text/css"/>
<script type="text/javascript">
function validate()
{
      if(document.form1.st id.value=="")
      {
       alert("Please enter your login Id.");
       document.form1.st_id.focus();
       return false;
      }
      if(document.form1.st pass.value=="")
      {
       alert("Please enter your password.");
       document.form1.st pass.focus();
       return false:
      }
}
</script>
</head>
<body onLoad="javascript:document.form1.st id.focus()">
<form name="form1" method="post" action="Student login handler.php"</pre>
onSubmit="return validate();">
 <?php include 'Header.php';?>
```

```
<table
width="90%" >
   <a href="index.php" class="stylelink" style="text-
decoration:none; font-family: " Times New Roman", Times,
serif;">Home</a>
    
    
   <a href="Student_Registration.php"
class="stylelink" style="text-decoration:none; font-weight: bold;">New
Student Click Here</a>
    
    
    
    
    
    
    
    
   <?php if($ GET['flag'] == "success") { ?>
        <td class="stylegreen" colspan="4"
align="center">Congratulations! You Are successfully registered. You can use
your Login Id and Password to login to your account.
        <?php
        }
        else if($ GET['flag'] == "exists") { ?>
```

```
This Login
Id( <?=$_GET['student_id']?>) already exists.Please, try again with another
Login Id
       <?php
         }else if($_GET['flag'] == "error") {
       ?>
   Error while
inserting data. Please, try again.
       <?php
       ?>
   
    
    
    
   
    
    
    
  <table width="30%" border="1" align="center"
cellpadding="3" cellspacing="0" bordercolor="#CCCCC"
bgcolor="#CCCCCC">
   Student Login Here
```

```
Login Id : 
     <input name="st_id" type="text"
id="st id">
    Password:
     <input name="st_pass" type="password"
id="st pass">
     
             <?php if($_GET['flag'] == "invalid") { ?>
     <span class="stylered">Invalid Login Id or Password</span>
             <?php }?>
             <input name="login" class="style10"
type="submit" id="login" value="Login">
     <input name="close" type="button" id="close" class="style10"</pre>
value="Close" onClick="self.location='index.php"">
                              <?php include 'Footer.php';?>
 </form>
</body>
```

Student_login_handler

```
<?php
      session start();
      include 'Connect.php';
      $flag = "";
      $student_id = $_POST['st_id'];
      $st pass = $ POST['st pass'];
      $query = "select last login date from student information where
student id='$student id' and student password='$st pass' and
student status ='Enable'";
      $result = mysql_query($query,$link_id);
      if(mysql error() != null){
             die(mysql_error());
      }
      if($date = mysql fetch array($result))
      {
              $lastdate = $date['last_login_date'];
              $date2 = date("d-m-Y h:i A",strtotime($lastdate));
              $ SESSION['userid'] = $_POST['st_id'];
              $ SESSION['lastlogin'] =$date2;
              $ SESSION['type'] = "Student";
              mysql_query("update student_information set
last_login_date=now() where student_id='$student_id'",$link_id);
              if(mysql_error() != null){
                    die(mysql error());
             }
              header("location:Student Home.php");
              die();
      }
      else
```

```
{
    $flag = "invalid";
    header("location:Student_login.php?flag=$flag");
    die();
}
```

Student_Registration.php

```
<html>
<head>
k rel="stylesheet" href="Style.css" type="text/css"/>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<title>Student Registration Page</title>
<script src="Validation.js"></script>
<script type="text/javascript">
function validation()
{
      if(document.form1.first name.value=="")
      {
        alert("Please enter your first name.");
        document.form1.first_name.focus();
        return false;
      }
      if(document.form1.last_name.value=="")
      {
        alert("Please enter your last name.");
        document.form1.last_name.focus();
        return false;
      }
      if(document.form1.dob.value=="")
      {
```

