SAVITRIBAI PHULE PUNE UNIVERSITY

A MINI-PROJECT REPORT ON

EXAMINATION CELL AUTOMATION SYSTEM

SUBMITTED TOWARDS THE
PARTIAL FULFILLMENT OF THE REQUIREMENTS OF

THIRD YEAR SEMESTER II OF ENGINEERING

(Computer Engineering)

BY

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DEPARTMENT OF COMPUTER ENGINEERING

CERTIFICATE

This is to certify that the Mini-Project Entitled

EXAMINATION CELL AUTOMATION SYSTEM

Submitted by

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is a bonafide work carried out by Students under the guidance of **Prof. P. R. Jaiswal** and it is submitted towards the partial fulfillment of the requirement of **Third Year Computer Engineering Semester II** of **Savitribai Phule Pune University**.

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Date:

Place :

Contents

EXAMINATION CELL AUTOMATION SYSTEM

Abstract:

Current exam-cell activities are mostly done on paper. Automated solutions using this system will make exam department activities more efficient by covering for the most important drawbacks of manual system, namely speed, precision and simplicity.

Exam Cell Automation System is developed for the college to simplify examination hall allotment and seating arrangement. It facilitates to access the examination information of a particular student in a particular class. The purpose of developing exam hall seating arrangement system is to computerized the traditional way of conducting exams.By automating this system, the examination coordinators can easily conduct the registration of students and the generation of results systematically.

Keywords:

Examination cell automation,Student details,Student Database,Administrator Login.

1 INTRODUCTION

Examination Cell Automation System is developed for the college to simplify the allocation of halls .It facilitates to access the examination information of a particular student in a particular department. The information is sorted information alphabetically, which will be provided by the teacher for a respective department. Here the admin updates the student details, exam timings, hall details, staff details and available space in the hall. So the automated system will give the seating details to the students whose details were listed in the database.

1.1 Motivation

The current examination process system is a complete manual work system which results in tedious work.The current system deals with the manual entries of the information about the students which leads the system prone to errors. The errors which might occur are the loss of data, data redundancy, time consuming process etc. The current system needs a lot of labour work as all the activities are done manually. The current system not only increases the workload for the exam-cell staff members managing the registration and admission processes but also increases workload for the students.Managing hard copies stack by stack becomes a tedious work for the exam-cell staff.

1.2 Purpose

The purpose of developing exam cell automation system is to computerize the traditional way of conducting the exams. Another purpose for developing this software is to generate the seating arrangement report automatically during exams at the end of the session or in between the session.

2 PROBLEM STATEMENT AND SCOPE

2.1 Problem Statement

To develop an effective system for Examination Automation Cell so as to reduce the tedious manual work and perform a systematic management.

2.2 Scope

The scope of the project is: All the examination related work for the students can be done using this system. It will provide faster and easier access for updating records as the paperwork will reduce. All the students related database can be retrieved at any time by authorized personnel. Application support and maintenance after deployment will be provided to production. The system can be customized as per the requirements of the college.

3 DESIGN AND ANALYSIS OF SYSTEM

3.1 Existing Systems

Existing system is very slow and inefficient. Report generation is also not an easy task in the current situation. Also if the report is generated then calculations are done manually that leads to more errors. There is a lot of manual work involved in current system and mistake in one detail can lead to wrong generation of page. No proper collection of requirements leads a huge problem for this system. This system is to enhance manual work and also more energy is wasted to allocate the seating arrangement.

3.2 Problems in Existing Systems

As discussed earlier existing systems have the the following problems :

- Manual paperwork and manual calculations.
- Very slow and tedious.
- Less accurate.
- Less efficient.
- Not user-friendly.
- Report and statistics cannot be generated easily.

3.3 Design of Newer System

Each and every user will be given specific privileges through which the users will not be able to access any other information.This will not only increase the security of the system but also the reliability and efficiency of the system. The purpose of developing this system is to computerize the traditional way of conducting exams. Another aim for creation of this system is to generate the seating arrangement report during exam at end of session or in between the session.

3.3.1 Module Information

This system has the following modules : -

1) Student Registration
2) Admin Login

3) Student Login

4) View and Update details

5) Seating Arrangement for Examination

6) Staff Allocation for Examination

3.3.2 Module Description

1) Student Registration : To register students have to just provide their Personal Details like Name, Address, Phone No, etc., to the enrol himself/herself into the System.

2) Admin Login : For all the official works like staff allotment,seating arrangement etc, can be done by administrator.

