

Working of the Project

The project is basically an application for a **loom management system** to keep the record of the employees and keep a check on them that how the looming is done in the industries. The application is basically having six states

—LOGIN —HOME—REGISTRATION—LOOM—RESULT— LOGOUT—

Login:

Login is necessary to proceed further and to access the rest of the webpages. Employee ID and password is required to login. Admin privileges are needed to login i.e. an employee who is admin can login and anyone else cannot.

All of this is implemented using Php and MySQL database. There is an option available during the registration of an employee to make admin and set admin password for that employee. Password hashing is used in order to keep the password safe.

Authentication is done by using Php and MySQL database. If EMP Id and the password entered matches with the database, login is successful and user is redirected to the home page. And a LOGOUT option also becomes active with the HOME, REGISTRATION, LOOM, and RESULT in the left side bar.

Home:

After login is successful, user is redirected to the home page. It is an introduction page. It contains a brief introduction about loom and power loom.

User can now access the rest of the pages namely HOME, REGISTRATION, LOOM, RESULT.

Registration:

The registration page helps in the registration of new employees with the inputs like Employee_Id, Name, Age, Gender, DOB, Address, Permanent_Address, Conatact_No, Email, Make_Admin. On submitting, the data entered is stored in a database named as “Loom” in a table named as “reg”.

Loom:

In this page, LOOM_No and EMP Id is entered. On submitting, It is checked if the entered loom is active or not then a loom management page is opened which has the inputs like Emp Id; Emp Name; Loom_No; Start Reading; End Reading; Type; Date; Shift.

If the loom is active, the user is redirected to the loom management page to stop the loom i.e. only end reading is to be entered the rest of the inputs are automatically fetched from the database named as “Loom” and a table named as “tmp”. On submitting, end reading is updated in the temporary table “tmp” and the production table named as “loomtable” is also updated along with the “reg” table. After the production data is entered in all the required tables the temporary data is deleted and the loom is stopped.

If the loom is inactive, the user is redirected to the loom management page to start the loom i.e. only Start Reading and Type (type of cloth) is to be entered and there is no option to enter the end reading. The rest of the inputs are automatically filled from the database according to the EMP Id entered before. Date is automatically generated. Day or night Shift is also automated as per the time. On submitting the data is saved in the “tmp” table in “Loom” database.

Result:

It contains three inputs namely EMP ID, Type (type of cloth) and LOOM_No.

If only EMP Id is entered, on submitting the details of the employee with that employee id is shown in a tabular form also showing the production. This data is fetched from the “reg” table in the database “Loom”.

If only Type is entered, on submitting the production of that cloth type is shown in a tabular form in ascending order of the loom number along with the total production. This data is fetched from the “loomtable” table in the database “Loom”.

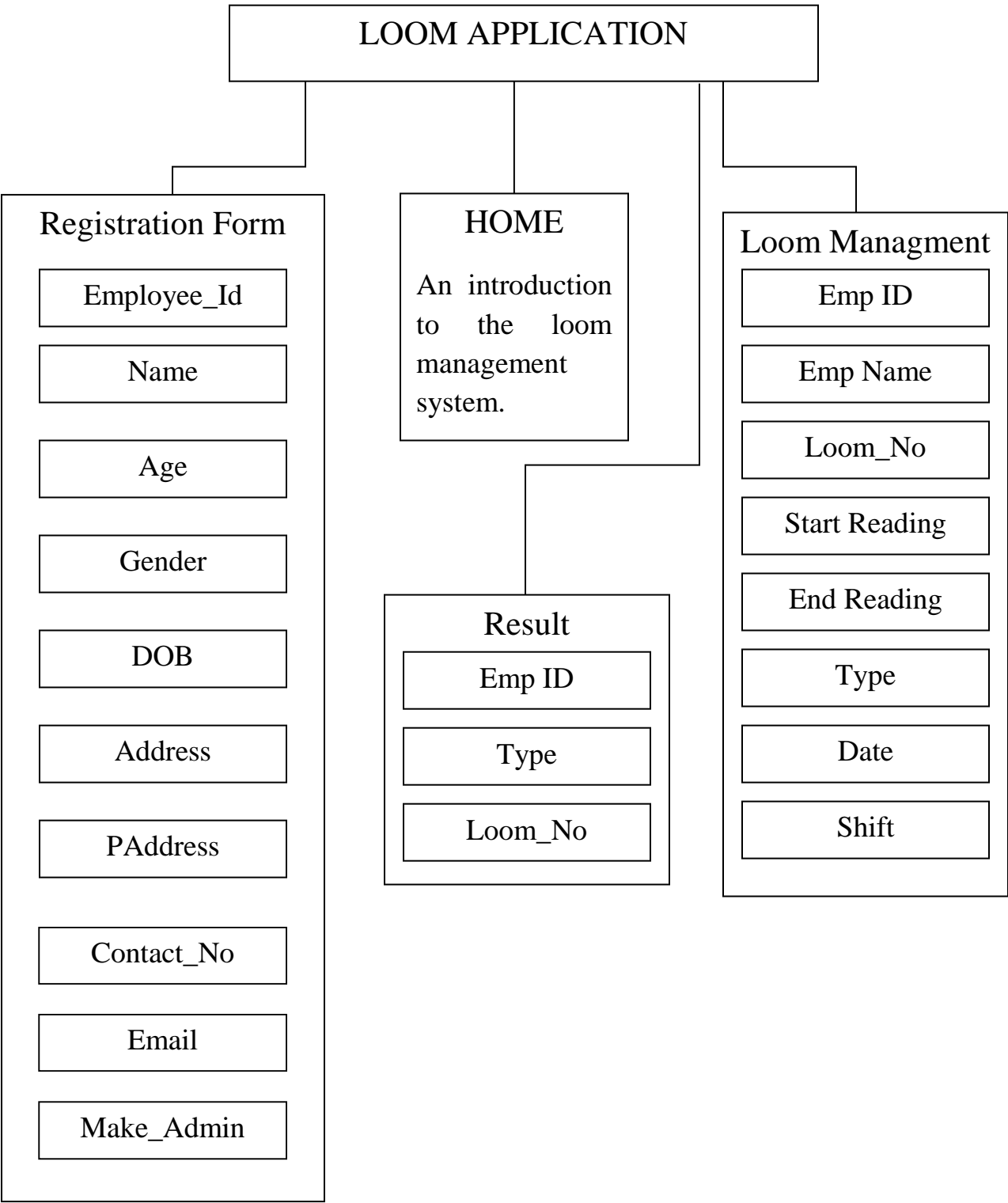
If only LOOM_No is entered, on submitting the total production of that loom is shown in a tabular form on the basis of type of cloth and shift along with the total production. This data is fetched from the “loomtable” table in the database “Loom”.

If any two of the three inputs are entered, both the results are shown.

If all three inputs are entered, all the results are shown.

Logout:

On clicking LOGOUT, the user is redirected to the LOGIN page and the rest of the pages become inaccessible.



Loom WEB Application:

The project has been prepared by the use of three platform:

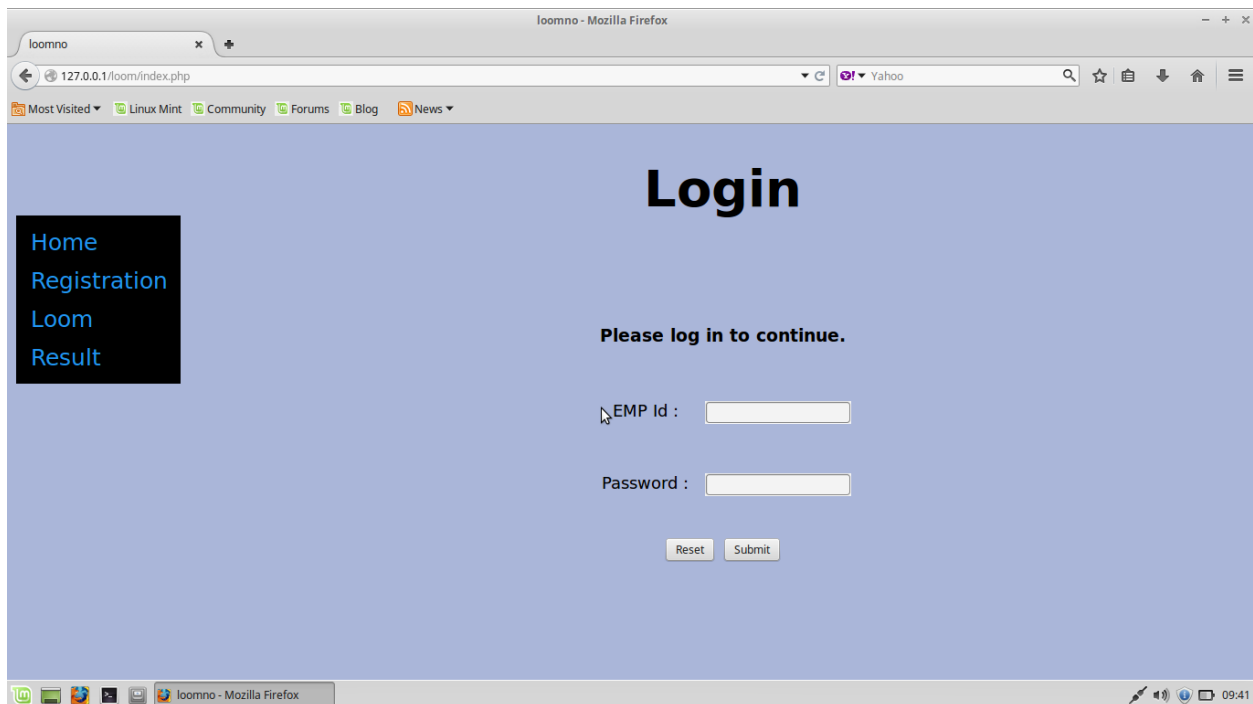
The front end has been prepared by the use of HTML. The front end has been designed by CSS to give the application a unique and attractive look.

