MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

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MICRO PROJECT ON

Time Table Generation System

Program: Computer Program code: CO6I

Course: CPE Course code: 22058



MAHARASHTRA STATE

BOARD OF TECHNICAL EDUCATION

Certificate

This is to certify that Mr. **Deep Pawar, Sanket Anarase, Deepak Margale, Dnyaneshwar Jarande** from TSSM's Bhivarabai Sawant College of Engineering and Research, Polytechnic,
Narhe, Pune having Enrolment number **1716060077**, **1716060083**,**1716060084**,**1816060248**has completed Project Planning Report having title **Time Table Generation System** in group
consisting of 4 Candidates under the guidance of the faculty Guide **Prof. Maitri.P.M.**

Name & Signature of Guide

Name & Signature of HOD

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- 8.1 Conclusion
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ACKNOWLEDGMENT

I have a great pleasure in presenting this Project Report on "<u>Time Table Generation System</u>" and to express my deep regards towards those who have offered their valuable time and guidance in our hour of need.

I would like to express our sincere and whole hearted thanks to my project guide Prof. Maitri P.M., Head of the department Prof. Karajgar M.D. for contributing valuable time, knowledge, experience and providing valuable guidance in making this project a success.

I am also glad to express my gratitude and thanks to our Principal Prof. Kande Sir for their constant inspiration and encouragement.

Finally, before ending I would like to express once again my gratitude and thanks to all my friends who are involved directly and indirectly in making my project success.

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ABSTRACT

Time table generation is very hard job for educationalist with respect to time and man power. Providing a automatic time table generator will help to generate time table automatically. Proposed system of our project will help to generate it automatically also helps to save time. It avoids the complexity of setting and managing Timetable manually. In our project we are going to use algorithms like genetic, heuristic, resource scheduling to reduce these difficulties of generating timetable. These algorithms incorporate a numeral of strategy, aimed to improve the operativeness of the search operation.

The system will take various inputs like number of subjects, teachers, workload of a teacher, semester, priority of subject. By relying on these inputs, it will generate possible time tables for working days of the week for teaching faculty. This will integrate by making optimal use of all resources in a way that will best suit the constraints. In this paper, through the analysis and the summarization of the existing problems, a software model for the course timetable system is proposed. At the same time aiming at this software model of our university course timetable system design program is proposed and realized. This program not only can well solve the shortages of the existing course timetable system, but also is simple and easy to operate, has strong versatility. Evolutionary techniques have been used to solve the time table scheduling problem.

CHAPTER 1: INTRODUCTION

1.1 MOTIVATION

We have selected this topic "Time Table Generation System" because we notice that in the existing system is a manual entry for each subject. Here the time table will be carried out in the hand written registers. It will be a tedious job to maintain the record for the user. The human effort is more here.

As we know all Institutions or organizations have its own timetable, managing and maintaining these will not be difficult. Considering workload with this scheduling will make it more complex. As mentioned, when Timetable generation is being done, it should consider the maximum and minimum workload that is in a college. In those cases, timetable generation will become more complex. Also, it is a time consuming process.

To overcome this problem and provide them platform and opportunity this application is developed. Automatic Timetable manger is a PHP based software used to generate timetable automatically. It will help you to manage all the periods automatically.

1.2 GOAL

The goal of proposed is to improve performance and accuracy of are as follows:

- To solve all problems in current system.
- To fulfill the requirement of teacher and make the Time Table generation process faster and efficient
- To provide comprehensive timetable management solution for Colleges which help to overcome the challenges in current system

1.3 **OBJECTIVES**

The objectives of the proposed system are as follows:

- To solve all problems in current system.
- To fulfill the requirement of school/colleges in the Education domain by giving them opportunity.
- To manage Time Table by teacher authority and admin.

1.4 PROBLEM STATEMENT

The Current College/School Education system makes Time Table manually. This process take a lot of time and to maintain large set of Subjects and Teachers is also a tough task. So there is a need of changing this existing system. So need to develop an Time Table Generation System which allows teacher to generate time table automatically which helps them to save time and efforts.

1.5 SCOPE OF THE WORK

Timetable Generation System generates timetable for each class and teacher, in keeping with the availability calendar of teachers, availability and capacity of physical resources (such as classrooms, laboratories and computer room) and rules applicable at different classes, semesters, teachers and subjects level. Best of all, this Timetable Generation System tremendously improves resource utilization and optimization.

1.6 OUTCOMES

- Automatic Timetable manger is a Web based software used to generate timetable automatically.
- Proposed system will help to generate it automatically also helps save the time.
- There is no need for Faculty to worry about their timetable.
- It is a comprehensive timetable management solution for Colleges which help to overcome the challenges in current system.