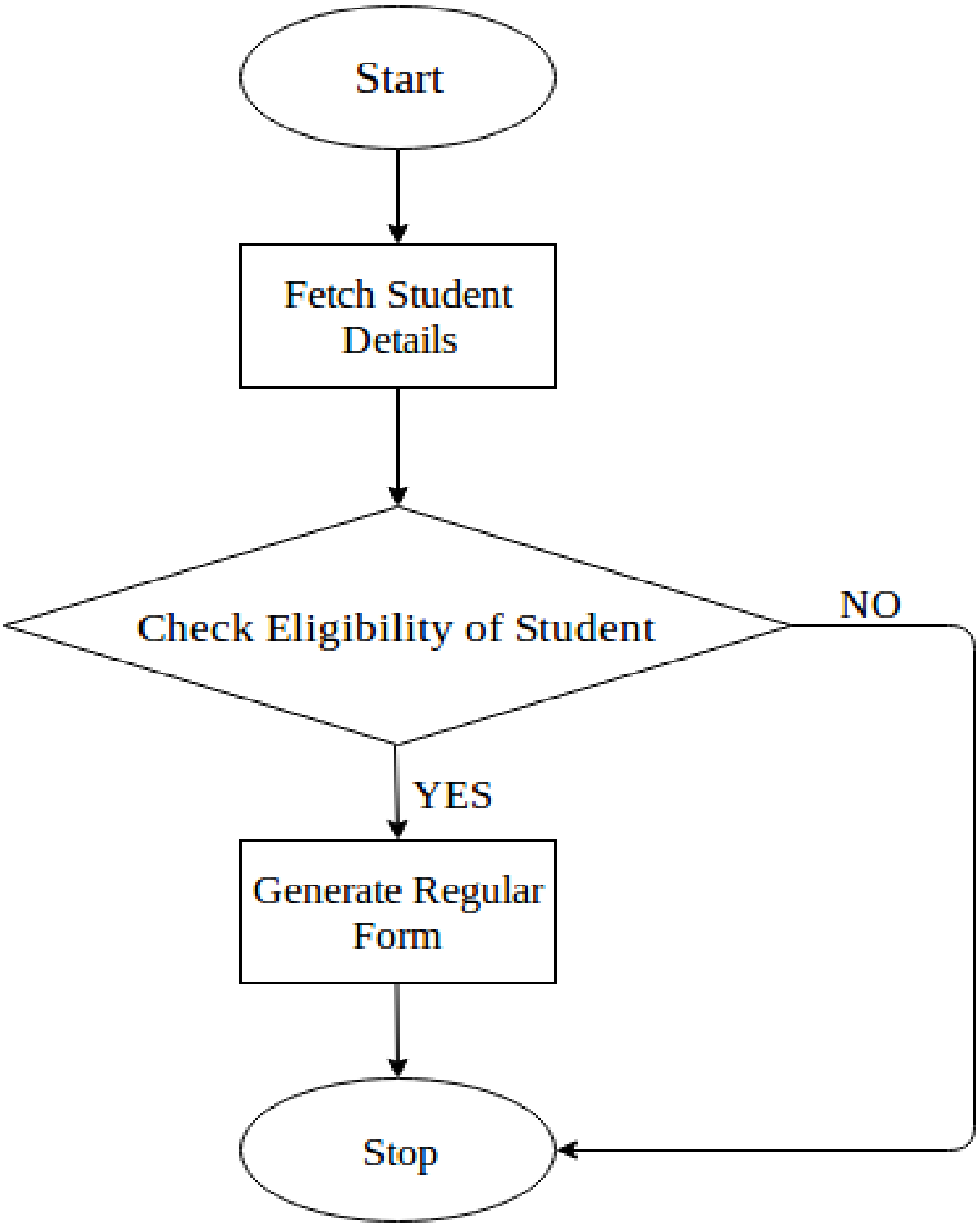
3) Student Login : To get details about the exam and view the seating arrangement.

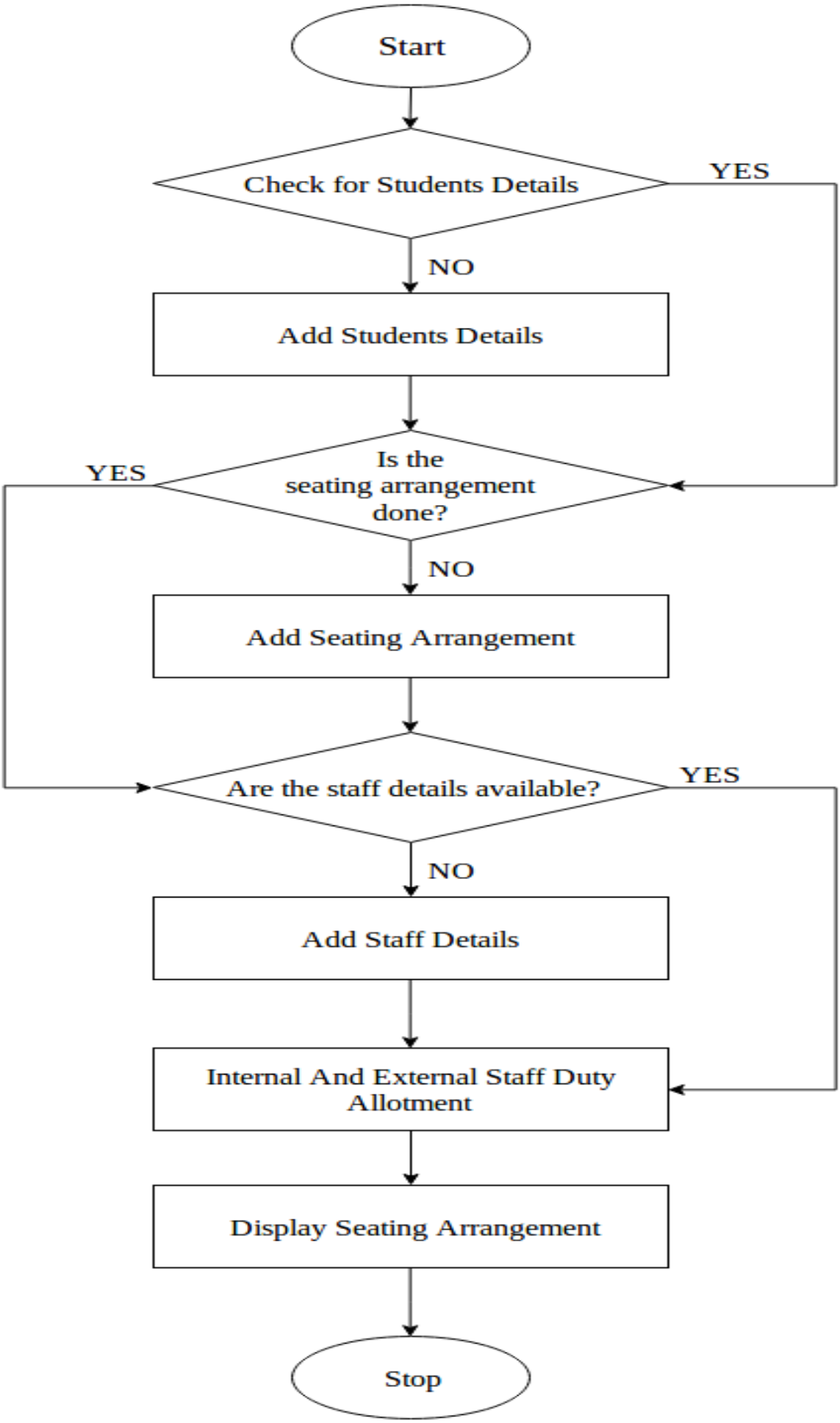
4) View and Update Details : System allows registered students to view and modify/update the personal details like Phone number, email-id, etc.

5) Seating Arrangement : Administrator can allocate seats for respective students using this functionality.

6) Staff Allocation : Administrator can allocate staff for respective examination using this functionality.