The back end has been prepared by MySQL database. The name of the database is “Loom” and the three tables has been created as “reg”, “tmp”, “loomtable”.

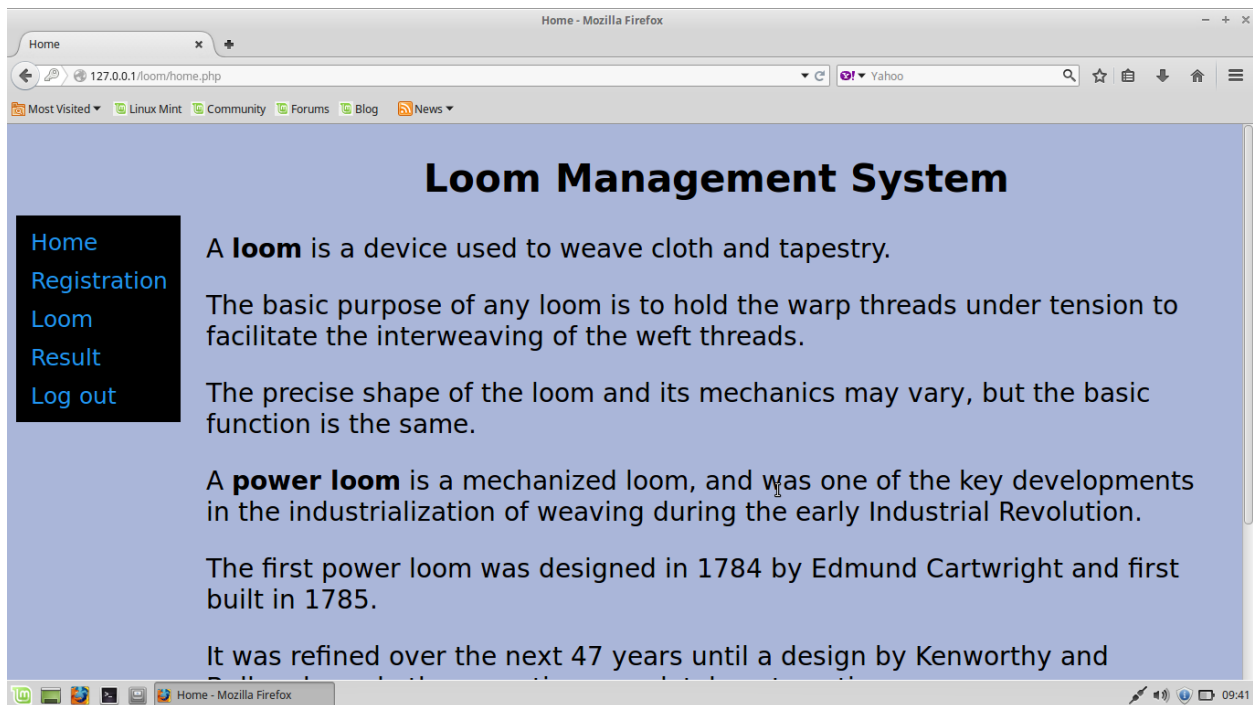
The connection between backend and frontend is done by using PHP which is one of the best platform to send the data to the database and receive data from the database.

We have to search 127.0.0.1 which is an address of loopBack Abapter through we can access the desired application.

Login is required:



This is the home page of the application where you can find the way to:



Registration form – where you can fill the new record for the database of the loom.

127.0.0.1 / localhost / Loo... x reg

127.0.0.1/loom/register.php

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Registration Form

Home
Registration
Loom
Result
Log out

Employee_Id:
Enter id

Name:
Enter Name

Age:
Enter Age

Gender:
☒ Male
 ☐ Female
 ☐ Other

DOB:

Address:

reg - Mozilla Firefox 11:52

127.0.0.1 / localhost / Loo... x reg

127.0.0.1/loom/register.php

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Home
Registration
Loom
Result
Log out

DOB:

Address:

Permanent_Address:

Contact_No:

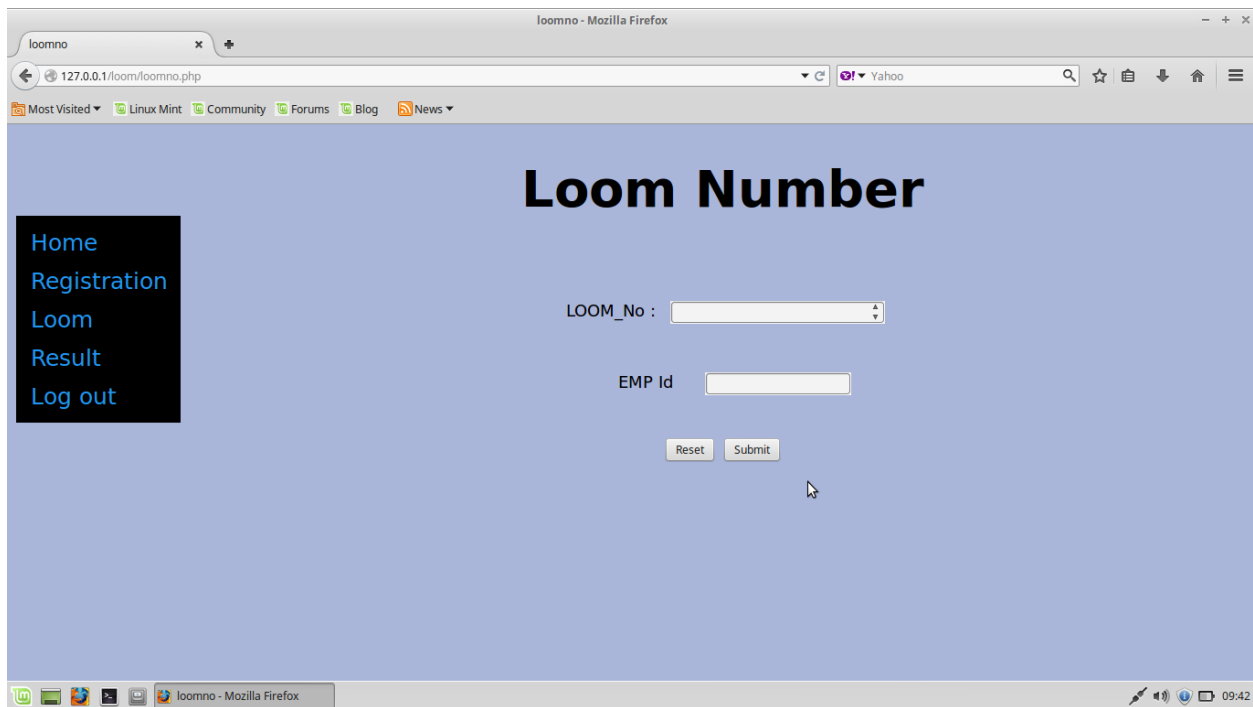
Email:

Make_Admin:
☒ No
 ☐ Yes
 Set password

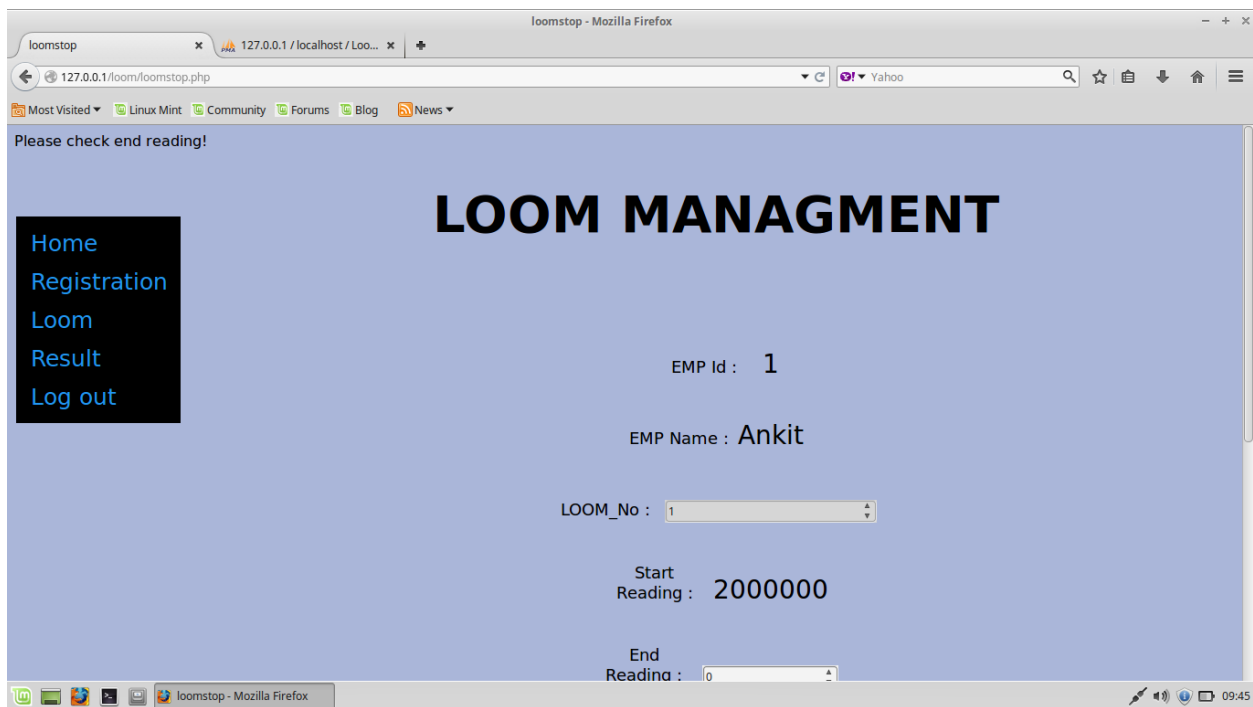
Submit

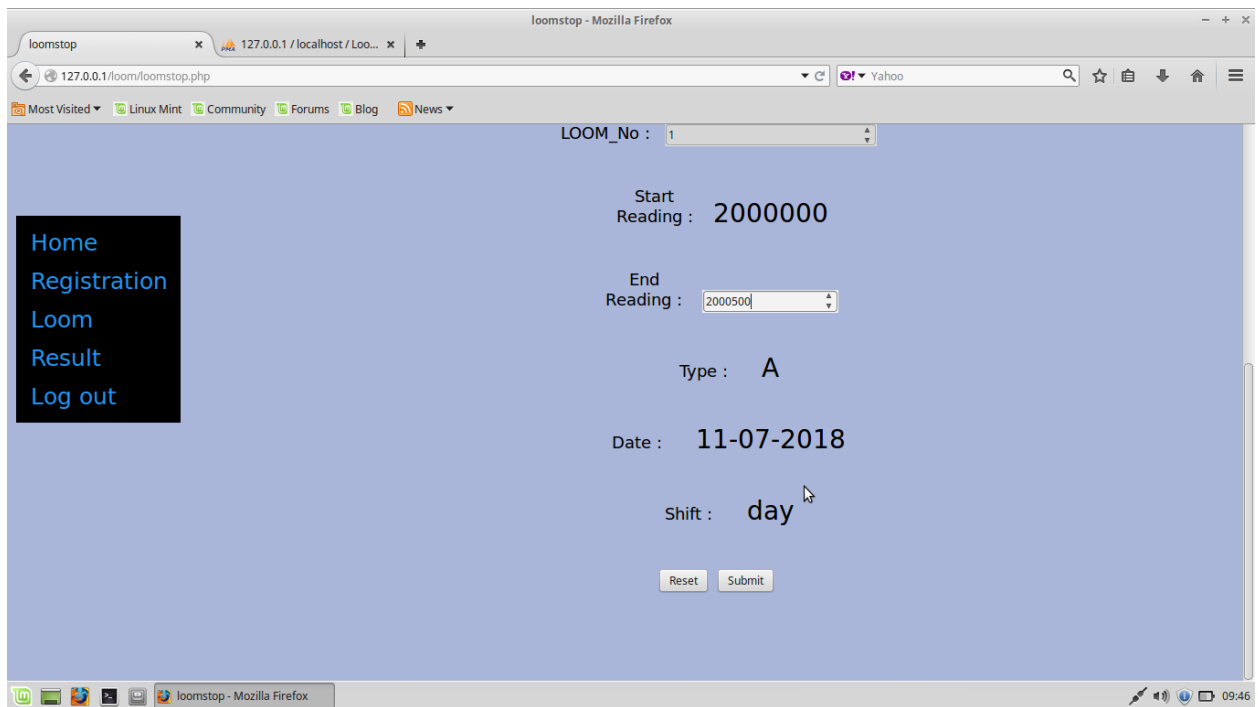
reg - Mozilla Firefox 11:52

Loom management – where we can take the record to the loom form to check whether the loom is active or not.

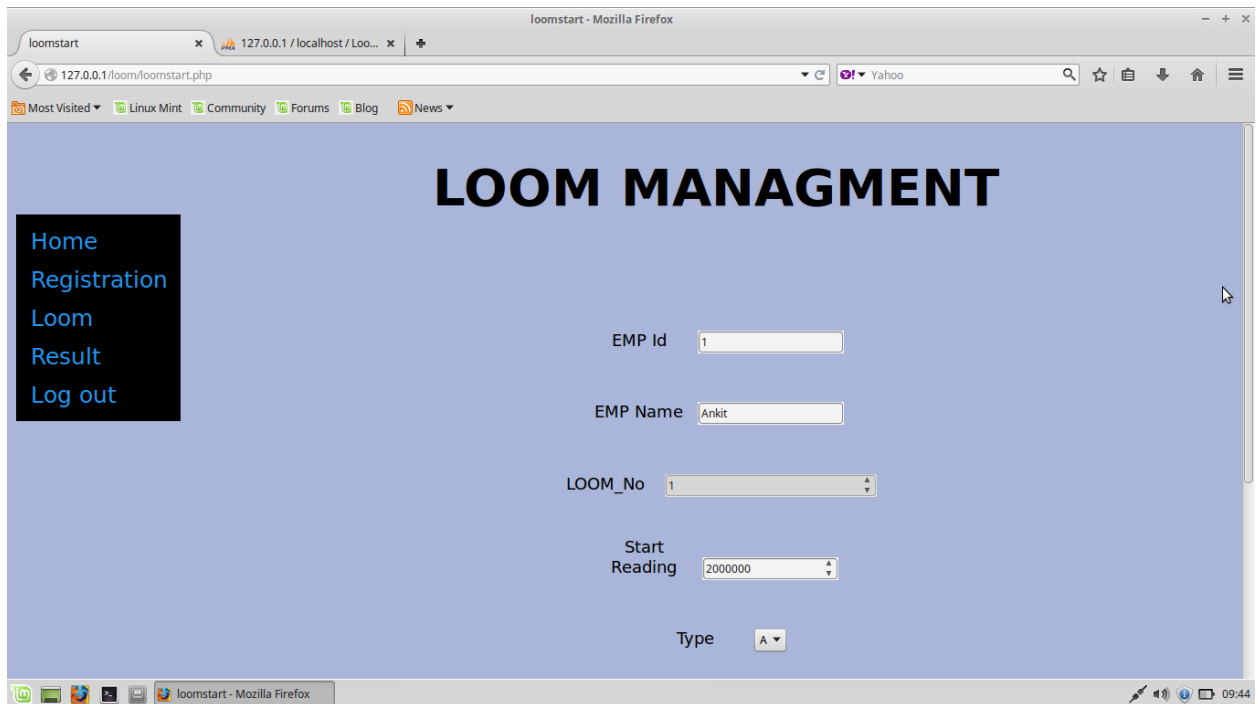


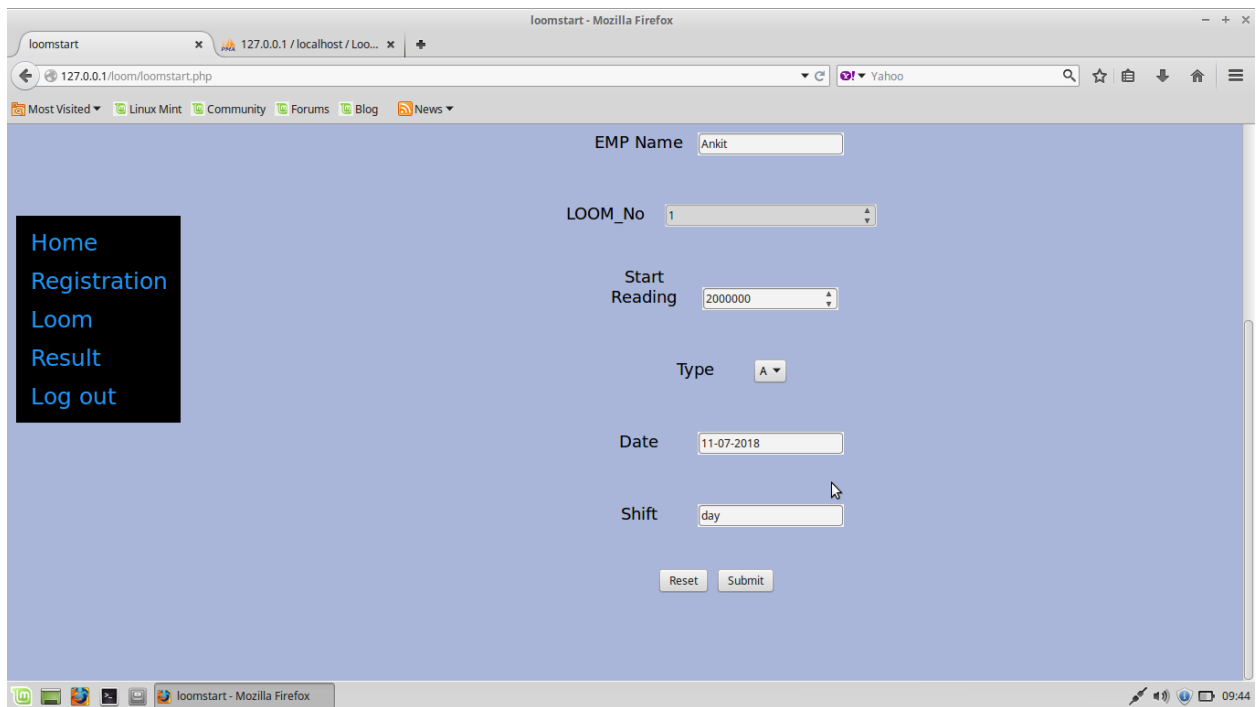
When the loom is in the active state.