CHAPTER 2: LITERATURE SURVEY

2.1 EXISTING SYSTEM

- Normally timetable generation done manually.
- Considering workload with this scheduling will make it more complex.
- Manual timetable generation is time consuming process.
- Almost a week of work of an experienced person is needed to produce a timetable.

2.2 LIMITATIONS

- It does not meet all the requirements.
- When the preconditions change, the whole work becomes unusable, and has to be restarted from scratch.

CHAPTER 3: PROPOSED SYSTEM

3.1 BACKGROUND NEEDED

3.1.1 SOFTWARE SPECIFICATION

Operating System : Windows/Linux

Web Technologies : XHtml, JavaScript,PHP

Web Server : Appache Tomcat

Design Tools :XAMPP

• Database : MySQL

Web Browser :Mozilla Firefox/Google Chrome

3.1.2 HARDWARE SPECIFICATION

• Hardware : Pentium

• Speed: 2 Ghz

• RAM : 2GB

Hard Disk: 80 GB

3.2 PROPOSED SYSTEM

- Automatic Timetable manger is a JavaScript based software used to generate timetable automatically.
- It will help you to manage all the work load automatically.
- Automatic Time Table system will also helps to save time.
- There is no need for Faculty to worry about their period details and maximum workload.
- It is a comprehensive timetable management solution for Colleges which helps to overcome the challenges in current system.

3.3 ARCHITECTURE

Software architecture describes the elements of a system. It also shows the interactions between these elements, the models governing its composition and the constraints of these models.

Generally, when facing a complex problem, the best approach is to break it down into parts that become easier to solve with simple solutions. Then, when we combine all these small solutions, we can find the solution to our complex problem.

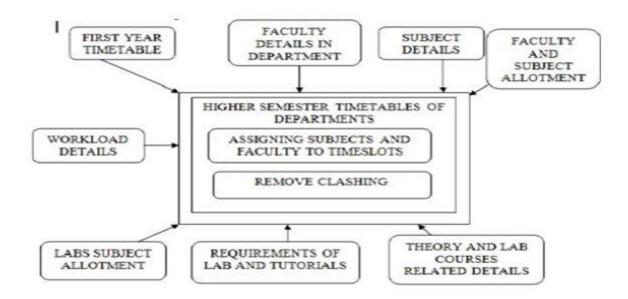


Fig 3.3 Architecture

Architecture contains the following things:

- 1. First year timetable it contains timetable of first year based on that we will create higher semester timetables.
- 2. Faculty details in department tells that the details of respective faculty in department.
- 3. A workload detail tells that the higher and lower workload that faculty has.
- 4. Subject details as subject name, subject code.
- 5. Faculty and subject allotment table consist for which subject respective faculty is allotted based on timeslots.
- 6. Theory and lab courses related details contain the details of each subject that is handled by respective faculty.

3.4 ALGORITHM

3.4.1 GENETIC ALGORITHM

A genetic algorithm is a search heuristic that is inspired by Charles Darwin's theory of natural evolution. This algorithm reflects the process of natural selection where the fittest individuals are selected for reproduction in order to produce offspring of the next generation.

By using Genetic algorithm we are able to reduce the time require to generate time table and generate a timetable which is more accurate, precise and free of human errors. The first phase contains all the common compulsory classes of the institute, which are scheduled by a central team.

CHAPTER 4: REQUIREMENT ANALYSIS

4.1 RESPONSIBILITIES OF DEVELOPER

- To study of function, performance, and constraints like resources availability, technology.
- To study development risk that may affect the ability to achieve an acceptable system.\

4.2 SYSTEM FEATURES

- It will become easy to generate Time Table.
- It will save Time and avoid Complexities.
- It will generate Time Table Automatically by using different Algorithm.
- The system will take various inputs and according to that input Time Table will be generated.
- The system will generate possible time tables for working days of the week for teaching faculty by relying on inputs given.

