Internet and Web Programming Digital Assignment – 3

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19BCE1120

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Slot: A1

Q) Design an online train ticket reservation/cancellation system using HTML and PHP with the following

features:

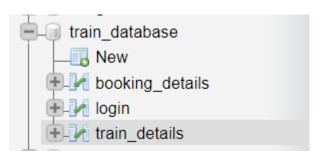
- Provide a login for the users and use sessions
- When login display the reservation/cancellation form with suitable validation
- Perform validation of form
- Using PHP and MySQL display the availability of the seats for a class for a given train. Assume 5
- trains. When a reservation or cancellation is done update the available seats accordingly.
- Assume the scenario for 5 days

Approach:

A robust login,menu ,date selection,booking and cancellation page have been developed using HTML, CSS and PHP.Suitable form validation has been provided using PHP in each of these modules. The database and tables used are with MYSQL as attached below. Sessions play a major role to track the user-id ,to both display it and to use it to store and retrieve contents from the database. Sessions are also used to send date and boarding information that the user enters to the next page for further use.

This scenario is from October 20th to October 24th for 10 trains ,with classes A1, 3 Tier AC,2 Tier AC and Sleeper corresponding to 10 tickets each-with a feature to avoid overbooking. Cancellation also ensures that only the user who booked the ticket can cancel it and that too only once with the help of sessions.

Database:



Login:

Username	Password
admin	admin
vmaheysh@gmail.com	admin

Train_details:

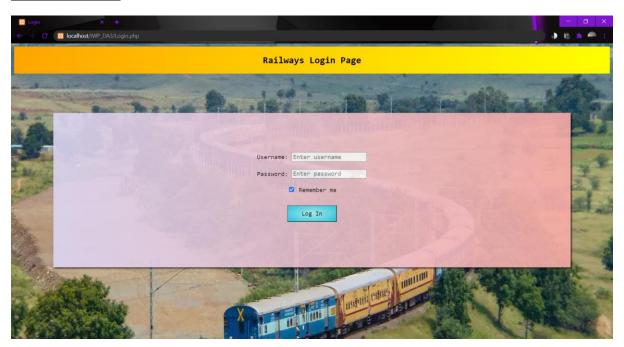
TrainNumber	TrainName	TrainFrom	TrainTo	Date	A1	2TIERAC	3TIERAC	SLEEPER
1	Chennai Express	Chennai	Mumbai	2020-10-20	10	10	10	10
2	SuperFast Express	Chennai	Delhi	2020-10-21	10	10	10	10
3	Powerful Express	Kolkata	Mumbai	2020-10-22	10	10	10	10
4	Enterprise Express	Chennai	Bangalore	2020-10-23	10	10	10	10
5	Bangalore Express	Bangalore	Delhi	2020-10-24	10	10	10	10
7	Rajdhani Express	Delhi	Mumbai	2020-10-21	10	10	10	10
6	Rajavel Mail	Chennai	Coimbatore	2020-10-20	10	10	10	10

Booking_details:

+ Options

Name	TrainNumber	Class	TicketsBooked
admin	6	2TIERAC	2

Login.php



On Entering Username Alone:



On Entering Password Alone:

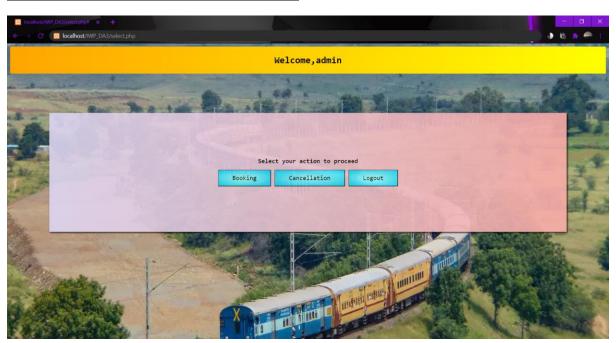


On Entering Wrong Credentials:



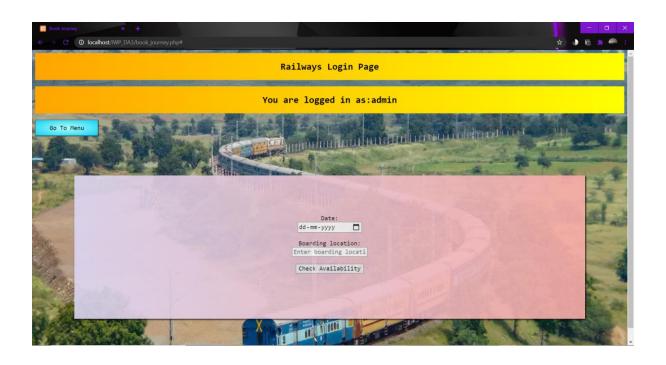
On Logging in With Credentials:

Select.php: (A menu Page)



On Selecting Booking:

Book_journey.php:



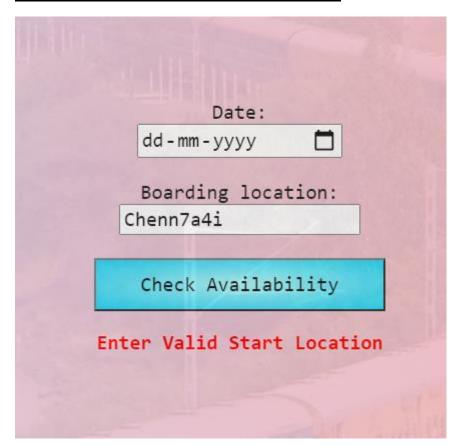
On Not Entering Date:



On Not Entering Location:



On Entering Invalid Location:



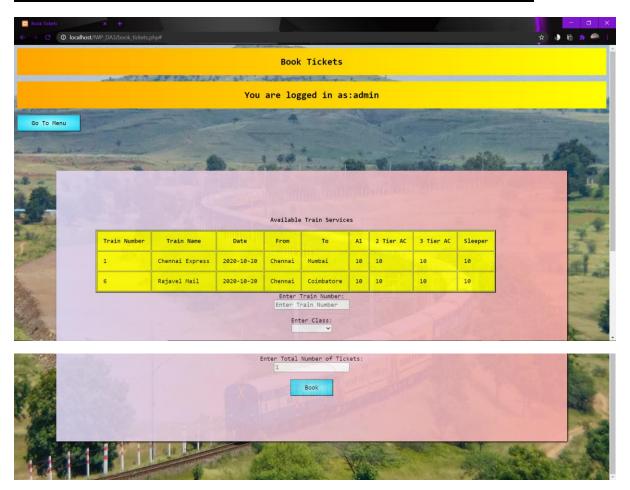
On going above/below 5 day timeframe:



On valid filling:

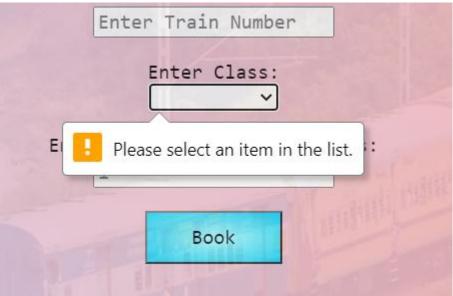
Book_tickets.php:

(Relevant Train Details Selected and displayed)

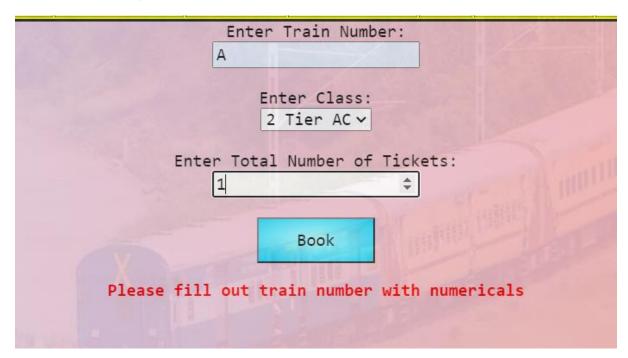


All null validations provided





On entering non-numericals for train number:



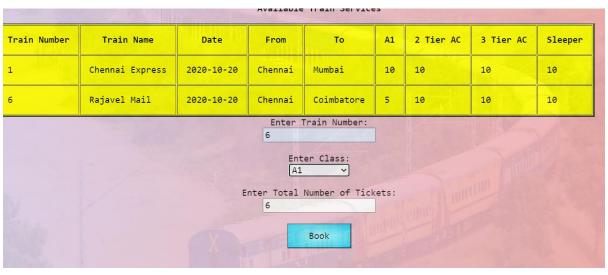
Valid Booking:

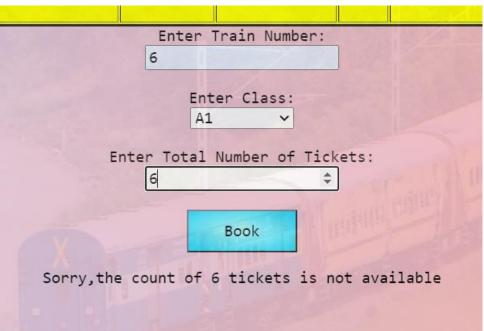


Table After Booking:

			Avallable	Train Service	25			
Train Number	Train Name	Date	From	То	A1	2 Tier AC	3 Tier AC	Sleeper
1	Chennai Express	2020-10-20	Chennai	Mumbai	10	10	10	10
6	Rajavel Mail	2020-10-20	Chennai	Coimbatore	7	10	10	10

On Entering count greater than ticket count:





Now on going back to menu and selecting cancellation:

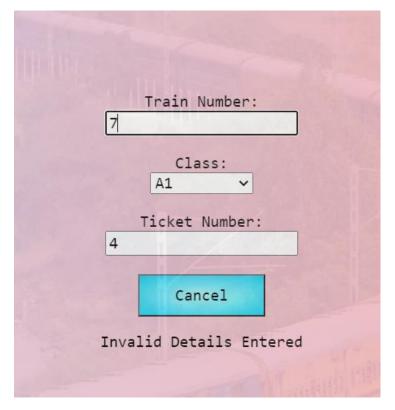
Cancellation.php:



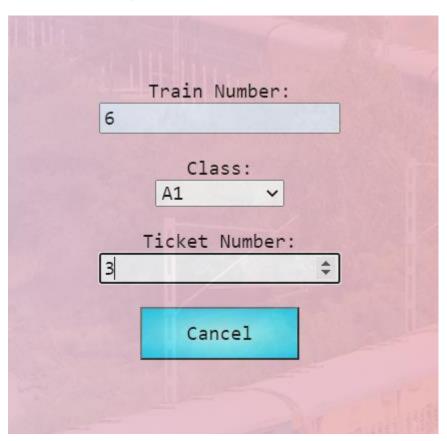
Validations provided as in last booking module.

On Entering Any type of invalid data not booked:

Train Number:
1
Class: 3 Tier AC ~
Ticket Number:
7
Cancel
Invalid Details Entered



On Entering Valid Cancellation Details:



Database Before Cancellation:

+ Option	S		
Name	TrainNumber	Class	TicketsBooked
admin	6	2TIERAC	2
admin	6	A1	3
admin	6	A1	2

Database After Cancellation:

(Record cross checked with session name of user, train no, class, ticket booked and deleted-to prevent further misuse)