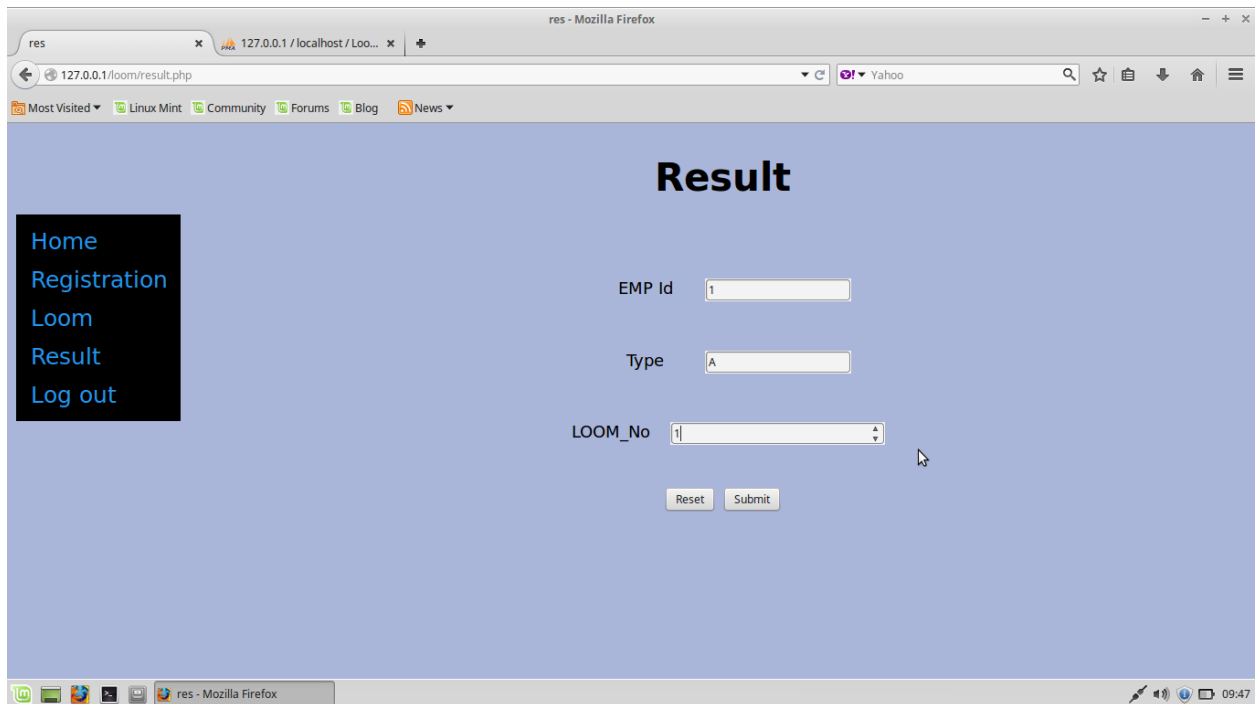


When the loom is inactive.





Result– where you can see the data fetched from the database.



Home - Mozilla Firefox

127.0.0.1 / localhost / Loo... x

127.0.0.1/loom/res.php

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Details of EMP Id: 1

Name	Age	Gender	DOB	Address	Permanent Address	Contact	Email	Production
Ankit	20	male	17/12/1998	Piska More	Piska More	9852388862	ankit532n@gmail.com	1875923

Home
Registration
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Result
Log out

Production of cloth type: A

Loom_no	Production
1	1997923
2	
3	
4	40
5	13377
6	2000
7	
8	5411
9	100
10	800

Total Production: 2019651

Production of Loom_no: 1

A	B	C	Total Production	Day	Night
1997923	4679	1125	2003727	10500	1989900

Home - Mozilla Firefox 09:48

Database:

Registration table named as “reg”: The data of the employees are stored in this table.

127.0.0.1 / localhost / Loom / reg | phpMyAdmin 4.8.1 - Mozilla Firefox

127.0.0.1/phpmyadmin/sql.php?server=1&db=Loom&table=reg&pos=0

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phpMyAdmin

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- New
- information_schema
- Loom
 - New
 - loomtable
 - reg
 - tmp
- mysql
- performance_schema

Server: localhost > Database: Loom > Table: reg

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total, Query took 0.0004 seconds.)

SELECT * FROM `reg`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all Number of rows: 25 Filter rows: Search this table

+ Options

name	age	gender	dob	address	paddress	contact	email	empid	production	admin	password
Ankit	20	male	17/12/1998	Piska More	Piska More	9852388862	ankit532n@gmail.com	1	1875923	1	\$2y\$10\$e9hW4GGkqgL5w8eMBvKED.EagF7MBEc6CLfz4jyTOZ8...
Aman	21	male	13/2/1997	Piska More	Piska More	8296538852	amana345@gmail.com	2	123456	NULL	NULL
Avinash	21	male	1/2/1997	Piska More	Piska More	9988776655	avinash@gmail.com	3	12317	1	\$2y\$10\$UnX.IHUm1fa4jMa5O4o1xOswOzt1jHdjG9yjiOuqQRb...

Show all Number of rows: 25 Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Console

127.0.0.1 / localhost / Loom / ... 11:53

127.0.0.1 / localhost / Loom / reg | phpMyAdmin 4.8.1 - Mozilla Firefox

127.0.0.1/phpmyadmin/sql.php?server=1&db=Loom&table=reg&pos=0

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phpMyAdmin

Recent Favorites

- New
- information_schema
- Loom
 - New
 - loomtable
 - reg
 - tmp
- mysql
- performance_schema

Server: localhost > Database: Loom > Table: reg

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Query took 0.0004 seconds.)

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Number of rows: 25 Filter rows: Search this table

address	paddress	contact	email	empid	production	admin	password
1998 Piska More	Piska More	9852388862	ankit532n@gmail.com	1	1875923	1	\$2y\$10\$e9hW4GGkqgL5w8eMBvKED.EagF7MBEc6CLfz4jyTOZ8...
997 Piska More	Piska More	8296538852	amana345@gmail.com	2	123456	NULL	NULL
97 Piska More	Piska More	9988776655	avinash@gmail.com	3	12317	1	\$2y\$10\$UnX.IHUm1fa4jMa5O4o1xOswOzt1jHdjG9yjiOuqQRb...

Number of rows: 25 Filter rows: Search this table

Export Display chart Create view

Console

127.0.0.1 / localhost / Loom / ... 11:53

Temporary table named as “tmp”: the data of the running looms is stored temporarily while loom machine is active.

127.0.0.1 / localhost / Loom / tmp | phpMyAdmin 4.8.1 - Mozilla Firefox

127.0.0.1/phpmyadmin/sql.php?server=1&db=Loom&table=tmp&pos=0

Server: localhost > Database: Loom > Table: tmp

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 3 (4 total. Query took 0.0012 seconds.)

SELECT * FROM `tmp`

Number of rows: 25 Filter rows: Search this table

empid	empname	loomno	sread	eread	type	date	shift
12	Avinash	3	200		B	27/6/2018	night
1234	Ankit	111	11		A	04-07-2018	night
3	Avinash	5	13000		A	06-07-2018	day

Production table named as “loomtable”: The data of the production of looms in terms of cloth type(A/B/C) and shift(day/night) is stored in this table after the loom has been stopped.