CHAPTER 5: SYSTEM ANALYSIS

5.1 PROJECT PLAN

Table 1.1 summaries various tasks being carried out in estimated

Work Task	Description	Duration
Basic Study	In the first week we were informed about what a project is and how to work on it. We also were told to form groups and choose a leader in the second week. In the third week we were informed to make a research on 10 topics for the project to be developed. Finally, in the fourth week a topic was finalized that would be unique among the other groups.	3 weeks
Review of papers	We referred a lot of papers and even experienced a round of situations where the application will be boosting up the process that manually was a big headache.	2 weeks
Problem Formulation	Avoid the complexity of setting and managing Timetable manually. It will help you to manage all the periods automatically. Faculty can recieve their periods information in their phone. Initially we will be setting the maximum workloads for a Faculty in a day, week and month. Main challenge is to manage timetable when any Faculty is absent. By using this software it will be very easy to allocate subject for different faculty.	2 weeks
Literature Survey	We made a survey by discussing this topic with the friends and our guides. We even had a discussion for the sponsorship they liked the idea. We referred a lot of ieee paper for developing this system.	3 weeks
Objective of Topic	"Time Table Generation System" is a system which will help to generate it automatically also	2 weeks

	helps to save time. It avoids the complexity of	
	setting and managing Timetable manually.	
Design of mathematical model	Firstly, we collected information required for preparing design of mathematical model of Project. Then we prepared Design of Mathematical model of Our System.	2 weeks
Software Requirement and Specification	The development of front end is done using various Languages which includes java, PHP. The technology used for back end is PHP Server.	1 weeks
Detailed Design Document	Firstly, we collected all information about How to create detailed design documentation. Then we design detailed design documentation.	3 weeks
Selection Data set	First we collect all information about our college & dept. Then we collect information, how our Teachers create Time Table and manage it. After getting all information we developed a solution to existing problem.	2 weeks
Implementation of Proposed System	We are trying to save time and efforts of teachers by automatically generate Time Table.	2 weeks
Testing of system	Tested the application on various android operating system. The testing was implemented using White Box and Black Box testing.	2 weeks
Report Writing	We begin our report and shown to our guide for checking and improvements.	2 weeks
Final Report with Modification	According to suggestion given by our guide and HOD mam we prepared our final report	1 weeks

Table 5.1 Project Plan

5.2 SOFTWARE DEVELOPMENT LIFE CYCLE

There are various life cycle models to improve the software processes.

- WATERFALL MODEL
- PROTOTYPE MODEL
- ITERATIVE ENHANCEMENT MODEL
- EVOLUTIONARY MODEL
- SPIRAL MODEL

PROTOTYPE MODEL

- Since in this methodology a working model of the system is provided, the users get a better understanding of the system being developed.
- Errors can be detected much earlier.
- Quicker user feedback is available leading to better solutions.
- Missing functionality can be identified easily

Confusing or difficult function can be identified requirements validation, Quick implementation, incomplete but functional, application. Automatic Timetable Generator is a creative and scientific system through which colleges and other institutions can easily handle timetable management.

5.3 FEASIBILITY STUDY

5.3.1 ECONOMIC FEASIBILITY

To develop the proposed system, it needs no extra facilities and devices. All dependencies are satisfied from the open source projects. All tools used are free, open source and the programming language is JSP and hence its development is economically.

5.3.2 TECHNICAL FEASIBILITY

Proposed system is technically feasible because the proposed system requires only those H/W and S/W tools that are available in the system. It requires the installation of PHP and MYSQL which can be done for free. More over expandability will be maintained in the new system. New modules can be added later on the application, if required in the future. Additionally the application will have User friendly Forms and Screens.

5.3.3 BEHAVIORAL FEASIBILITY

Behavioral feasibility determines how much effort will go in the proposed information system, and in educating and training the users on the new system. Since the user interface is very simple and easily understandable, no training is required for using this software.

CHAPTER 6: SYSTEM DESIGN DIAGRAM

6.1 USE CASE DIAGRAM

This system is used by 2 types of users. They are Admin, Users (faculty)