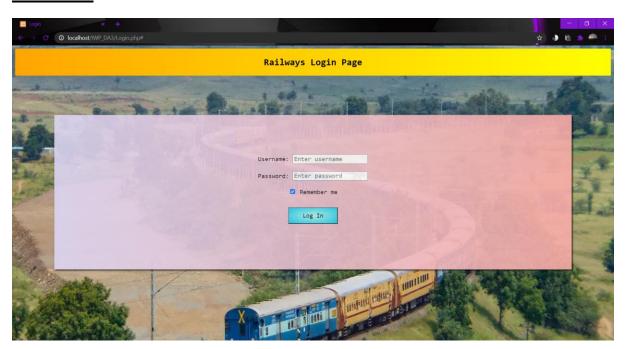
+ Options

Name	TrainNumber	Class	TicketsBooked
admin	6	2TIERAC	2
admin	6	A1	2

For Logout:



Redirects to login.php after clearing all session details:



• Login.php:

```
<?php
    session_start();
?>
<html>
<head>
    <title>Login</title>
</head>
<style>

*{
    font-family: monospace;
```

```
font-size: 16px;
  }
  body {
background:url('https://static.toiimg.com/photo/77548457.cms')
      background-position: center;
      background-repeat: no-repeat;
      background-size: cover;
  }
  h1 {
    background-image: linear-gradient(to right, orange, yellow);
    padding-top: 20px;
    padding-bottom: 20px;
    font-size: 24px;
    text-align: center;
  #form-ele{
      background-image: linear-gradient(to
right, #ddd6f3, #faaca8);
      box-shadow: 2px 2px 4px #000000;
      opacity:0.9;
      text-align:center;
      margin-top: 100px;
      margin-bottom: 100px;
      margin-left: 100px;
      margin-right: 100px;
      padding-left: 100px;
      padding-right: 100px;
      padding-top: 100px;
```

```
padding-bottom: 100px;
  #form{
    opacity:0.9;
  #username{
    opacity:0.9;
  #Log-In{
    padding-left: 35px;
    padding-right: 35px;
    padding-top: 10px;
    padding-bottom: 10px;
    background-image: radial-gradient(#B2FEFA, #0ed2f7);
</style>
<body>
  <h1>Railways Login Page</h1>
  <div id="form-ele" >
    <form action="#" id="form" method="post">
      <label for="username">Username:</label>
      <input type='text' id='uname' name='uname'</pre>
placeholder="Enter username"></input><br><br>
      <label for="username">Password:</label>
      <input type='password' id='password' name='password'</pre>
placeholder="Enter password"></input><br><br>
      <input type="checkbox" checked="checked" name="remember"</pre>
style="margin-bottom:15px"> Remember me</label><br><br>
```

```
<input type="submit" id="Log-In" name="Log-In"</pre>
value="Log In">
    </form>
      <?php
        if(isset($ POST['Log-In']))
          $uname=$ POST['uname'];
          $password=$ POST['password'];
          //Form Validation
          if($uname=="")
          {
            echo("<h3>Enter username!</h3>");
          }
          else if($password=="")
          {
            echo("<h3>Enter password!</h3>");
          }
          //Checking in database
          else
          {
$con=mysqli connect("localhost", "Administrator", "#Kalizen0123"
) or die("Unable to connect");
            mysqli select db($con,"train database");
            $sql="select * from login where Username='$uname'
and Password='$password'";
            $result = $con->query($sql);
            if($result->num rows > 0)
```

```
echo("<h3>You will be redirected</h3>");
              $ SESSION['username']=$uname;
              header("Location: select.php");
            }
            else
            {
              echo("<h3 style='color:red;'>Wrong
credentials!</h3>");
              // echo("<script>alert('Wrong
credentials!');</script>") ;
    ?>
  </div>
</body>
</html>
```