127.0.0.1 / localhost / Loom / loomtable | phpMyAdmin 4.8.1 - Mozilla Firefox

127.0.0.1/phpmyadmin/sql.php?server=1&db=Loom&table=loomtable&pos=0

Server: localhost > Database: Loom > Table: loomtable

Number of rows: 25 Filter rows: Search this table

loomno	A	B	C	production	day	night	lastread
1	1997923	4679	1125	2003727	10500	1989900	2000500
2		10355	5993	16348	0	9998	9999
3			22	28	0	0	NULL
4	40	49	12608	12697	527	12170	200
5	13377	266	1090	14733	12877	500	13000
6	2000	321	8001	10322	2000	0	NULL
7		527		527	0	0	NULL
8	5411			5411	0	0	NULL
9	100			100	0	100	200
10	800			800	0	0	NULL

Codes:

Code for login page:

index.php:

```
<?php
```

```
session_start();
```

```
session_unset();
```

```
session_destroy();
```

```
session_start();
```

```
$server= "127.0.0.1";
```

```
$dbuser= "root";
```

```
$dbpass= "devilmaycry";
```

```
$db= "Loom";
```

```
$conn= new mysqli($server,$dbuser,$dbpass,$db);
```

```
$pempid= $_POST['empid'];
```

```
$ppwd= $_POST['pwd'];
```

```
$pass= password_hash($ppwd, PASSWORD_DEFAULT);
```

```
echo $_SESSION['messagelogin'];
```

```
$sql="SELECT * FROM reg WHERE (admin='1' && empid=$pempid)";
```

```

$res=$conn->query($sql);

if(isset($pempid,$ppwd)){
    if($res->num_rows>0){

        $row=$res->fetch_assoc();

        if($pempid==$row['empid'] &&
password_verify($ppwd,$row['password'])){

            $_SESSION['sessionid']=$row['empid'];
            //$_SESSION['messagelogin']='Logged in!';

            header("Location: home.php");
        }
        }else{
            $_SESSION['messagelogin']='Invalid Credentials!';
            header("Location: index.php");
        }
    }
?>

<html lang="en" >

<head>

    <meta charset="UTF-8">

    <title>loomno</title>

```

<link rel="stylesheet" href="loomnostyle.css">

</head>

<body>

<div class="sidenav">

Home

Registration

Loom

Result

</div>

<div class="main">

<h1> Login </h1>

<h6>Please log in to continue.</h6>

<form method="POST" action="index.php">

<div class="userinput">

<label> EMP Id : </label>

<input type="text" name="empid" required>

</div>

<div class="userinput">

<label> Password : </label>

<input type="password" name="pwd" required>

</div>

```
<div style="text-align:center">

<input type="reset" name="reset">

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

</div><br><br>

</form>


</div>

</div>

</div>

</body>

</html>
```

Code for home page:

home.php:

```
<?php

session_start();

if (!isset($_SESSION['sessionid'])) {

    header("Location: index.php");

}

echo $_SESSION['messagelogin'];

$server= "127.0.0.1";
```



```
$bduser= "root";
```

```
$dbpass= "devilmaycry";
```

```
$db= "Loom";
```

```
$conn= new mysqli($server,$dbuser,$dbpass,$db);
```

```
?>
```

```
<html lang="en" >
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>Home</title>
```

```
<link rel="stylesheet" href="homestyle.css">
```

```
</head>
```

```
<body>
```

```
<div class="sidenav">
```

```
<a href=home.php>Home</a>
```

```
<a href=register.php>Registration</a>
```

```
<a href=loomno.php>Loom</a>
```

```
<a href=result.php>Result</a>
```

```
<a href=index.php>Log out</a>
```

```
</div>
```

```
<div class="main">
```

```
<h2>Loom Management System</h2>
```

```
<p>A <b>loom</b> is a device used to weave cloth and tapestry.</p>
```

```
<p>The basic purpose of any loom is to hold the warp threads under tension to facilitate the interweaving of the weft threads. </p>
```

```
<p>The precise shape of the loom and its mechanics may vary, but the basic function is the same. </p>
```

```
<p>A <b>power loom</b> is a mechanized loom, and was one of the key developments in the industrialization of weaving during the early Industrial Revolution.</p>
```

```
<p>The first power loom was designed in 1784 by Edmund Cartwright and first built in 1785.</p>
```

```
<p>It was refined over the next 47 years until a design by Kenworthy and Bullough made the operation completely automatic.</p>
```

```
<p>By 1850 there was 260,000 power looms in operation in England.</p>
```

```
<p>Fifty years later came the Northrop loom which replenished the shuttle when it was empty. This replaced the Lancashire loom.</p>
```

```
</div>
```

```
</body>
```

```
</html>
```

Code for employee registration page:

reg.php:

```
<?php
```

```
session_start();
```

```
if (!isset($_SESSION['sessionid'])){\n
```

```
header("Location: index.php");  
}  
  
$server= "127.0.0.1";  
$bduser= "root";  
$dbpass= "devilmaycry";  
$db= "Loom";  
  
$conn= new mysqli($server,$dbuser,$dbpass,$db);  
if($conn->connect_error){  
    die("Connection failed!" . $conn->connect_error);  
}  
  
else  
    {        echo "Connection success!";  
    }  
  
$pname= test_input($_POST['name']);  
$page= test_input($_POST['age']);  
$pgender= $_POST['gender'];  
$pdob= test_input($_POST['dob']);  
$paddress= test_input($_POST['address']);  
$ppaddress= test_input($_POST['paddress']);  
$pmobile= test_input($_POST['mobile']);  
$pemail= test_input($_POST['email']);  
$pempid= test_input($_POST['empid']);  
$padmin= $_POST['admin'];
```

```
$ppwd= password_hash($_POST['pwd'], PASSWORD_DEFAULT);
```

```
function test_input($data){  
    $data = trim($data);  
    $data = stripslashes($data);  
    $data = htmlspecialchars($data);  
    return $data;  
}
```

```
$sql="INSERT INTO  
reg(name,age,gender,dob,address,paddress,contact,email,empid,admin,password)  
VALUES('$pname','$page','$pgender','$pdob','$paddress','$ppaddress','$pmobile','$pemail','$pempid','$padmin','$ppwd')";  
if ($conn->query($sql)){  
    echo "Data updated";  
} else {  
    echo "ERROR: " . $sql . $conn->error;  
}  
?>
```

register.php:

```
<?php
```

```
session_start();
```

```
if (!isset($_SESSION['sessionid'])) {
```

```
header("Location: index.php");  
}
```

```
$server= "127.0.0.1";
```

```
$bduser= "root";
```

```
$dbpass= "devilmaycry";
```

```
$db= "Loom";
```

```
$conn= new mysqli($server,$dbuser,$dbpass,$db);
```

```
?>
```

```
<html lang="en" >
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>reg</title>
```

```
<link rel="stylesheet" href="regstyle.css">
```

```
</head>
```

```
<body>
```

```
<div class="sidenav">
```

```
<a href=home.php>Home</a>
```

</div>

<div class="main">

<h2>Registration Form</h2>

<form method="POST" action="reg.php">

<h6>Employee_Id:</h6>

<div class="frm"> <input id="empid" type="text" placeholder="Enter id" name="empid" required>

</div>

<h6>Name:</h6>

<div class="frm"> <input id="name" type="text" placeholder="Enter Name" name="name" required>

</div>

<h6>Age:</h6>

<div class="frm"> <input id="age" type="text" placeholder="Enter Age" name="age" required>

</div>

<h6>Gender:</h6>

<div class="radiotext">

<input class="radio" type="radio" name="gender" value="male" checked> Male

<input class="radio" type="radio" name="gender" value="female"> Female

<input class="radio" type="radio" name="gender" value="other"> Other

</div>

<h6>DOB:</h6>

<div class="frm"> <input id="dob" type="date" name="dob" required>

</div>

<h6>Address:</h6>

<div class="frm"> <input id="address" type="text" placeholder="Enter Address" name="address" required>

</div>

<h6>Permanent_Address:</h6>

<div class="frm"> <input id="paddress" type="text" placeholder="Enter Permanent Address" name="paddress" required>

</div>

<h6>Contact_No:</h6>

<div class="frm"> <input id="mobilenno" type="text" placeholder="Enter Mobile no " name="mobile" required>

</div>

<h6>Email:</h6>

<div class="frm"> <input id="email" type="text" placeholder="Enter Email Id" name="email" required>

</div>

<h6>Make_Admin:</h6>

<div class="radiotext">

<input class="radio" type="radio" name="admin" value="0" checked> No

<input class="radio" type="radio" name="admin" value="1"> Yes <input id="pwd" type="password" placeholder="Set password" name="pwd">

</div>

<div class="frm"> <input id="button" input type="submit" value="Submit">

</div>

</form>

</div>

</body>

</html>

Code for loom management page:

loomno.php:

```
<?php
```

```
session_start();
```

```
if (!isset($_SESSION['sessionid'])) {
```

```
    header("Location: index.php");
```

```
}
```

```
$server= "127.0.0.1";
```

```
$bduser= "root";
```

```
$dbpass= "devilmaycry";
```

```
$db= "Loom";
```

```
echo $_SESSION['message'];
```

```
$conn= new mysqli($server,$dbuser,$dbpass,$db);
```

```
$ploomno= $_POST['loomno'];
```



```
$pempid= $_POST['empid'];  
$_SESSION['loomno']=$ploomno;  
$_SESSION['empid']=$pempid;  
$sql="SELECT * FROM tmp WHERE loomno='$ploomno'";
```

```
$res=$conn->query($sql);
```

```
if(isset($ploomno)){  
    if($res->num_rows>0){  
        header("Location: loomstop.php");  
  
    }else{  
        echo "Loom Inactive";  
        header("Location: loomstart.php");  
    }  
}  
?>
```

```
<html lang="en" >
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>loomno</title>
```

```
<link rel="stylesheet" href="loomnostyle.css">
```

</head>

<body>

<div class="sidenav">

Home

Registration

Loom

Result

Log out

</div>

<div class="main">

<h1> Loom Number </h1>

<form method="POST" action="loomno.php">

<div class="userinput">

<label> LOOM_No : </label>

<input id="A" type="number" name="loomno" required>

</div>

<div class="userinput">

<label> EMP Id </label>

<input type="text" name="empid" required>

</div>

```
<div style="text-align:center">  
  <input type="reset" name="reset">  
  <input type="submit" name="submit" value="Submit">  
</div><br><br>
```

```
</form>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

loomstart.php:

```
<?php
```

```
session_start();
```

```
if (!isset($_SESSION['sessionid'])) {
```

```
    header("Location: index.php");
```

```
}
```

```
$server= "127.0.0.1";
```

```
$bduser= "root";
```

```
$dbpass= "devilmaycry";
```

```
$db= "Loom";
```

```
$conn= new mysqli($server,$dbuser,$dbpass,$db);
```

```
$pempid= $_SESSION['empid'];
```

```
$pempname= $_POST['empname'];
```

```
$ploomno= $_SESSION['loomno'];
```

```
$psread= $_POST['sread'];
```

```
/*$peread= $_POST['eread'];*/
```

```
$ptype= $_POST['type'];
```

```
$pdate= $_POST['date'];
```

```
$pshift= $_POST['shift'];
```

```
if(isset($pempid)){
```

```
    $sql="SELECT name FROM reg WHERE empid=$pempid";
```

```
    $res=$conn->query($sql);
```

```
    if($res->num_rows>0){
```

```
        $row=$res->fetch_assoc();
```

```
        $name=$row['name'];
```

```
    }
```

```
}
```

```
if(isset($pempid)){
```

```
    $sqllast="SELECT lastread FROM loomtable WHERE loomno=$ploomno";
```

```
    $res=$conn->query($sqllast);
```

```
    if($res->num_rows>0){
```

```
        $row=$res->fetch_assoc();
```

```
        $lastread=$row['lastread'];
```

```

    }
}

if(date("H")<12){
    $shift="day";
}
else {
    $shift="night";
}

if(isset($pempid,$pempname,$ploomno,$psread,$ptype,$pdate,$pshift)){

$sql="INSERT INTO tmp(empid,empname,loomno,sread,type,date,shift)
VALUES('$pempid','$pempname','$ploomno','$psread','$ptype','$pdate','$pshift')";

if ($conn->query($sql)){
    echo "Data updated";

    $_SESSION['message']='LOOM '. $ploomno . ' STARTED.';

    header("Location: loomno.php");

} else {
    echo "ERROR: " . $sql . $conn->error;
}
}

?>

```

```
<html lang="en" >
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>loomstart</title>
```

```
<link rel="stylesheet" href="loomstartstyle.css">
```

```
</head>
```

```
<body>
```

```
<div class="sidenav">
```

```
<a href=home.php>Home</a>
```

```
<a href=register.php>Registration</a>
```

```
<a href=loomno.php>Loom</a>
```

```
<a href=result.php>Result</a>
```

```
<a href=index.php>Log out</a>
```

```
</div>
```

```
<div class="main">
```

```
<h1> LOOM MANAGMENT </h1><BR>
```

```
<form method="POST" action="loomstart.php">
```

```
<br><div class="userinput">
```

<label> EMP Id </label>

<input type="text" name="empid" value="<?php echo \$pempid; ?>" required>

</div>

<div class="userinput">

<label> EMP Name </label>

<input type="text" name="empname" value="<?php echo \$name; ?>" required>

</div>

<div class="userinput">

<label> LOOM_No </label>

<input id="A" type="number" name="loomno" value="<?php echo \$ploomno; ?>" readonly>

</div>

<div class="userinput">

<label> Start Reading </label>

<input type="number" name="sread" value="<?php echo \$lastread; ?>" required>

</div>

<div class="userinput">

<label> Type </label>

<select name="type" required>

<option value="A">A</option>

<option value="B">B</option>

<option value="C">C</option>

</select>

</div>

<div class="userinput">

<label>Date</label>

```
<input type="date" name="date" value="<?php echo date("d-m-Y"); ?>" required>
</div>
<div class="userinput">
    <label>Shift</label>
    <input type="text" name="shift" value="<?php echo $shift; ?>" required>
</div>
<div style="text-align:center">
    <input type="reset" name="reset">
    <input type="submit" name="submit" value="Submit">
</div><br><br>

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

</body>
</html>
```

loomstop.php:

```
<?php
session_start();

if (!isset($_SESSION['sessionid'])) {
```



```

header("Location: index.php");
}

$server= "127.0.0.1";

$dbuser= "root";

$dbpass= "devilmaycry";

$db= "Loom";

$flag=0;

$conn= new mysqli($server,$dbuser,$dbpass,$db);

$ploomno= $_SESSION['loomno'];

$sql="SELECT * FROM tmp WHERE loomno='$ploomno'";

$res=$conn->query($sql);

if($res->num_rows>0){
    while($row=$res->fetch_assoc()){
        //echo "<br>". "Name:". $row['empid'] . $row['empname'] . $row['loomno'] .
        $row['sread'] . $row['eread'] . $row['type'] . $row['date'] . $row['shift'] . "<br>";

        $pempid= $row['empid'];

        $pempname= $row['empname'];

        $psread= $row['sread'];

        $ptype= $row['type'];

        $pdate= $row['date'];
    }
}

```

```

        $pshift= $row['shift'];

    }

}

$peread= $_POST['eread'];

if($peread<$psread){
    echo "Please check end reading!";
}
else
{
    if($peread!=0){
        $sql="UPDATE tmp SET eread=$peread WHERE loomno=$ploomno ";
        if ($conn->query($sql)){
            $flag=1;
            echo "Data updated!";
        }    else {
            $flag=0;
            echo "ERROR: " . $sql . $conn->error;
        }
    }
}

if($flag==1)
{
    $prod=$peread-$psread;

```

```

$type=$ptype;

$shift=$pshift;

$sql3="UPDATE loomtable SET production=production + $prod, $type= $type +
$prod,$shift=$shift + $prod,lastread=$peread WHERE loomno=$ploomno ";

if ($conn->query($sql3)){
echo "Updated Production!";
}

$sql4="UPDATE reg SET production=production + $prod WHERE empid=$pempid ";

if ($conn->query($sql4)){
echo "Updated Employee!";
echo $pempid;

        $sql5=" DELETE FROM tmp WHERE loomno=$ploomno ";
        if ($conn->query($sql5)){
            $_SESSION['message']='LOOM '. $ploomno . ' CLOSED.';
            //echo $_SESSION['message'];
            header("Location: loomno.php");
        }

    }else {
        echo "ERROR: " . $sql4 . $conn->error;
    }
}

```

```
}
```

```
?>
```

```
<html lang="en" >
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>loomstop</title>
```

```
<link rel="stylesheet" href="loomstopstyle.css">
```

```
</head>
```

```
<body>
```

```
<div class="sidenav">
```

```
<a href=home.php>Home</a>
```

```
<a href=register.php>Registration</a>
```

```
<a href=loomno.php>Loom</a>
```

```
<a href=result.php>Result</a>
```

```
<a href=index.php>Log out</a>
```

```
</div>
```

```
<div class="main">
```

```
<h1> LOOM MANAGMENT </h1><BR>
```

```
<form method="POST" action="loomstop.php">
```

```
<br><div class="userinput">
```

```
<label> EMP Id : </label>
```

```
<?php echo "$pempid"; ?>
```

```
</div>
```

```
<div class="userinput">
```

```
<label> EMP Name : </label>
```

```
<?php echo "$pempname"; ?>
```

```
</div>
```

```
<div class="userinput">
```

```
<label> LOOM_No : </label>
```

```
<input id="A" type="number" name="loomno" value="<?php echo $ploomno; ?>" readonly>
```

```
</div>
```

```
<div class="userinput">
```

```
<label> Start Reading : </label>
```

```
<?php echo "$psread"; ?>
```

```
</div>
```

```
<div class="userinput">
```

```
<label> End Reading : </label>
```

```
<input type="number" name="eread" value="0" >
```

```
</div>
```

```
<div class="userinput">
```

```
<label> Type : </label>
```

```
<?php echo "$ptype"; ?>
```

```
</div>
```

```
<div class="userinput">

    <label>Date : </label>

    <?php echo "$pdate"; ?>

</div>

<div class="userinput">

    <label>Shift : </label>

    <?php echo "$pshift"; ?>

</div>

<div style="text-align:center">

    <input type="reset" name="reset">

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

</div><br><br>

</form>

</div>

</div>

</div>

</body>

</html>
```

Code for result page:

res.php:

```
<?php
session_start();

if (!isset($_SESSION['sessionid'])) {
    header("Location: index.php");
}

$server= "127.0.0.1";
$dbuser= "root";
$dbpass= "devilmaycry";
$db= "Loom";

$conn= new mysqli($server,$dbuser,$dbpass,$db);

$pempid= test_input($_POST['empid']);
$type= test_input($_POST['type']);
$ploomno= test_input($_POST['loomno']);

function test_input($data){
    $data = trim($data);
    $data = stripslashes($data);
    $data = htmlspecialchars($data);
    return $data;
}
```

```

if(isset($pempid)){

    $sql="SELECT * FROM reg WHERE empid='$pempid' ";

    $res=$conn->query($sql);

    if($res->num_rows>0){

        echo '<div class="main">' . "<br>". "<b>Details of EMP Id: </b>".
        $pempid;

        echo '<table border=4>

                <tr>

                <th>Name</th>

                <th>Age</th>

                <th>Gender</th>

                <th>DOB</th>

                <th>Address</th>

                <th>Permanent Address</th>

                <th>Contact</th>

                <th>Email</th>

                <th>Production</th>

                </tr>';

        while($row=$res->fetch_assoc()){

            echo '