4 IMPLEMENTATION FLOW




Start
Check for Students Details
YES
NO
Add Students Details
Is the seating arrangement done?
YES
NO
Add Seating Arrangement
Are the staff details available?
YES
NO
Add Staff Details
Internal And External Staff Duty Allotment
Display Seating Arrangement
Stop

5 CONCLUSION AND FUTURE WORK

5.1 Conclusion

Ultimately the result of the implementation of this project will lead to reduce the workload of the students, the faculty members and the exam-cell staff.A web based interface for showing hall name for student is developed, which makes students to see their seat in respective hall easily. The exam cell automation system is allow examiner to reduce the time required for the information to reach the exam cell and also help in avoiding misinterpretation of information. This will reduce the tediousness of the manual processes and give a chance for efficient, flexible and automated processes.

5.2 Future Work

The system can be enhanced using different seating arrangements for different exams which can be obtained by applying various constraints. By the use of internet, automatic timetable generation module can also be added.

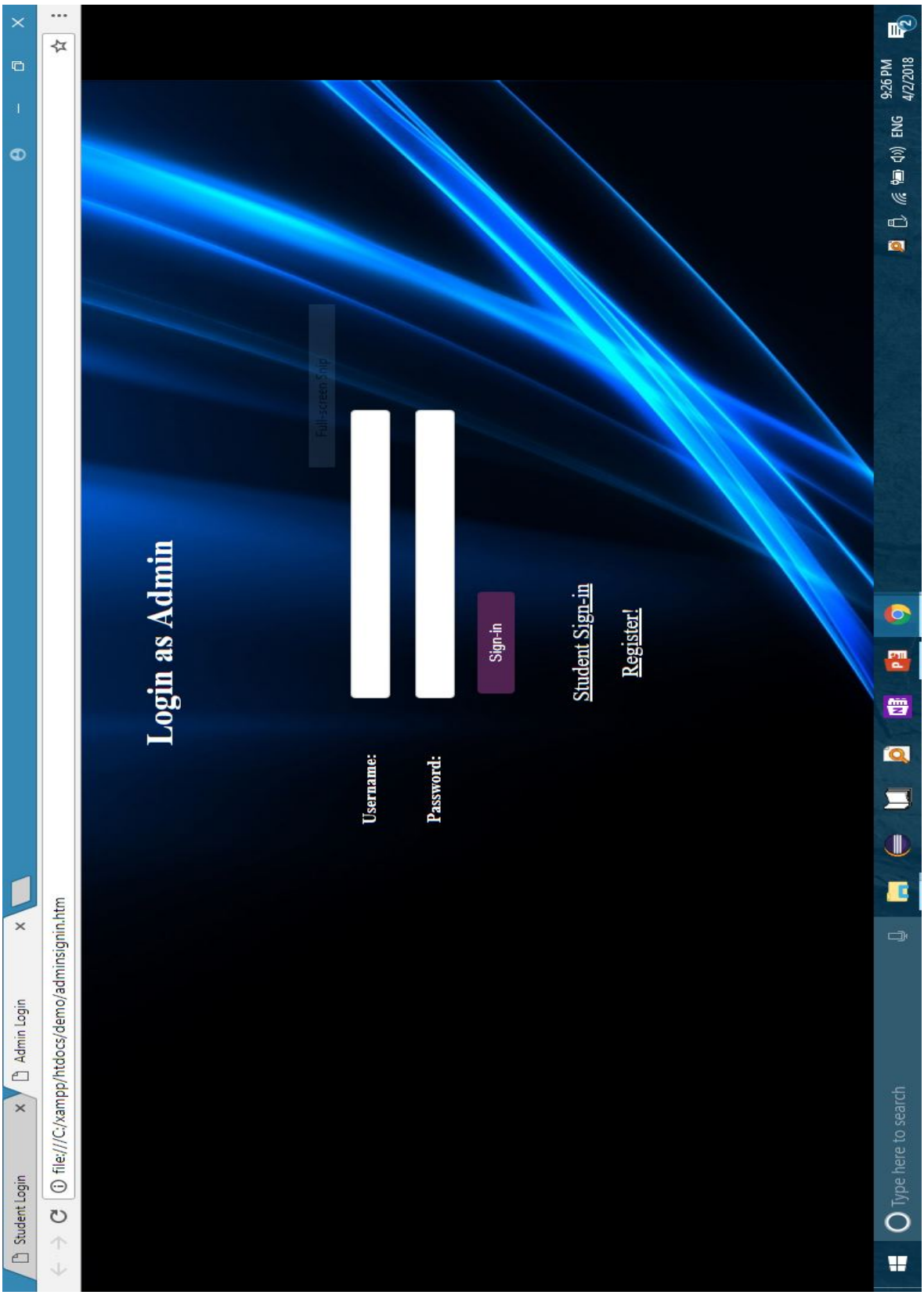
References

[1] http://www.php-learn-it.com/

[2] http://www.javapoint.com/php/

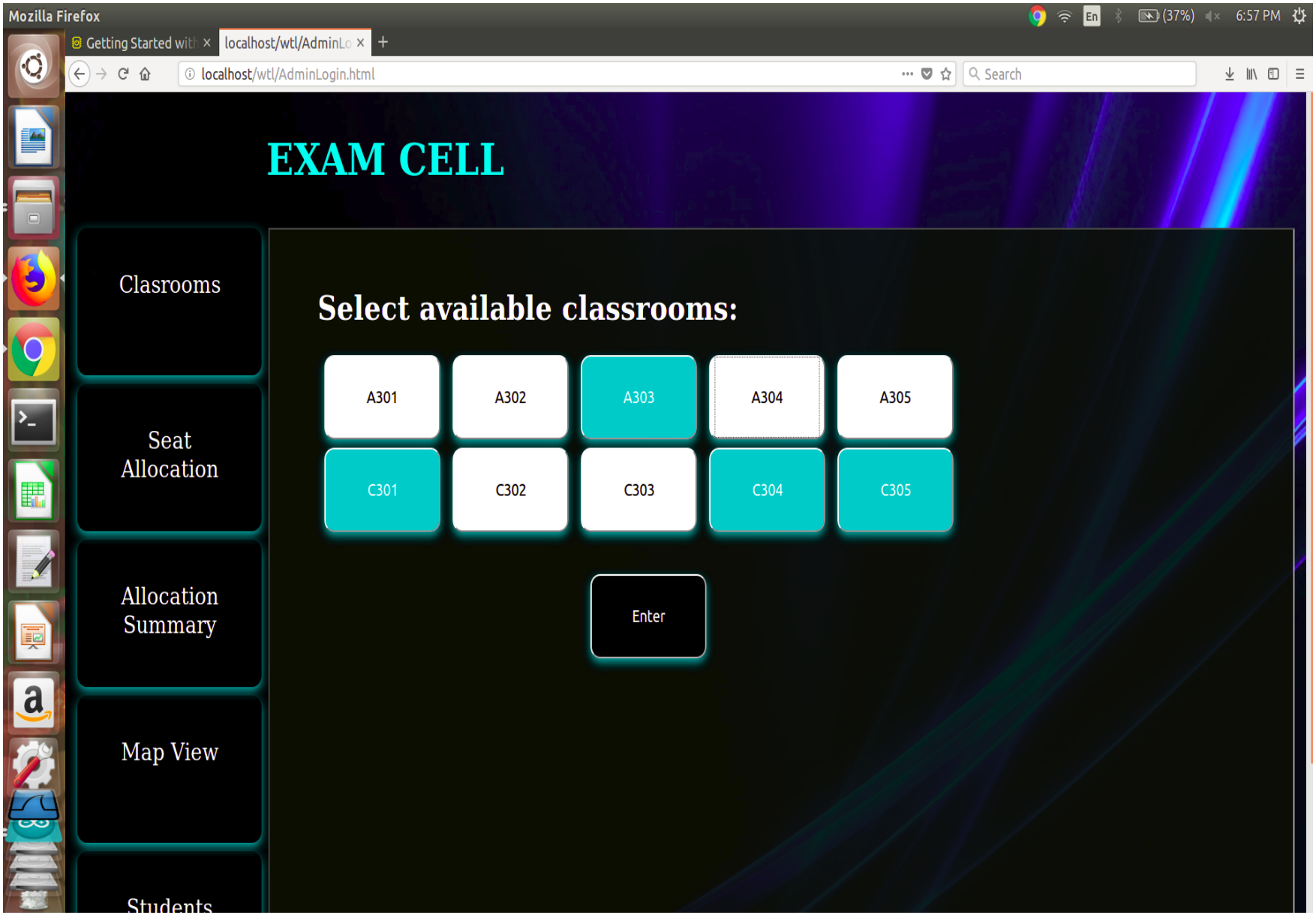
[3] http://www.w3resource.com/

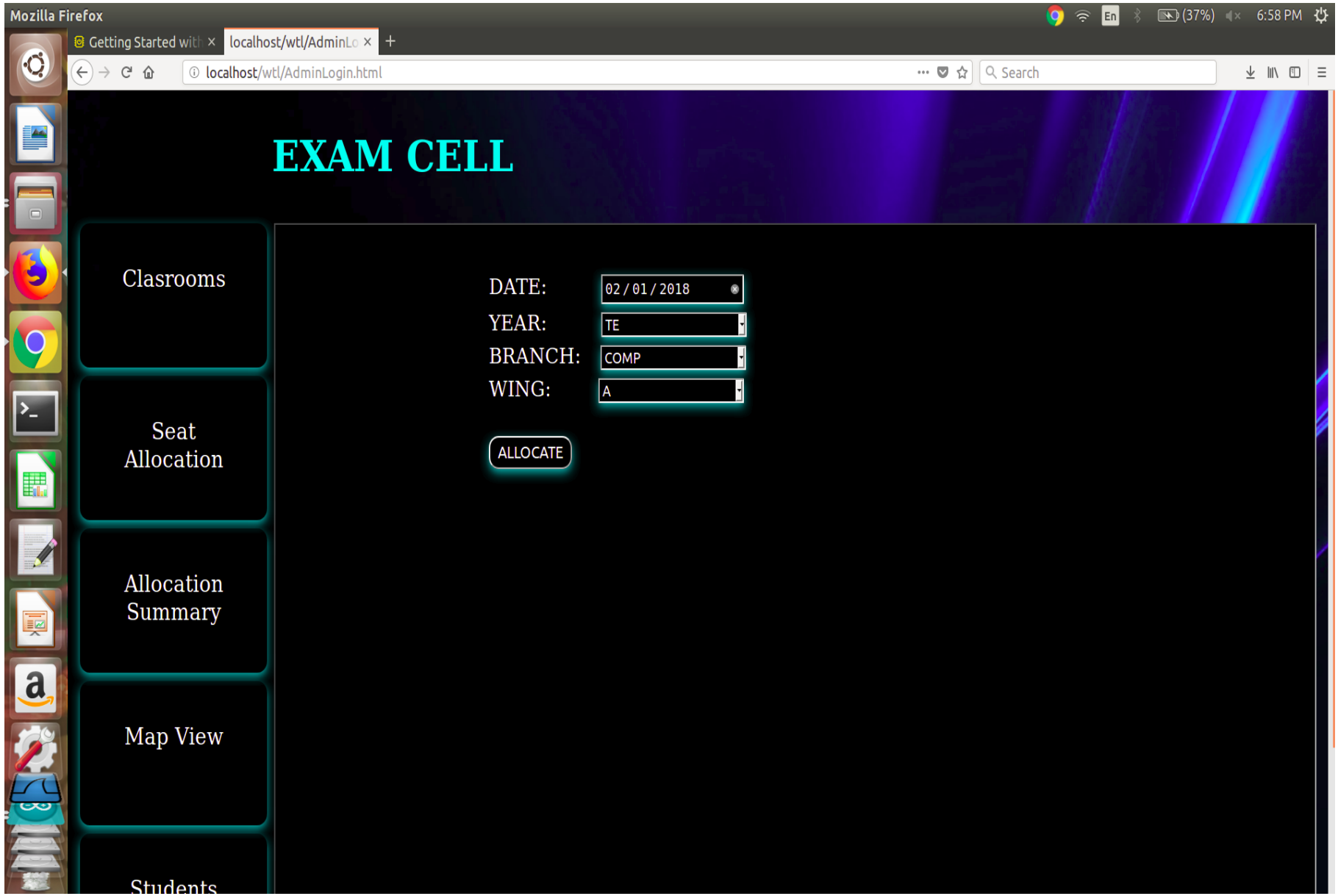
SCREENSHOTS

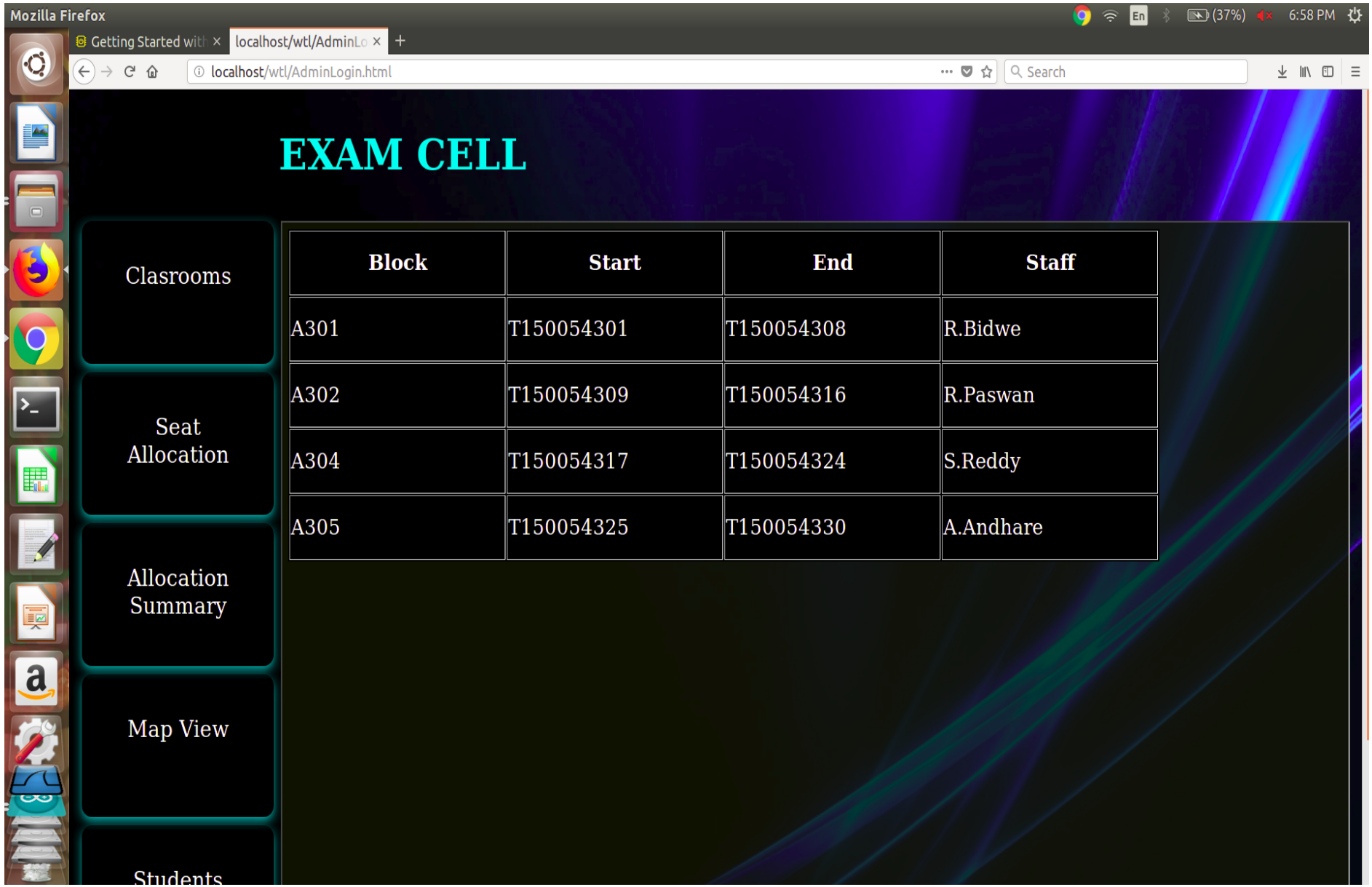


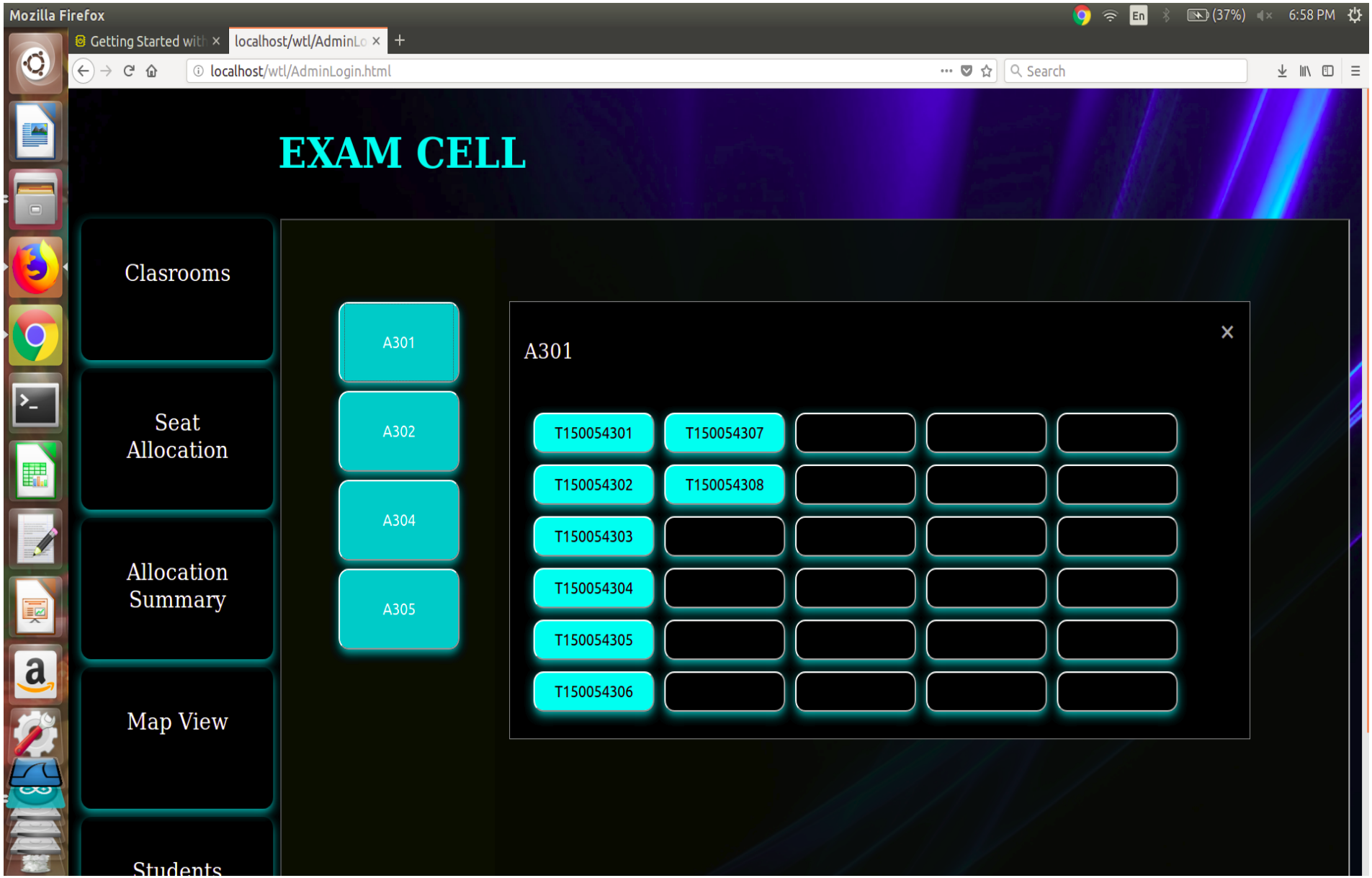
Student Login