• Select.php:

```
<?php
session_start();
echo("<h1>Welcome," .$_SESSION['username']. "</h1>" );
if(isset($_POST['Booking']))
{
    header("Location: book_journey.php");
}
if(isset($_POST['Cancellation']))
{
    header("Location: cancellation.php");
```

```
}
  if(isset($ POST['Logout']))
  {
    session unset();
    session destroy();
    header("Location: Login.php");
  }
 ?>
 <html>
 <head>
 <style>
   * {
   font-family: monospace;
   font-size: 16px;
   }
   body{
background:url('https://static.toiimg.com/photo/77548457.cms')
       background-position: center;
       background-repeat: no-repeat;
       background-size: cover;
   }
   h1 {
     background-image: linear-gradient(to
right, orange, yellow);
     padding-top: 20px;
     padding-bottom: 20px;
     font-size: 24px;
     text-align: center;
```

```
}
   #form-ele{
       background-image: linear-gradient(to
right, #ddd6f3, #faaca8);
       box-shadow: 2px 2px 4px #000000;
       opacity:0.9;
       text-align:center;
       margin-top: 100px;
       margin-bottom: 100px;
       margin-left: 100px;
       margin-right: 100px;
       padding-left: 100px;
       padding-right: 100px;
       padding-top: 100px;
       padding-bottom: 100px;
   }
   #form{
     opacity:0.9;
   #username{
     opacity:0.9;
   }
   #Logout, #Booking, #Cancellation{
     padding-left: 35px;
     padding-right: 35px;
     padding-top: 10px;
     padding-bottom: 10px;
     background-image: radial-gradient(#B2FEFA, #0ed2f7);
```

```
}
 </style>
</head>
<body>
  <div id="form-ele" >
      <h2>Select your action to proceed</h2>
      <form action="#" method="post">
      <input type="submit" id="Booking" name="Booking"</pre>
value="Booking" >
      <input type="submit" id="Cancellation"</pre>
name="Cancellation" value="Cancellation" >
      <input type="submit" id="Logout" name="Logout"</pre>
value="Logout" >
      </form>
  </div>
</body>
</html>
```

• Book_journey.php:

```
<?php
    session_start();
    if(isset($_POST['back']))
    {
       header("Location: select.php");
    }
?>
<html>
<head>
```

```
<title>Book Journey</title>
</head>
<style>
  * {
  font-family: monospace;
  font-size: 16px;
  }
  body {
background:url('https://static.toiimg.com/photo/77548457.cms')
      background-position: center;
      background-repeat: no-repeat;
      background-size: cover;
  }
  h1 {
    background-image: linear-gradient(to right, orange, yellow);
    padding-top: 20px;
    padding-bottom: 20px;
    font-size: 24px;
    text-align: center;
  #form-ele{
      background-image: linear-gradient(to
right, #ddd6f3, #faaca8);
      box-shadow: 2px 2px 4px #000000;
      opacity:0.9;
      text-align:center;
      margin-top: 100px;
```

```
margin-bottom: 100px;
      margin-left: 100px;
      margin-right: 100px;
      padding-left: 100px;
      padding-right: 100px;
      padding-top: 100px;
      padding-bottom: 100px;
  }
  #form{
    opacity:0.9;
  #username{
   opacity:0.9;
  #Log-In,#back,#CA{
   padding-left: 35px;
   padding-right: 35px;
   padding-top: 10px;
   padding-bottom: 10px;
   background-image: radial-gradient(#B2FEFA, #0ed2f7);
</style>
<body>
  <h1>Railways Login Page</h1>
  <?php echo("<h1>You are logged in as:"
.$ SESSION['username']. "</h1>" ); ?>
  <form action="#" method="post">
<input type="submit" id="back" name="back" value="Go To Menu">
```

```
</form>
  <div id="form-ele" >
    <form action="#" id="form" method="post">
      <label for="username">Date:</label><br>
      <input type='date' placeholder="Enter date" id="date"</pre>
name="date"></input><br><br>
      <label for="username">Boarding location:</label><br>
      <input type='text' placeholder="Enter boarding location"</pre>
id="start" name="start"></input><br><br>
      <input type="submit" id="CA" name="CA" value="Check</pre>
Availability">
    </form>
      <?php
        if(isset($ POST['CA']))
          $date=$ POST['date'];
          $start=$ POST['start'];
          $ SESSION['datez']=$ POST['date'];
          $ SESSION['startz']=$ POST['start'];
          $pattern="/[^A-Za-z]+/";
          //echo($date.$start);
          //Validation
          if($date=="")
            echo("<h2>Enter Date</h2>");
          else if($start=="")
            echo("<h2>Enter Start Location</h2>");
```

```
else if(preg match($pattern,$start))
          {
            echo("<h2 style='color:red;'>Enter Valid Start
Location</h2>");
          }
          //sqldb
          else
$con=mysqli connect("localhost", "Administrator", "#Kalizen0123"
) or die("Unable to connect");
          mysqli select db($con,"train database");
          $sql="select * from train details where Date='$date'
and TrainFrom='$start'";
          $result = $con->query($sql);
          if ($result->num rows > 0)
          {
              header("Location: book tickets.php");
          }
          else
          {
            echo "Sorry, No trains available in selected
timeframe";
        }
    ?>
```

```
</div>
</body>
</html>
```