            <tr>

            <td>'.$row['name'].'</td>

            <td>'.$row["age"].'</td>

```



```

        <td>'.$row["gender"].'</td>
        <td>'.$row["dob"].'</td>
        <td>'.$row["address"].'</td>
        <td>'.$row["paddress"].'</td>
        <td>'.$row["contact"].'</td>
        <td>'.$row["email"].'</td>
        <td>'.$row["production"].'</td>
    </tr>';
}

    echo '</table>';

    echo '</div>';

}

else
{
    echo "No results found!";
}

}

if(isset($ptype)){

    $sql="SELECT loomno, $ptype FROM loomtable ";

    $res=$conn->query($sql);

    if($res->num_rows>0){

```

\$ptype;

```
echo '<div class="main">' . "<br>". "<b>Production of cloth type: </b>".
```

```
echo '<table border=4>
```

```
    <tr>
```

```
        <th>Loom_no</th>
```

```
        <th>Production</th>
```

```
    </tr>';
```

```
while($row=$res->fetch_assoc()){
```

```
    echo '
```

```
    <tr>
```

```
        <td>' . $row['loomno'] . '</td>
```

```
        <td>' . $row["$ptype"] . '</td>
```

```
    </tr>';
```

```
    $sumtype=$sumtype + $row["$ptype"];
```

```
}
```

```
echo '</table>';
```

```
echo " Total Production: " . $sumtype. "<br>";
```

```
echo '</div>';
```

```
}else{
```

```
    echo "No results found!";
```

```

} else {

    echo "enter data";

}

if(isset($ploomno)){

    $sql="SELECT * FROM loomtable WHERE loomno='$ploomno' ";

    $res=$conn->query($sql);

    if($res->num_rows>0){

        echo '<div class="main">' . "<br>". "<b>Production of Loom_no: </b>".

        $ploomno;

        echo '<table border=4>

        <tr>

        <th>A</th><th>B</th><th>C</th><th>Total

        Production</th><th>Day</th><th>Night</th>

        </tr>';

        while($row=$res->fetch_assoc()){

            echo '

            <tr>

            <td>' . $row['A'] . '</td>

            <td>' . $row['B'] . '</td>

```

```

        <td>'.$row['C'].'</td>
        <td>'.$row['production'].'</td>
        <td>'.$row['day'].'</td>
        <td>'.$row['night'].'</td>
    </tr>';
}

    echo '</table>';
    echo '</div>';
}
else
{
    echo "No results found!";
}
}
?>

<html lang="en" >
<head>
    <meta charset="UTF-8">
    <title>Home</title>
    <link rel="stylesheet" href="homestyle.css">
</head>
<body>
    <div class="sidenav">

```

```
<a href=home.php>Home</a>
<a href=register.php>Registration</a>
<a href=loomno.php>Loom</a>
<a href=result.php>Result</a>
<a href=index.php>Log out</a>
</div>
```

```
<div class="main">
</div>
</body>
</html>
```

result.php:

```
<?php
session_start();

if (!isset($_SESSION['sessionid'])) {
    header("Location: index.php");
}

$server= "127.0.0.1";
$dbuser= "root";
$dbpass= "devilmaycry";
$db= "Loom";
$conn= new mysqli($server,$dbuser,$dbpass,$db);
```

?>

<html lang="en" >

<head>

<meta charset="UTF-8">

<title>res</title>

<link rel="stylesheet" href="resstyle.css">

</head>

<body>

<div class="sidenav">

Home

Registration

Loom

Result

Log out

</div>

<div class="main">

<h2>Result</h2>

<form method="POST" action="res.php">

<div class="userinput">

<label> EMP Id </label>

<input type="text" name="empid">

</div>

<div class="userinput">

```
<label> Type </label>

<input type="text" name="type" placeholder="A/B/C">

</div>

<div class="userinput">

  <label> LOOM_No </label>

  <input id="A" type="number" name="loomno">

</div>

<div style="text-align:center">

  <input type="reset" name="reset">

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

</div><br><br>

</form>

</div>

</body>

</html>
```

CSS code for style:

All the pages have almost the same style as “homestyle.css”.

homestyle.css:

```
body {

  font-family: "Lato", sans-serif;

  background-color: #AAB6D9;
```

```
}
```

```
h2{
```

```
    text-align: center;
```

```
}
```

```
.sidenav {
```

```
    width: 180px;
```

```
    position: fixed;
```

```
    z-index: 1;
```

```
    top: 100px;
```

```
    left: 10px;
```

```
    background: black;
```

```
    overflow-x: hidden;
```

```
    padding: 8px 0;
```

```
}
```

```
.sidenav a {
```

```
    padding: 6px 8px 6px 16px;
```

```
    text-decoration: none;
```

```
    font-size: 25px;
```

```
    color: #2196F3;
```

```
    display: block;
```

```
}
```

```
.sidenav a:hover {
```

```
    color: #064579;
```



```
}  
  
.main {  
  
    margin-left: 200px;  
  
    font-size: 28px;  
  
    padding: 0px 10px;  
  
}
```

Security:

Data validation:

Code for data validation:

```
function test_input($data){  
  
    $data = trim($data);  
  
    $data = stripslashes($data);  
  
    $data = htmlspecialchars($data);  
  
    return $data;  
  