file:///C:/xampp/htdocs/demo/signin.htm
Login as a Student
Roll no.:
Password:
Sign-in
Admin Sign-in
Register!
Type here to search
ENG
9:24 PM
4/2/2018

Student Login
Admin Login
Form
file:///C:/xampp/htdocs/demo/form1.htm
Form
News
Contact
Search
About
Form
First Name*
Last Name*
PRN*
Department*
CS/IT/EnTC
Pattern*
2008/2012/2015
Current Semester*
1 to 8
Password*
Type here to search
ENG
9:28 PM
4/2/2018


Mozilla Firefox
Getting Started with
localhost/wtl/AdminLo
localhost/wtl/AdminLogin.html
Search
6:57 PM
EXAM CELL
Clasrooms
Seat Allocation
Allocation Summary
Map View
Students
Select available classrooms:
A301
A302
A303
A304
A305
C301
C302
C303
C304
C305
Enter


Mozilla Firefox
Getting Started with
localhost/wtl/AdminLo
localhost/wtl/AdminLogin.html
Search
EXAM CELL
Clasrooms
Seat Allocation
Allocation Summary
Map View
Students
DATE:
02/01/2018
YEAR:
TE
BRANCH:
COMP
WING:
A
ALLOCATE


Mozilla Firefox
Getting Started with
localhost/wtl/AdminLo
localhost/wtl/AdminLogin.html
Search
EXAM CELL
Clasrooms
Seat Allocation
Allocation Summary
Map View
Students
Block
Start
End
Staff
A301
T150054301
T150054308
R.Bidwe
A302
T150054309
T150054316
R.Paswan
A304
T150054317
T150054324
S.Reddy
A305
T150054325
T150054330
A.Andhare


Mozilla Firefox
Getting Started with
localhost/wtl/AdminLo
localhost/wtl/AdminLogin.html
Search
(37%)
6:58 PM
EXAM CELL
Clasrooms
Seat Allocation
Allocation Summary
Map View
Students
A301
A302
A304
A305
A301
T150054301
T150054307
T150054302
T150054308
T150054303
T150054304
T150054305
T150054306