6.1.1 FACULTY

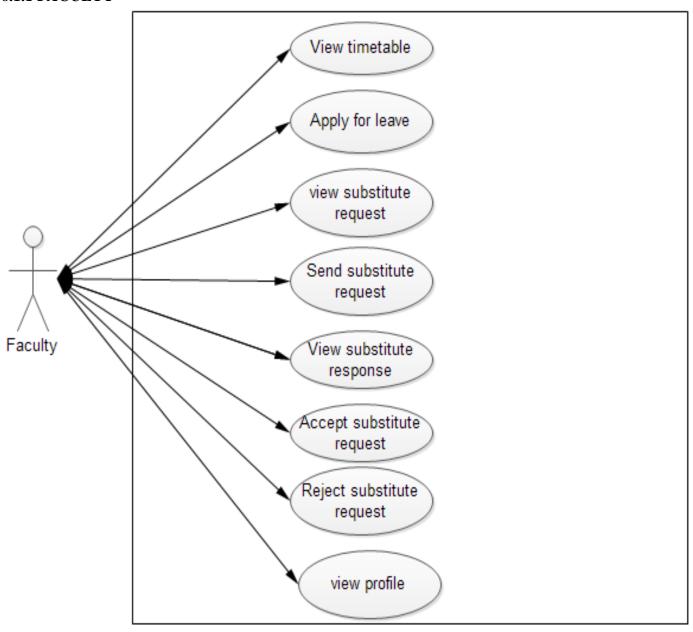


Fig. 6.1.1 FACULTY

6.1.2 ADMIN

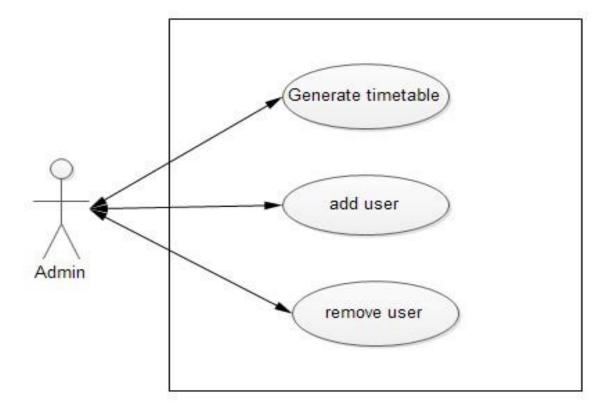


Fig 6.1.2 ADMIN

6.2 E-R DIAGRAM

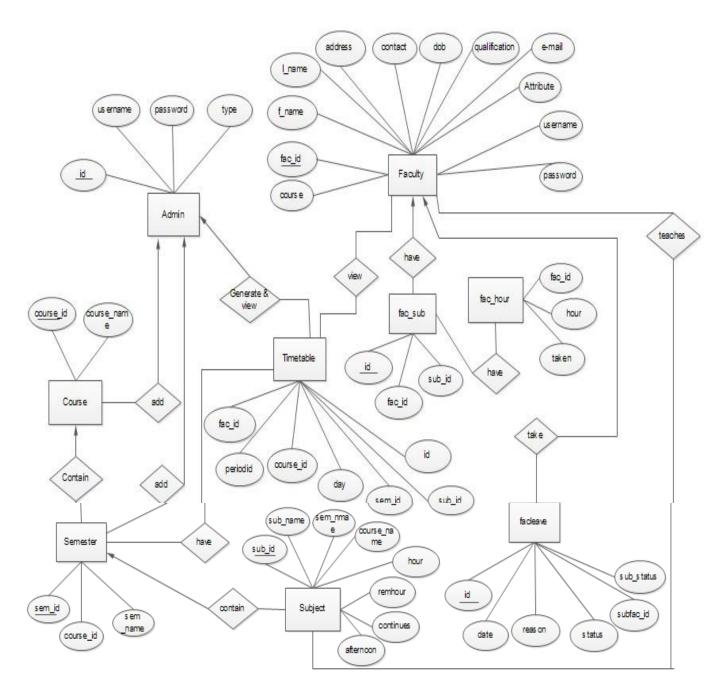


Fig 6.2 ER Diagram

6.3 DATA FLOW DIAGRAM

The DFD is also known as the bubble chart. It is a simple graphical formalism that can be used to represent a system in terms of the input data to the system, various processing carried out in these data and the output data generated by the system. Starting with a set of high-level functions that a system performance of DFD model in hierarchically it represents various sub functions.

In a normal convention, logical DFD can be completed using only four notations:

- Represents source or destination of data
- Represents Data Flow
- Represents a process that transforms incoming data into outgoing data
- Represents Data Source