```
document.form1.dob.focus();
        return false;
      }
      else
        var date = document.form1.dob.value;
        var yes = checkDate(date);
        if(!yes)
             {
                    alert("Please Enter a valid date of birth.");
                     document.form1.dob.focus();
                     return false;
             }
       }
      if(document.form1.email1.value=="")
      {
        alert("Please enter your primary email.");
        document.form1.email1.focus();
        return false;
      }
      else
        var isEmail = emailValidator(document.form1.email1.value);
        if(!isEmail)
        {
                    alert("Please enter a valid primary email.");
                    document.form1.email1.focus();
                    return false;
        }
      }
      if(document.form1.address.value != "" &&
document.form1.address.value.length > 100){
             alert("You can enter address upto 100 characters only.");
```

alert("Please enter your date of birth.");

```
document.form1.address.focus();
             return false;
      }
      if(document.form1.description.value != "" &&
document.form1.description.value.length > 200){
             alert("You can enter description upto 200 characters only.");
             document.form1.description.focus();
             return false;
      }
      if(document.form1.st_id.value=="")
        alert("Please enter your desired student id.");
             document.form1.st_id.focus();
        return false;
      }
      if(document.form1.st pass.value=="")
      {
        alert("Please enter your desired password.");
        document.form1.st_pass.focus();
        return false:
      }
      if(document.form1.retype.value=="")
        alert("Please enter retype password.");
        document.form1.retype.focus();
        return false:
      }
      if(document.form1.st_pass.value != document.form1.retype.value)
       {
        alert("Password and retype password are not same.");
             document.form1.st pass.value = "";
        document.form1.retype.value = "";
        document.form1.st_pass.focus();
        return false;
```

```
}
}
</script>
</head>
<body onLoad="javascript:document.form1.first_name.focus()">
<form name="form1" method="post"</pre>
action="Student Registration handler.php" onSubmit="return validation()"
enctype="multipart/form-data">
 <?php include
'Header.php';?>
 <table width="80%"
border="1" cellpadding="2" cellspacing="0" bordercolor="#CCCCC">
   Student
Information
    First Name <span class="stylered">*</span> 
    <input name="first_name" type="text" id="first_name"
maxlength="50">
    Last Name <span class="stylered">*</span> 
    <input name="last name" type="text" id="last name"
maxlength="30">
   Gender
    <input name="gender" type="radio" value="Male" checked>
     Male<input name="gender" type="radio" value="Female">
     Female
```

```
Date Of Birth <span class="stylered">*</span> 
    <input name="dob" type="text" id="dob" size="10"
maxlength="10">
     DD-MM-YYYY
   Qualification <span class="stylered">*</span> 
    <select name="qualification" id="qualification">
     <option value="">-----select-----</option>
               <option value="High School">High School
               <option value="Graduate">Graduate
               <option value="MCA">MCA</option>
               <option value="BCA">BCA</option>
               <option value="Master Degree">Master Degree
    </select>
    Contact No
    <input name="contact_no" type="text" id="contact_no"
maxlength="20">
   City
    <input name="city" type="text" id="city" maxlength="30">
     
    &nbsp:
   Primary Email <span class="stylered">*</span> 
    <input name="email1" type="text" id="email1"
maxlength="100">
    Secondary Email
    <input name="email2" type="text" id="email2"
maxlength="100">
```

```
Address
   <textarea name="address" cols="45" rows="2"
id="address"></textarea>
   Description 
   <textarea name="description" cols="45" rows="3"
id="description"></textarea>
  Login
Information
   
   Desired ID <span class="stylered">*</span> 
   <input name="st_id" type="text" id="st_id" maxlength="20">
    
    
  Password <span class="stylered">*</span> 
   <input name="st pass" type="password" id="st pass"
maxlength="20">
   Retype Password<span class="stylered"> *</span>
<input name="retype" type="password" id="retype"
maxlength="20">
```

```
 
      
      
      
      Resume
Information
   Upload Resume 
     <input name="resume" type="file" >
            
class="stylered">.doc , .txt, .pdf file only</span>
    
  Image Information
     Upload Image 
     <input type="file" name="image">
            
class="stylered"><span class="stylered">.jpg file And .gif file
only</span>
     <span class="stylered">* <em>means fields are
compulsory</em> </span>
```