SOURCE CODE

```
<!DOCTYPE html>
<!– AdminLoginHome.html –>
<html>
<header id="hd">
<table>
<tr><td><img class="i1" src="/home/student/NEET_Exam-Pattern.jpg"></td>
<td><h1 id=’name’> EXAM CELL</h1></td>
</tr>
</table>
</header>
<body>
<link type="text/css" rel="stylesheet" href="AdminLogin.css"/>
<div>
<iframe name="ifr" class="page1">
</iframe></div>
<div class="tab">
<a class="tablinks" href="Classrooms.html" target="ifr"><span>Classrooms</span></a>
<a class="tablinks" href="form.html" target="ifr"><span>Seat Allocation</span></a>
<a class="tablinks" href="alloc2.php" target="ifr"><span>Allocation Summary</span></a>
<a class="tablinks" href="Map.php" target="ifr"><span>Map View</span></a>
</div>
</body>
</html>
```

```
<!– alloc.php–>
<?php
include "connect.php";
$ sql1 = "SELECT ∗ FROM Seat_Arrg";
$ result1= mysqli_query($ conn,$ sql1);
echo "<table id=’tab1’ border=’1’>
<tr>
<th>Block</th>
<th>Start</th>
<th>End</th>
<th>Staff</th>
</tr>";
if(mysqli_num_rows($ result1)>0)
{
while($ row1 = mysqli_fetch_assoc($ result1))
{
  echo "<tr>";
  echo "<td>" . $ row1[’Block’] . "</td>";
  echo "<td>" . $ row1[’start_seat’] . "</td>";
  echo "<td>" . $ row1[’end_seat’] . "</td>";
  echo "<td>" . $ row1[’Staff’] . "</td>";
  echo "</tr>";
}
}
echo "</table>";
?>
```

```
<!DOCTYPE html>
<!– Classrooms.html–>
<html>
<body>
<link type="text/css" rel="stylesheet" href="Classrooms.css"/>
<script src="Classrooms.js"></script>
<div class="row">
<button class="classbutton" id="b1" onclick="changebuttoncolor(’b1’)"
value="A301">A301</button>
<button class="classbutton" id="b2" onclick="changebuttoncolor(’b2’)"
value="A302">A302</button>
<button class="classbutton" id="b3" onclick="changebuttoncolor(’b3’)"
value="A303">A303</button>
<button class="classbutton" id="b4" onclick="changebuttoncolor(’b4’)"
value="A304">A304</button>
<button class="classbutton" id="b5" onclick="changebuttoncolor(’b5’)"
value="A305">A305</button>
</div>
<div class="row">
<button class="classbutton" id="b6" onclick="changebuttoncolor(’b6’)"
value="C301">C301</button>
<button class="classbutton" id="b7" onclick="changebuttoncolor(’b7’)"
value="C302">C302</button>
<button class="classbutton" id="b8" onclick="changebuttoncolor(’b8’)"
value="C303">C303</button>
<button class="classbutton" id="b9" onclick="changebuttoncolor(’b9’)"
value="C304">C304</button>
<button class="classbutton" id="b10" onclick="changebuttoncolor(’b10’)"
value="C305">C305</button>
```

```
</div>
<form id="f1"action="Classrooms.php"method="POST">
<button id="submit"onclick='GetID()'>Enter</button>
<input name="classes" type="hidden" value="">
</form>
</body>
</html>
//Classrooms.js
var count=1;
function changebuttoncolor(btn)
{
  var property = document.getElementById(btn);
   var color1 = property.style.backgroundColor;
  if(color1 == "white") {
        property.style.backgroundColor = "black";
        property.style.color = "white";
        count = 1;
  }
  else {
        property.style.backgroundColor = "white";
        property.style.color = "black";
        count = 0;
  }
}
function GetID(){
  var str="";
  var el = document.getElementById("f1");
  var i;
  var b=["b1","b2","b3","b4","b5","b6","b7","b8","b9","b10"];
```

```
   for(i=0;i<b.length;i++)  {
          var property = document.getElementById(b[i]);
          var x = property.style.backgroundColor;
          if(x == 'white')
          {
                str+=property.value;
                str+=",";
           }
  }
          el.elements['classes'].value=str;
}
<!– Classrooms.php –>
<?php include 'connect.php';
$ sql2 = "delete from Wing";
$ result2 = mysqli_query($ conn,$ sql2);
$ Classes = $ _POST["classes"];
$ classarr = explode(",",$ Classes);
for ($ i=0; $ i<(count($ classarr)-1) ;$ i++){
  echo $ classarr[$ i];
  $ sql1 = "insert into Wing values('".$ classarr[$ i][0]."','".$ classarr[$ i]."')";
  $ result1 = mysqli_query($ conn,$ sql1);
}
?>
```

```
<!– connect.php –>
<?php
$ servername = "localhost";
$ username = "RohitDoshi";
$ password = "Pass@12345";
$ dbname = "WTL";

// Create connection
$ conn = mysqli_connect($ servername, $ username, $ password,$ dbname);

// Check connection
if (!$ conn) {
        die("Connection failed: " . mysqli_connect_error());
}
?>
```

```
<!DOCTYPE HTML>
<!– form.html –>
<html>
<head>
</head>
<body>
<div class="form">
<form action="p2_data.php" method="POST">
<link type="text/css" rel="stylesheet" href="form.css"/>
<label>DATE:<label>
<input type = "date" id="dt"name="date"><br>
<label>YEAR:</label>
 <select class="dropdown" id="yr"name = "year">
        <option value="FE">FE</option>
        <option value="SE">SE</option>
        <option value="TE">TE</option>
        <option value="BE">BE</option>
        </select><br>

<label>BRANCH:</label>
<select class="dropdown" id="drp"name = "branch">
        <option value="COMP">COMP</option>
        <option value="IT">IT</option>
        <option value="E& TC">E& TC</option>
        <option value="AS">AS</option>
        </select><br>

<label>WING:</label>
<select class="dropdown" id="drp2"name = "wing">
        <option value="A">A</option>
        <option value="B">B</option>
        <option value="C">C</option>
        <option value="H">H</option>
        </select><br>
<input id="sub"type = "submit" value="ALLOCATE">
</form>
</div>
</body>
</html>
```

```
<!– Map.php –>
<!DOCTYPE html>
<html>
<head></head>
<body>
<div id="myModal" class="modal">
<link type="text/css" rel="stylesheet" href="map.css"/>
 <div class="modal-content">
          <span class="close">& times;</span>
          <p id="bno">BLOCK</p><br>
          <table>
  <tr>
  <td><button class="seat" id="x11">xx</button></td>
  <td><button class="seat"id="x12">xx</button></td>
  <td><button class="seat"id="x13">xx</button></td>
  <td><button class="seat"id="x14">xx</button></td>
  <td><button class="seat"id="x15">xx</button></td>
  </tr>
  <tr>
  <td><button class="seat"id="x21">xx</button></td>