• Book_tickets.php:

```
<?php
session_start();
if(isset($ POST['back']))
{
 header("Location: select.php");
}
?>
<html>
<head>
  <title>Book Tickets</title>
</head>
<style>
  * {
  font-family: monospace;
  font-size: 16px;
  }
  body{
background:url('https://static.toiimg.com/photo/77548457.cms')
      background-position: center;
      background-repeat: no-repeat;
      background-size: cover;
```

```
}
  h1 {
    background-image: linear-gradient(to right, orange, yellow);
    padding-top: 20px;
    padding-bottom: 20px;
    font-size: 24px;
    text-align: center;
  #form-ele{
      background-image: linear-gradient(to
right, #ddd6f3, #faaca8);
      box-shadow: 2px 2px 4px #000000;
      opacity:0.9;
      text-align:center;
      margin-top: 100px;
      margin-bottom: 100px;
      margin-left: 100px;
      margin-right: 100px;
      padding-left: 100px;
      padding-right: 100px;
      padding-top: 100px;
      padding-bottom: 100px;
  }
  #form{
    opacity:0.9;
  #username{
    opacity:0.9;
```

```
#Book, #back {
    padding-left: 35px;
    padding-right: 35px;
    padding-top: 10px;
    padding-bottom: 10px;
    background-image: radial-gradient(#B2FEFA, #0ed2f7);
  }
</style>
<body>
  <h1>Book Tickets</h1>
  <?php echo("<h1>You are logged in as:"
.$ SESSION['username']. "</h1>" ); ?>
    <form action="#" method="post">
  <input type="submit" id="back" name="back" value="Go To</pre>
Menu">
    </form>
  <div id="form-ele" >
    <h3>Available Train Services</h3>
    <?php
    $datez=$ SESSION['datez'];
    $startz=$ SESSION['startz'];
$con=mysqli connect("localhost", "Administrator", "#Kalizen0123"
) or die("Unable to connect");
    mysqli select db($con,"train database");
    $sql="select * from train details where Date='$datez' and
TrainFrom='$startz'";
    $result = $con->query($sql);
    //Printdirectly as verified in book journey.php
    echo "<table border=3px bgcolor='yellow'
cellpadding='15'>Train NumberTrain
```

```
NameDateFromToA12
Tier AC3 Tier ACSleeper";
     while($row =$result ->fetch assoc())
     {
      // echo "Train Number" . $row["TrainNumber"]."Train
Name". $row["TrainName"]. "Date ".$row["Date"]. "From" .
$row["TrainFrom"]."To" . $row["TrainTo"] ."A1".$row["A1"].
      // "2 Tier AC".$row["2TIERAC"]."3 Tier
AC".$row["3TIERAC"]."Sleeper".$row["SLEEPER"]."<br/>;
      echo "" . $row["TrainNumber"]."".
$row["TrainFrom"]."" . $row["TrainTo"]
."".$row["A1"].
"".$row["2TIERAC"]."".$row["3TIERAC"]."
".$row["SLEEPER"]."";
   echo("");
   ?>
   <div id="form-elem" >
     <form action="#" id="form" method="post">
      <label for="tnoo">Enter Train Number:</label><br>>
      <input type='text' placeholder="Enter Train Number"</pre>
name="tno" id="tno"></input><br><br>
      <label for="class">Enter Class:</label><br>
      <select name="train class" id="train class" required>
        <option value=""></option>
        <option value="A1">A1</option>