```
<input name="register" type="submit"
id="register" value="Register">
     <input name="reset" type="reset" id="reset" value="Reset">
     <input name="close" type="button" id="close" value="Close"
onClick="self.location='Student login.php'">
    <?php include
'Footer.php';?>
 </form>
</body>
</html>
```

Student_Registration_handler.php

```
include 'Connect.php';

$flag = "success";

function rollbackData(){

    mysql_query(" ROLLBACK ");

    global $flag;

    $flag = "error";

    if(mysql_error() != null){

        die(mysql_error());

    }

}

$student_id = $_POST['st_id'];

$student_pass = $_POST['st_pass'];

$first_name = $_POST['first_name'];
```

```
$gender = $_POST['gender'];
      $contact_no = $_POST['contact_no'];
      $qualification = $ POST['qualification'];
      $city = $_POST['city'];
      $email1 = $ POST['email1'];
      $email2 = $ POST['email2'];
      $address = $ POST['address'];
      $description = $_POST['description'];
      $resumename = "";
      $imagename = "";
      $dobdate = date("Y-m-d",strtotime($ POST['dob']));
      /*
             This block is used to check whether the student id already exits
in database.
      */
      $select query="select student id from student information where
student_id = '$student_id'";
      $result_set = mysql_query($select_query,$link_id);
      if($row = mysql_fetch_array($result_set)){
             $flag="exists";
             header("location:Student_login.php?
flag=$flag&student id=$student id");
             die();
      }
      else{
             /*
                    This block is used to insert the student record in database
                    if the student_id is already not present in the database.
             */
             mysql query("SET AUTOCOMMIT = 0 ");
             if(mysql_error() != null){
                    die(mysql error());
```

\$last_name = \$_POST['last_name'];

```
}
              $query = "insert into
student_information(student_id,student_password,first_name,last_name,regis
tration_date,gender,date_of_birth,";
             $query .=
"student status, contact no, qualification, city, email1, email2, address, descriptio
n)";
              $query .= "
values('$student_id','$student_pass','$first_name','$last_name',now(),'$gender
','$dobdate','Disable','$contact_no',";
             $query .=
"'$qualification','$city','$email1','$email2','$address','$description')";
              $result = mysql_query($query,$link_id);
             if(mysql_error() != null){
                    die(mysql_error());
             }
             if($result){
                    if($_FILES['resume']['name'] != ""){
                           $filename = $_FILES['resume']['name'];
                           $ext = strrchr($filename,".");
                           $resumename = $student_id;
                           $resumename .= " ".$filename;
                           if($ext ==".txt" || $ext ==".doc" || $ext ==".TXT" ||
$ext ==".DOC" || $ext ==".pdf" || $ext ==".PDF"){
                                  $size = $ FILES['resume']['size'];
                                  if(size > 0 \&\& size < 1000000)
                                         $archive_dir = "resumes";
                                         $userfile_tmp_name =
$_FILES['resume']['tmp_name'];
      if(move_uploaded_file($userfile_tmp_name, "$archive_dir/
$resumename")){
```

```
/*
```

if image is successfully

```
uploaded then resumename is stored in database.
                                                */
                                                mysql_query("update
student information set resume='$resumename' where
student_id='$student_id'", $link_id);
                                                if(mysql_error() != null){
                                                       die(mysql_error());
                                                }
                                                $flag = "success";
                                         }else{
                                                rollbackData();
                                         }
                                  }
                                  else{
                                         rollbackData();
                                         die("You can upload resume of 1 MB
size only. Please, try again.");
                                  }
                           }
                           else{
                                  rollbackData();
                                  die("You can upload resume of .txt, .pdf,
.doc extensions only. Please, try again.");
                           }
                    }
                    if($_FILES['image']['name'] != ""){
                           $filename = $_FILES['image']['name'];
                           $ext = strrchr($filename,".");
                           $imagename = $student_id;
                           $imagename .="_". $filename;
                           if($ext ==".jpg" || $ext ==".jpeg" || $ext ==".JPG" ||
$ext ==".JPEG" || $ext ==".gif" || $ext ==".GIF"){
```