  <td><button class="seat"id="x22">xx</button></td>
  <td><button class="seat"id="x23">xx</button></td>
  <td><button class="seat"id="x24">xx</button></td>
  <td><button class="seat"id="x25">xx</button></td>
  </tr>
  <tr>
  <td><button class="seat"id="x31">xx</button></td>
  <td><button class="seat"id="x32">xx</button></td>
  <td><button class="seat"id="x33">xx</button></td>
  <td><button class="seat"id="x34">xx</button></td>
  <td><button class="seat"id="x35">xx</button></td>
  </tr>
  <tr>
  <td><button class="seat"id="x41">xx</button></td>
  <td><button class="seat"id="x42">xx</button></td>
  <td><button class="seat"id="x43">xx</button></td>
  <td><button class="seat"id="x44">xx</button></td>
  <td><button class="seat"id="x45">xx</button></td>
  </tr>
  <tr>
  <td><button class="seat"id="x51">xx</button></td>
```

```
  <td><button class="seat"id="x52">xx</button></td>
  <td><button class="seat"id="x53">xx</button></td>
  <td><button class="seat"id="x54">xx</button></td>
  <td><button class="seat"id="x55">xx</button></td>
  </tr>
  <tr>
  <td><button class="seat"id="x61">xx</button></td>
  <td><button class="seat"id="x62">xx</button></td>
  <td><button class="seat"id="x63">xx</button></td>
  <td><button class="seat"id="x64">xx</button></td>
  <td><button class="seat"id="x65">xx</button></td>
  </tr>
  </table>
 </div>
</div>
<div id="myModal2" class="modal2">
<div class="modal-content2">
          <span class="close2">& times;</span>
  <p id="st">Seat</p>
</div>
</div>
<?php include "mapview.php"?>
<script>
var modal = document.getElementById('myModal');
var modal2 = document.getElementById('myModal2');
var btn = document.getElementById("myBtn");
var span = document.getElementsByClassName("close")[0];
var span2 = document.getElementsByClassName("close2")[0];
function showMap(count,l1,blk) {
          var i;
          document.getElementById("bno").innerHTML=blk;
          var seats =["x11","x21" ,"x31" ,"x41","x51","x61",
"x12","x22" ,"x32" ,"x42" ,"x52", "x62",
"x13","x23","x33","x43","x53","x63",
"x14","x24","x34","x44","x54","x64",
"x15","x25","x35","x45","x55","x65"];
 for(i=0;i<30;i++)    {
  document.getElementById(seats[i]).style.backgroundColor='black';
  document.getElementById(seats[i]).innerHTML="——";
          }
 var ll =l1.split(",");
```

```
        for(i=0;i<count;i++)  {
  stud=document.getElementById(seats[i]);
  stud.style.backgroundColor='# 66FCF1';
  stud.innerHTML=ll[i];
        }
        modal.style.display = "block";
}
span.onclick = function() {
        modal.style.display = "none";
}
span2.onclick = function() {
        modal2.style.display = "none";
}
window.onclick = function(event) {
        if (event.target == modal) {
        modal.style.display = "none";
        }
}
</script>
</body>
</html>
```

```
<!– mapview.php –>
<?php
include "connect.php";
$ sql1 = "SELECT Block FROM Seat_Arrg";
$ result1= mysqli_query($ conn,$ sql1);

if($ count > 0)
{
  while($ row1 = mysqli_fetch_assoc($ result1))
   {
        $ r= $ row1[’Block’];
        echo "<p>BLOCK ".$ r."</p><br>";
  }
}
?>
```

```
<!– p2_data.php –>
<?php
session_start();
include ’connect.php’;
$ date = $ _POST["date"];
$ branch = $ _POST["branch"];
$ wing = $ _POST["wing"];
$ str ="";
$ list1 = $ _SESSION[’list1’];
$ capacity = 4 ;
//getBlocks
$ sql = "SELECT block FROM Wing where wing like ’$ wing’";
$ result = mysqli_query($ conn,$ sql);
//GetSubjects
$ sql3 = "SELECT Subject FROM Date where Branch like ’$ branch’ and Date like ’$ date’";
$ result3 = mysqli_query($ conn,$ sql3);
$ row3 = mysqli_fetch_assoc($ result3);
$ sub = $ row3[’Subject’];
$ sql8 = "SELECT count(SeatNo) FROM ".$ sub."";
$ result8 = mysqli_query($ conn,$ sql8);
$ row8 = mysqli_fetch_assoc($ result8);
$ c = $ row8[’count(SeatNo)’];
echo $ c;
//GetStaff
$ sql7 = "SELECT name FROM Staff where wing like ’$ wing’";
$ result7 = mysqli_query($ conn,$ sql7);
if(mysqli_num_rows($ result)>0)
{
for($ j=0 ; $ j<$ c ;)
{
  $ row = mysqli_fetch_assoc($ result);
  //getStartSeatNo
  $ sql4 = "SELECT SeatNo FROM ".$ sub." where Block=” limit 1";
  $ result4 = mysqli_query($ conn,$ sql4);
  $ row4 = mysqli_fetch_assoc($ result4);
  $ start = $ row4[’SeatNo’];
  $ cnt = 0;
  $ str = "";
for($ i=0;$ i<$ capacity;$ i++)
{
  //getEndSeatNo
```

```
  $ sql5 = "SELECT SeatNo FROM ".$ sub." where Block=’’ limit 1";
  $ result5 = mysqli_query($ conn,$ sql5);
  if(mysqli_num_rows($ result5)==0)
        break;
  $ row5 = mysqli_fetch_assoc($ result5);
  $ end = $ row5[’SeatNo’];
  $ str = $ str.$ row5[’SeatNo’];
  $ str = $ str.",";
  //Assign Block to each student
  $ sql2="update ".$ sub." set block=’".$ row[’block’]."’ where block=’’ limit 1";
  $ res=mysqli_query($ conn,$ sql2);
  echo mysqli_num_rows($ res);
  $ cnt++;
  $ j++;
}
  array_push($ list1,$ str);
  //Allocate Staff
  $ row7 = mysqli_fetch_assoc($ result7);
  $ teacher = $ row7[’name’];
  //InsertStartSeatNo
  $ sql6 = "insert into Seat_Arrg values(".$ row[’block’].’,".$ start.’’,".$ end.",".$ teacher.’,".$
cnt.")";
  $ result6 = mysqli_query($ conn,$ sql6);
}
  $ _SESSION[’list1’] = $ list1 ;
  echo "<p style=’color:white’>".$ list1[5]."Seating arrangement successful!!</p>";
}
else
{
echo "0 results";
}
mysqli_close($ conn);
?>
```

```
<!– showstud.php –>
<?php
include "connect.php";
$ sql1 = "SELECT ∗ FROM Student where SeatNo = ’T150054301’";
$ result1= mysqli_query($ conn,$ sql1);
$ row1 = mysqli_fetch_assoc($ result1);
echo "<p id=’st’>".$ row1[’name’]."</p>";
echo $ row1[’photo’];
echo "<img width=60px height=60px src=’".$ row1[’photo’]."’>";
echo $ _GET[’name’];
?>

<!– p2_data2.php –>
<?php
session_start();
$ list1 = array();
$ _SESSION[’list1’] = $ list1 ;
include ’connect.php’;
$ sql1 = "delete from Wing";
$ result1 = mysqli_query($ conn,$ sql1);
$ sql2 = "UPDATE CN SET Block=”";
$ result2 = mysqli_query($ conn,$ sql2);
$ sql3 = "UPDATE SMD SET Block=”";
$ result3 = mysqli_query($ conn,$ sql3);
$ sql4 = "DELETE FROM Seat_Arrg";
$ result4 = mysqli_query($ conn,$ sql4);

?>
```