        <option value="2TIERAC">2 Tier AC</option>
```

```
<option value="3TIERAC">3 Tier AC</option>
              <option value="SLEEPER">Sleeper</option>
        </select><br><br>
        <!-- <input type='text'
placeholder="A1"></input><br><br> -->
        <label for="ticket">Enter Total Number of
Tickets:</label><br>
        <input type='number' placeholder="1" min=1</pre>
name="tickets" id="tickets"></input><br><br>
        <input type="submit" id="Book" name="Book"</pre>
value="Book">
      </form>
  </div>
  <?php
        //echo("<script>alert('Wrong
credentialssqxd!');</script>") ;
        if(isset($ POST['Book']))
          $tno=$ POST['tno'];
          $train class=$ POST["train class"];
          $tickets=$ POST["tickets"];
           $pattern="/[0-9]+/";
           //Validation
          if($tno=="")
             echo("Please fill out train number");
           else if($train class=="")
```

```
{
             echo("Please fill out train class");
           else if($tickets=="")
             echo("Please fill out tickets");
           }
           else if(!preg match($pattern,$tickets))
             echo("<h2 style='color:red;'>Please fill out
tickets with numericals</h2>");
           }
           else if(!preg match($pattern,$tno))
           {
             echo("<h2 style='color:red;'>Please fill out
train number with numericals</h2>");
           }
           //db
          else
          {
$con=mysqli connect("localhost", "Administrator", "#Kalizen0123"
) or die("Unable to connect");
            mysqli select db($con,"train database");
            //$sql="select '$train class' from train details
where TrainNumber='$tno'";
            $sql="select * from train details where
TrainNumber='$tno'";
            $result = $con->query($sql);
            if ($result->num rows > 0)
```

```
while($row =$result ->fetch assoc())
                    //echo($row[$train class]);//GETS
RESPECTIVE CLASS TICKET COUNT LEFT
                    $tickets in db=$row[$train class];
                    //echo($row["A1"]);
                  //$tickets in db-=
                  //echo($result);
                  if($tickets in db-$tickets<0)</pre>
                    echo("Sorry, the count of ".$tickets."
tickets is not available");
                  else
                    $tickets_in_db-= $tickets;
                    $sql="UPDATE train details SET
$train_class=$tickets_in_db WHERE TrainNumber=$tno";
                    $result = $con->query($sql);
                    $usname=$ SESSION['username'];
                    $sql="INSERT INTO booking details
(Name, TrainNumber, Class, TicketsBooked) VALUES
('$usname','$tno','$train class','$tickets')";
                    $result = $con->query($sql);
                    echo("The count of ".\tickets."
successfully booked in ".\tain class." class");
```

```
else
{
    echo("Server Error,Please Try Again");
}

?>
</div>
</body>
<html>
```