```
$size = $_FILES['image']['size'];
                                  if(size > 0 \&\& size < 1000000)
                                        $archive_dir = "images";
                                        $userfile tmp name =
$_FILES['image']['tmp_name'];
      if(move_uploaded_file($userfile_tmp_name, "$archive_dir/
$imagename")){
                                               /*
                                                      if image is successfully
uploaded then imagename is stored in database.
                                               mysql_query("update
student information set image='$imagename' where
student_id='$student_id'", $link_id);
                                               $flag = "success";
                                               if(mysql error()!=null){
                                                      die(mysql_error());
                                               }
                                        }
                                        else{
                                               if(file exists('resumes/' .
$resumename)) {
                                                      unlink('resumes/' .
$resumename);
                                               }
                                               rollbackData();
                                        }
                                 }
                                 else{
                                        if(file_exists('resumes/' .
$resumename)) {
                                               unlink('resumes/'.
$resumename);
```

```
}
                                          rollbackData();
                                          die("You can upload image of 1 MB
size only. Please, try again.");
                                   }
                            }
                            else{
                                   if(file_exists('resumes/' . $resumename)) {
                                          unlink('resumes/' . $resumename);
                                   }
                                   rollbackData();
                                   die("You can upload images of .jpg, .jpeg,
.gif extensions only. Please, try again. ");
                     }
             }
              else{
                     $flag="error";
             }
             if($flag == "success"){
                     mysql_query(" COMMIT ");
                     $flag="success";
                     if(mysql_error() != null){
                            die(mysql_error());
                     }
                     /*
                            This block is used to send email to the
successfully registered users.
                     */
                     to = \text{semail1};
                     $subject = 'Congratulations';
                     $message = 'Congratulations you are registered in our
site.\r\n\r\n';
```

```
$message .= "Your Login Id : $student_id \r\n Password :
$student_pass";

$headers = "From: info@sims.com\r\n";
$headers .= 'X-Mailer: PHP' . phpversion();
mail($to, $subject, $message, $headers);
*/
}
header("location:Student_login.php?flag=$flag");
die();
}
?>
```

Admin_Edit_Student_Info.php

```
<?php
      session_start();
      $session id = $ SESSION['userid'];
      if($session_id == null){
        header("location:index.php");
        die();
      }
 include 'Connect.php';
 $student_id = $_REQUEST['student_id'];
 $query = "select * from student_information where
student id='$student id'";
 $result = mysql query($query, $link id);
 $data = mysql_fetch_array($result);
?>
<html>
<head>
k rel="stylesheet" href="Style.css" type="text/css"/>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<title>Edit Student Information By Admin</title>
```

```
<script src="Validation.js"></script>
<script type="text/javascript">
function validation()
{
      if(document.form1.first_name.value=="")
      {
        alert("Please enter your first name.");
        document.form1.first_name.focus();
        return false;
      }
      if(document.form1.last_name.value=="")
        alert("Please enter your last name.");
        document.form1.last_name.focus();
        return false;
      }
      if(document.form1.dob.value=="")
      {
        alert("Please enter your date of birth.");
        document.form1.dob.focus();
        return false;
      }
       else
        var date = document.form1.dob.value;
        var yes = checkDate(date);
        if(!yes)
             {
                     alert("Please Enter a valid date of birth.");
                     document.form1.dob.focus();
                     return false;
             }
       }
      if(document.form1.email1.value=="")
```

```
alert("Please enter your primary email.");
        document.form1.email1.focus();
        return false;
      }
      else
        var isEmail = emailValidator(document.form1.email1.value);
        if(!isEmail)
        {
                    alert("Please enter a valid primary email.");
                    document.form1.email1.focus();
                    return false;
        }
      }
      if(document.form1.email2.value != "")
      {
        var isEmail = emailValidator(document.form1.email2.value);
        if(!isEmail)
        {
                    alert("Please enter a valid secondary email.");
                    document.form1.email2.focus();
                    return false;
        }
      }
      if(document.form1.address.value != "" &&
document.form1.address.value.length > 100){
             alert("You can enter address upto 100 characters only.")
             document.form1.address.focus();
             return false;
      }
      if(document.form1.description.value != "" &&
document.form1.description.value.length > 200){
             alert("You can enter description upto 200 characters only.")
```

{