}
```

The function “test_input(\$data)” is used to establish data validation.

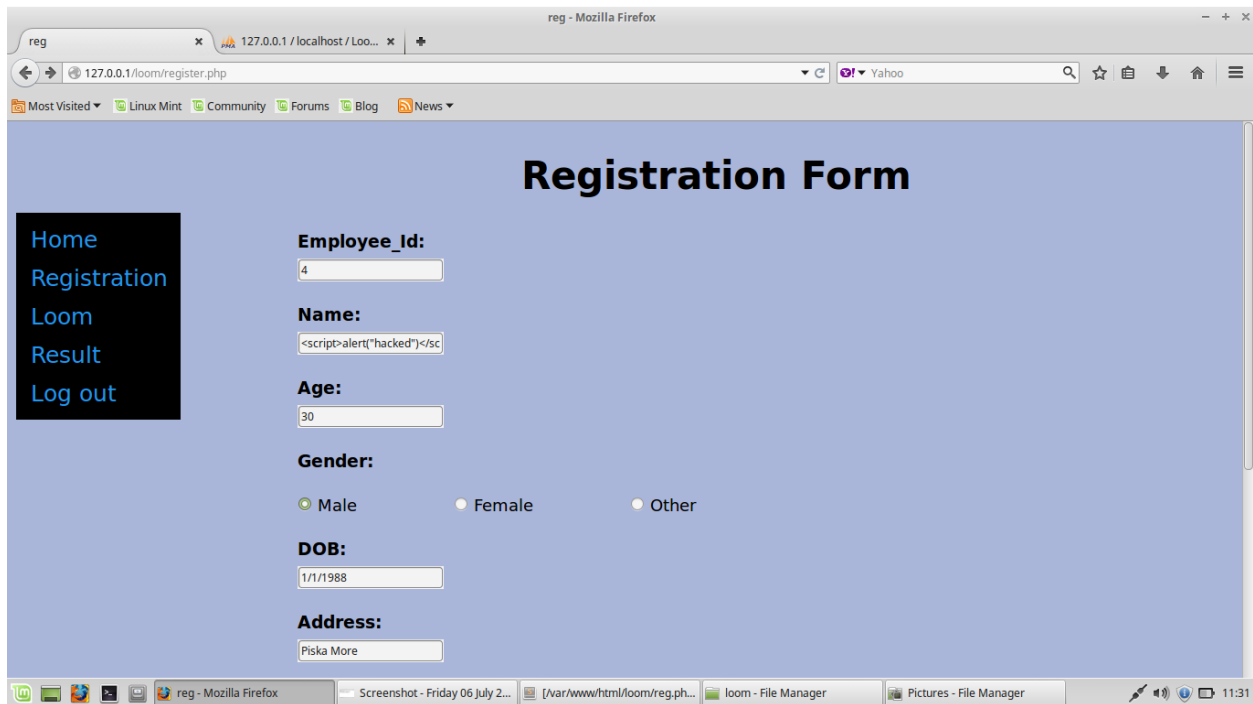
The function “trim(\$data)” removes the spaces.

The function “stripslashes(\$data)” strips off slashes.

The function “htmlspecialchars(\$data)” replaces html characters such as <, >, (,), ' , ” .

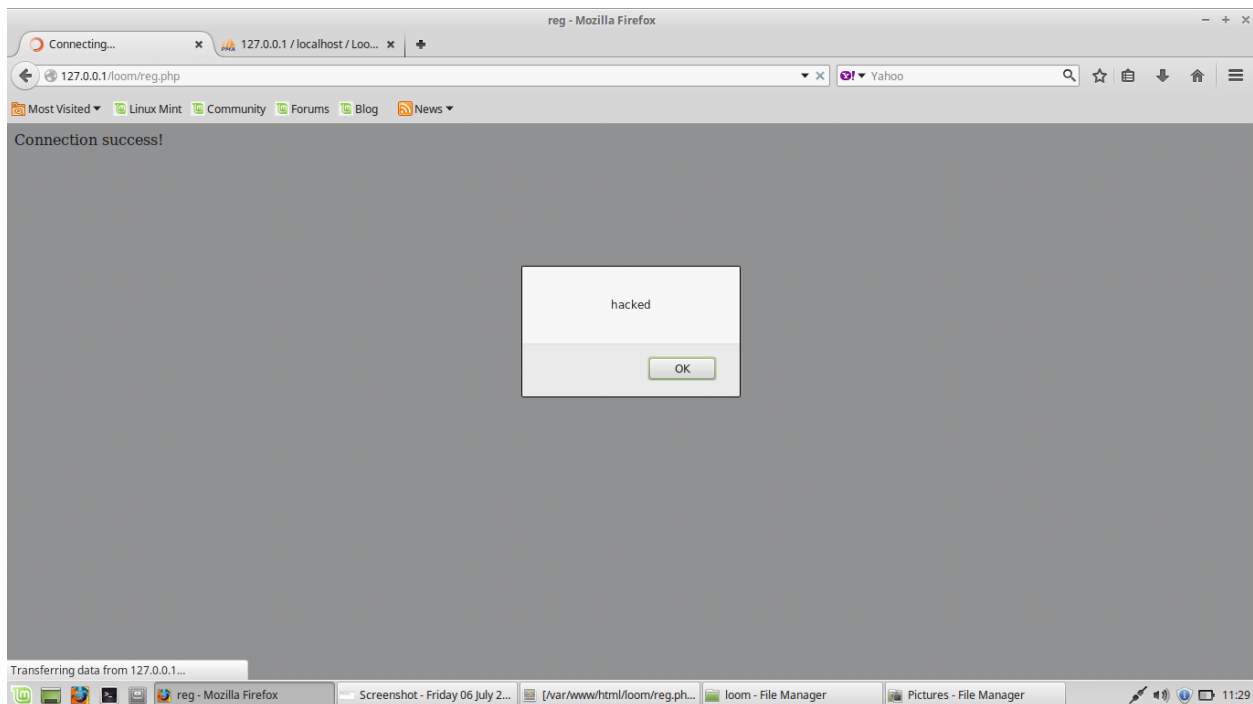
For example : “<” is replaced by “<” and “>” is replaced by “>” so that it does not execute any script if present.

If data validation is not done:



The screenshot shows a web browser window titled "reg - Mozilla Firefox". The address bar displays "127.0.0.1/loom/register.php". The page has a blue background and a navigation menu on the left with links: Home, Registration, Loom, Result, and Log out. The main content area is titled "Registration Form" and contains several input fields: "Employee_Id:" with the value "4", "Name:" with the value "<script>alert('hacked')</script>", "Age:" with the value "30", "Gender:" with radio buttons for "Male", "Female", and "Other", "DOB:" with the value "1/1/1988", and "Address:" with the value "Piska More". The browser's taskbar at the bottom shows several open applications, including "reg - Mozilla Firefox", "Screenshot - Friday 06 July 2...", "[var/www/html/loom/reg.ph...", "loom - File Manager", and "Pictures - File Manager".

Any one can run a script to attack the system as shown below a simple script is run in the name section and an alert message showing “hacked” opens up.



And the database gets affected as the script can be run whenever a query is executed.

127.0.0.1 / localhost / Loom / reg | phpMyAdmin 4.8.1 - Mozilla Firefox

127.0.0.1/phpmyadmin/sql.php?server=1&db=Loom&table=reg&pos=0

Server: localhost > Database: Loom > Table: reg

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 3 (4 total, Query took 0.0013 seconds.)

SELECT * FROM `reg`

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

name	age	gender	dob	address	paddress	contact	email	empid	production	admin	password
Ankit	20	male	17/12/1998	Piska More	Piska More	9852388862	ankit532n@gmail.com	1	1875423	1	1234
Aman	21	male	13/2/1997	Piska More	Piska More	8296538852	amana345@gmail.com	2	123456	NULL	NULL
Avinash	21	male	1/2/1997	Piska More	Piska More	9988776655	avinash@gmail.com	3	12317	1	4321
<script>alert("hacke 30 male 1/1/1988 Piska More Piska More 9988776655 abc@gmail.com 4 0 NULL NULL											

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

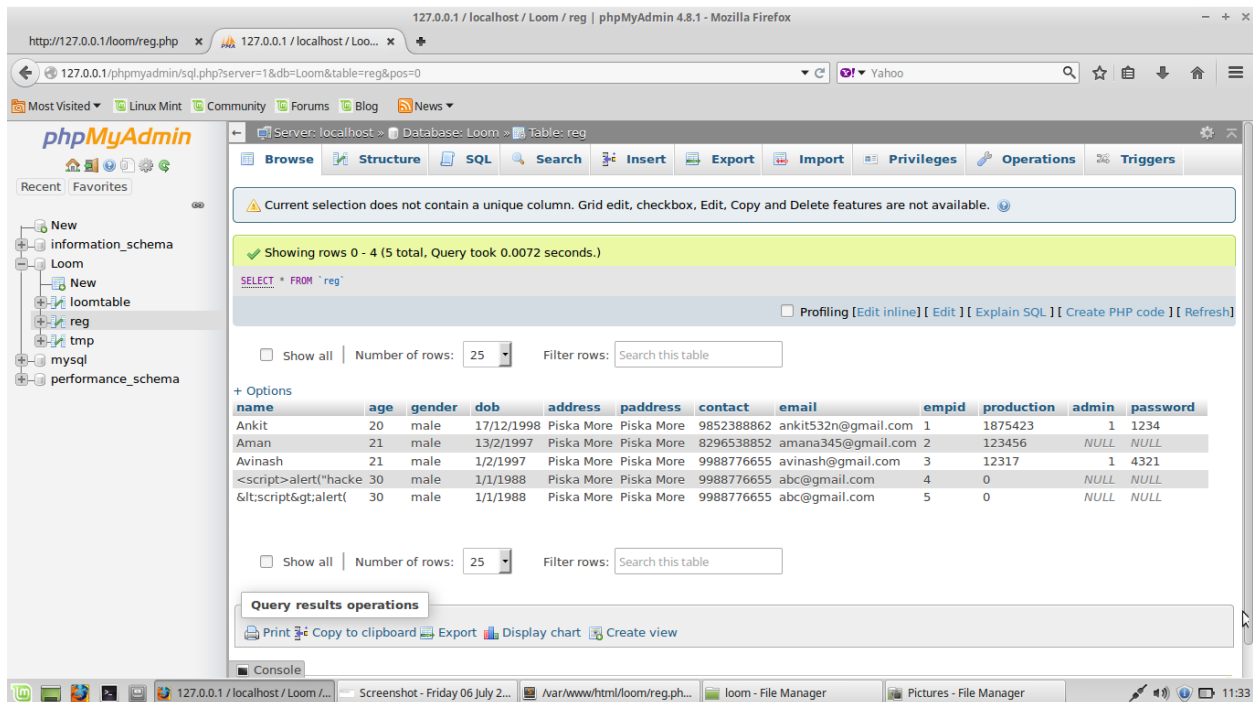
Print Copy to clipboard Export Display chart Create view

Console

To avoid all these problems we use data validation.

If data validation is not done no script can be run by anyone.

If data validation is used: no alert message comes as no script can be run.



In the above screenshot the data with empid=4 is without data validation and the data with empid=5 is with data validation.

Password Hashing:

Code for password hashing:

```
$pass= password_hash($ppwd, PASSWORD_DEFAULT);
```

The inbuilt Php function “password_hash(p1,p2)” is used to establish password hashing.

This function converts the value of p1 to its hash value according to the hash type i.e. p2.

Password hashing is used to make the password secure. The hash value of the password is stored in the database instead of the exact password such that no other user can know the password expect for the user it belongs to.

The inbuilt Php function “password_verify(\$ppwd,\$row['password'])” is used to verify the password entered during login is same as the hash value of the password existing in the database. Here \$ppwd is the password entered in the login form and \$row[‘password’] is the password existing in the database.

The following shows the database with password hashing:

The screenshot shows the phpMyAdmin interface for a MySQL database named 'Loom'. The selected table is 'reg'. A message at the top states: "Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available." Below this, a query result is displayed for the query "SELECT * FROM `reg`". The result shows 3 rows. The columns are: name, age, gender, dob, address, paddress, contact, email, empid, production, admin, and password. The passwords are hashed.

name	age	gender	dob	address	paddress	contact	email	empid	production	admin	password
Ankit	20	male	17/12/1998	Piska More	Piska More	9852388862	ankit532n@gmail.com	1	1875923	1	\$2y\$10\$e9hW4GGkqgLsw8eMBvKED.EagF7MBEc6CLfz4jyTOZ8...
Aman	21	male	13/2/1997	Piska More	Piska More	8296538852	amana345@gmail.com	2	123456	NULL	NULL
Avinash	21	male	1/2/1997	Piska More	Piska More	9988776655	avinash@gmail.com	3	12317	1	\$2y\$10\$UnX.IHUm1fa4jMa504o1xOswOzt1jHdjG9yjiOuqQRb...

This screenshot is a zoomed-in view of the same phpMyAdmin interface. It shows the 'reg' table with the same data as the first screenshot. The 'password' column contains hashed values. The interface includes navigation tabs like 'Browse', 'Structure', 'SQL', 'Search', 'Insert', 'Export', 'Import', 'Privileges', 'Operations', and 'Triggers'. The status bar at the bottom shows the server path and the time 11:53.