• Cancellation.php:

```
<?php
    session_start();
    if(isset($_POST['back']))
    {
       header("Location: select.php");
    }
?>
<html>
<head>
    <title>Cancellation</title>
</head>
<style>
```

```
* {
  font-family: monospace;
  font-size: 16px;
  }
  body{
background:url('https://static.toiimg.com/photo/77548457.cms')
      background-position: center;
      background-repeat: no-repeat;
      background-size: cover;
  }
  h1{
    background-image: linear-gradient(to right, orange, yellow);
    padding-top: 20px;
    padding-bottom: 20px;
    font-size: 24px;
    text-align: center;
  #form-ele{
      background-image: linear-gradient(to
right, #ddd6f3, #faaca8);
      box-shadow: 2px 2px 4px #000000;
      opacity:0.9;
      text-align:center;
      margin-top: 100px;
      margin-bottom: 100px;
      margin-left: 100px;
      margin-right: 100px;
      padding-left: 100px;
```

```
padding-right: 100px;
      padding-top: 100px;
      padding-bottom: 100px;
  }
  #form{
    opacity:0.9;
  #username{
    opacity:0.9;
  #Cancel, #back{
    padding-left: 35px;
    padding-right: 35px;
    padding-top: 10px;
    padding-bottom: 10px;
    background-image: radial-gradient(#B2FEFA, #0ed2f7);
</style>
<body>
  <h1>Cancellation</h1>
  <?php echo("<h1>You are logged in as:"
.$_SESSION['username']. "</h1>" ); ?>
    <form action="#" method="post">
  <input type="submit" id="back" name="back" value="Go To</pre>
Menu">
    </form>
  <div id="form-ele" >
```

```
<form action="#" id="form" method="post">
      <label for="tnoo">Train Number:</label><br>
      <input type='text' placeholder="Enter Train Number"</pre>
name="tno" id="tno"></input><br><br>
      <label for="class">Class:</label><br>
      <select name="train_class" id="train_class" required>
        <option value=""></option>
        <option value="A1">A1</option>
        <option value="2TIERAC">2 Tier AC</option>
          <option value="3TIERAC">3 Tier AC</option>
            <option value="SLEEPER">Sleeper</option>
      </select><br><br><
      <!-- <input type='text'
placeholder="A1"></input><br> -->
      <label for="ticket">Ticket Number:</label><br>
      <input type='number' placeholder="1" min=1</pre>
name="tickets" id="tickets"></input><br><br>
      <input type="submit" id="Cancel" name="Cancel"</pre>
value="Cancel">
    </form>
    <?php
    if(isset($ POST['Cancel']))
      $tno=$ POST['tno'];
      $train_class=$_POST["train_class"];
      $tickets=$ POST["tickets"];
      $usname=$ SESSION["username"];
      pattern="/[0-9]+/";
```

```
//Validation
     if($tno=="")
      {
        echo("Please fill out train number");
      else if($train class=="")
        echo("Please fill out train class");
      else if($tickets=="")
        echo("Please fill out tickets");
      else if(!preg match($pattern,$tickets))
        echo("<h2 style='color:red;'>Please fill out tickets
with numericals</h2>");
      else if(!preg match($pattern,$tno))
      {
        echo("<h2 style='color:red;'>Please fill out train
number with numericals</h2>");
      }
      //db
      else
      {
$con=mysqli_connect("localhost","Administrator","#Kalizen0123"
) or die("Unable to connect");
          mysqli select db($con,"train database");
```

```
$sql="select * from booking details where
TrainNumber='$tno' and Name='$usname' and Class='$train class'
and TicketsBooked='$tickets'";
          $result = $con->query($sql);
          if (\$result->num\ rows > 0)
            while($row =$result ->fetch assoc())
              //echo($row['TicketsBooked']);//GETS RESPECTIVE
CLASS TICKET COUNT LEFT
              //$tickets in db=$row[$train class];
              $restore tickets=$row['TicketsBooked'];
            $restore tickets+=$tickets;
            $sql="UPDATE train details SET
$train class=$restore tickets WHERE TrainNumber='$tno'";
            $result = $con->query($sql);
            //To ensure misuse by same account
            $sql="Delete from booking details where
TrainNumber='$tno' and Name='$usname' and Class='$train class'
and TicketsBooked='$tickets'";
            $result = $con->query($sql);
              echo("Your Ticket count of ".$tickets." has been
cancelled successfully");
          }
          // Validate
          else
          {
            echo("Invalid Details Entered");
```