```
document.form1.description.focus();
          return false;
     }
}
function SetAll()
{
 document.form1.gualification.value="<?php echo $data['qualification'];?>";
 var gen = "<?php echo $data['gender'];?>";
 var gend = document.form1.gender.length;
 for(var i =0; i<gend; i++)
 {
      if(document.form1.gender[i].value == gen)
       document.form1.gender[i].checked=true;
     }
}
</script>
</head>
<body onLoad="javascript:SetAll()">
<form name="form1" method="post"</pre>
action="Admin Edit Student Info Handler.php" onSubmit="return
validation()">
<input type="hidden" name="student id" value="<?php echo $student id; ?</pre>
 <?php include
'Admin Header.php';?>
  <table width="80%"
border="1" cellpadding="2" cellspacing="0" bordercolor="#EEEEEE">
```

```
<td colspan="4" align="center" bgcolor="#EEEEEE"
class="stylebig">Edit Student Information
     
         <?php if($ GET['flag'] == "success") { ?>
         <span class="stylered">Student Information updated
successfully.</span>
   <?php } else if($ GET['flag'] == "error") { ?>
         <span class="stylered">Error while updating student
information.Please, try again</span>
   <?php } ?>
                   First Name : 
    <input name="first_name" type="text"
id="first_name" value="<?php echo $data['first_name']; ?>"
size="25"maxlength="50">
    Last name
    <input name="last name" type="text"
id="last_name" value="<?php echo $data['last_name'];?>" size="25"
maxlength="30">
   Gender : 
    <input name="gender" type="radio" value="Male">
     Male<input name="gender" type="radio" value="Female">
     Female
    Date Of Birth
    <input name="dob" type="text" id="dob" size="10"
maxlength="10" value="<?php echo date("d-m-
Y",strtotime($data['date of birth']));?>">
     DD-MM-YYYY
```

```
Qualification: 
    <select name="qualification" id="qualification">
    <option value="High School">High School
             <option value="Graduate">Graduate
             <option value="MCA">MCA</option>
             <option value="BCA">BCA</option>
             <option value="Master Degree">Master Degree</option>
         </select>
    Contact No
    <input name="contact no" type="text" id="contact no"
value="<?php echo $data[$contact no];?>" size="25" maxlength="20">
   Primary Email: 
    <input name="email1" type="text" id="email1"
value="<?php echo $data['email1'];?>" size="25" maxlength="100">
    Secondary Email
    <input name="email2" type="text" id="email2"
value="<?php echo $data['email2'];?>" size="25" maxlength="100">
   City: 
    <input name="city" type="text" id="city"
value="<?php echo $data['city'];?>" size="25" maxlength="30">
    Address : 
    <textarea name="address" rows="2"
cols="40"><?php echo $data['address'];?></textarea>
   Description :
```

```
<textarea name="description" rows="3"
cols="40"><?php echo $data['description'];?></textarea>
   
  <input name="update" type="submit"
id="update" value="Update">
    <input name="close" type="button" id="close" value="Close"
onClick="self.location='DisplayAll.php"">
   <?php include
'Footer.php';?>
 </form>
</body>
</html>
```

<u>Admin_Edit_Student_Info_Handler</u>

```
<?php
    session_start();
    $session_id = $_SESSION['userid'];
    if($session_id == null){
        header("location:index.php");
        die();
    }</pre>
```

```
include 'Connect.php';
      $student_id = $_POST['student_id'];
      $first_name = $_POST['first_name'];
      $last name = $ POST['last name'];
      $gender = $ POST['gender'];
      $contact no = $ POST['contact no'];
      $qualification = $ POST['qualification'];
      $city = $ POST['city'];
      $email1 = $ POST['email1'];
      $email2 = $_POST['email2'];
      $address = $ POST['address'];
      $description = $ POST['description'];
      $dateofbirth = date("Y-m-d",strtotime($ POST['dob']));
      $flag = "";
      $query = "update student information set
first name='$first name',last name='$last name',gender='$gender',date of
birth='$dateofbirth',";
      $query .=
"qualification='$qualification',contact no='$contact no',email1='$email1',email
2='$email2',city='$city',address='$address',description='$description' ";
      $query .= " where student id='$student id";
      $result = mysql query($query, $link id);
      if(mysql error() != null){
             die(mysql error());
      }
      if($result)
      {
             $flag = "success";
      }
  else
      {
              $flag = "error";
      }
```

Validation.js

```
function checkDate(dobStr)
{
       var arr = dobStr.split(/-/);
       if(arr.length != 3){
              return false;
       }
       var ddStr = arr[0];
       var mmStr = arr[1];
       var yyStr = arr[2];
       if(isNaN(ddStr)){
              return false;
       }
       if(isNaN(mmStr)){
              return false;
       }
       if(isNaN(yyStr)){
              return false;
       }
       dd=parseInt(ddStr,10);
       mm=parseInt(mmStr,10);
       yy=parseInt(yyStr,10);
       if(dd < 1 || dd > 31){}
              return false;
       }
       if(mm < 1 || mm > 12){
```

```
return false;
}
if(yy < 1900){
      return false;
}
if(yy > 3000){
      return false;
}
switch (mm){
       case 1:
       case 3:
       case 5:
       case 7:
       case 8:
       case 10:
       case 12:
              return true;
       case 4:
       case 6:
       case 9:
       case 11:
             if(dd<=30)
                     return true;
              else
                     return false;
       case 2:
             if(yy\%100==0)
                    if(yy%400==0)
              {
                    {
                           if(dd<=29)
                                  return true;
                            else
                                  return false;
                    }
```

```
}
                     else
                     {
                             if(yy\%4==0){
                                    if(dd<=29)
                                           return true;
                                    else
                                           return false;
                            }
                     }
                     if(dd<=28)
                             return true;
                     }
                     else
                     {
                             return false;
                     }
              default:
                     return false;
       }
}
function emailValidator(elem)
{
        var\ emailExp = /^[\w\-\.+] + \@[a-zA-Z0-9\.\.-] + \. [a-zA-z0-9]{2,4}$/; 
       if(elem.match(emailExp))
       {
              return true;
       }
       else
       {
              return false;
       }
}
```

Style.css

```
body {
      margin-left: 0px;
      margin-top: 0px;
      margin-right: 0px;
      margin-bottom: 0px;
}
.stylebig {
      font-size: 18px;
      font-family: "Times New Roman", Times, serif;
      font-weight: bold;
}
.stylemedium {
      font-size: 14px;
      font-family: "Times New Roman", Times, serif;
      font-weight: bold;
}
.stylesmall {
      font-family: "Times New Roman", Times, serif;
      font-size: 12px;
      font-weight: bold;
}
.stylegreen {font-family: "Times New Roman", Times, serif; font-size: 12px;
font-weight: bold; color: #007F00; }
.stylered {
      font-size: 12px;
      font-family: "Times New Roman", Times, serif;
      color: #FF0000;
      font-weight: bold;
}
.stylegrey {font-family: "Times New Roman", Times, serif; font-size: 12px;
font-weight: bold; color: #550055; }
```

```
.stylegreyre {font-family: "Times New Roman", Times, serif; font-size: 12px; font-weight: bold; color: #CCC; }
.stylelink {font-family: "Times New Roman", Times, serif; font-size: 12px; font-weight: bold; color: #AA0000; }
.stylelink2 {font-family: "Times New Roman", Times, serif; font-size: 12px; font-weight: bold; color: #999; }
```

Connect.php

```
<?php
      $host = "localhost";
      $dbusername = "root";
      $dbpassword = "";
      $dbname = "student";
      $link id = mysql connect($host, $dbusername, $dbpassword);
      if(!$link_id){
             die(mysql_error("Can`t Connect To database"));
      }
      else{
             $db = mysql select db($dbname, $link id);
      }
      if(!$db){
             die(mysql_error("Can`t select database"));
      }
      return;
?>
```

SNAPSHOTS