6.3.1 LEVEL 0

Level 0

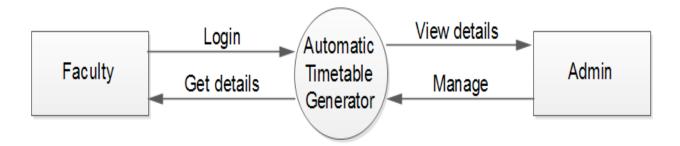


Fig 6.3.1 LEVEL 0 DFD

6.3.2 LEVEL 1



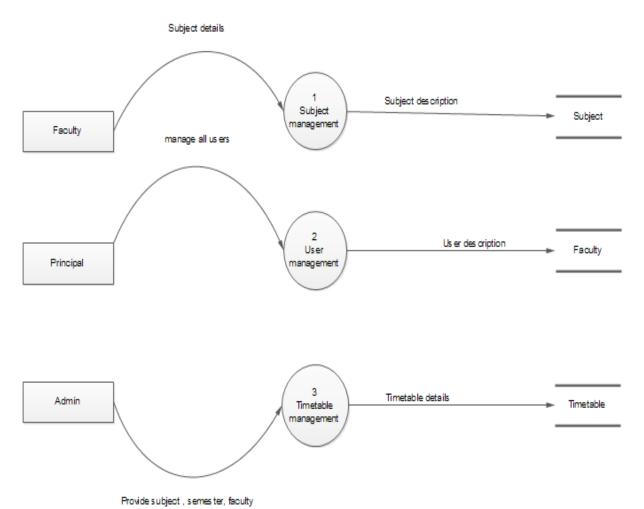


Fig 6.3.2 LEVEL 1 DFD

6.3.3 LEVEL 2

Level 2

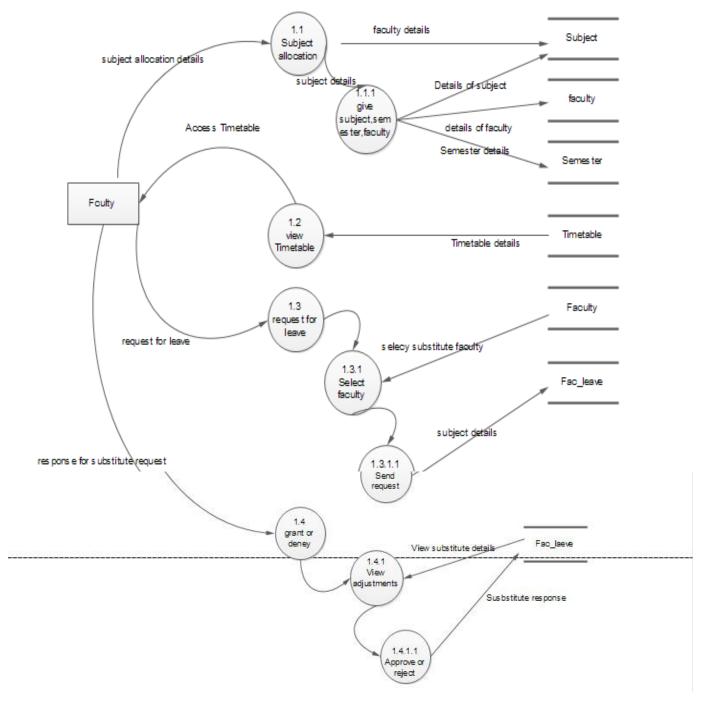


Fig 6.3.3 LEVEL 2 DFD

6.4 FLOW CHART

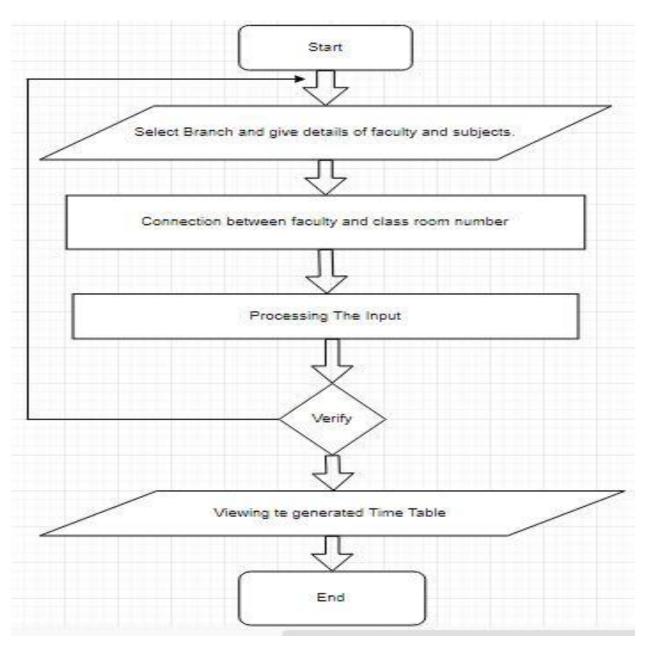


Fig 6.4 Flow Chart

CHAPTER 7: EXPERIMENTATION AND RESULT

7.1 TEST PLAN

TEST TYPES

- Unit testing
- Integration testing
- System testing
- Acceptance testing

7.1.1 UNIT TESTING

In unit testing different modules are tested against the specifications produced during design phase for the modules in the project and the goal is to test the internal logic of the modules.

In order to perform the unit testing, the best approach we adopted in this project is functional testing in which inputs are given to the system for which the expected results are known, boundary values and special values. For this the module selected was advance details where the balance amount falls to negative indicating there is no more payment required.

Secondly performance testing was done to determine the amount of execution time spent in various aspects like the module, program throughput, response time, and the device utilization by the program unit.

7.1.2 INTEGRATION TESTING

The primary goal of the integration testing is to see if the modules can be integrated properly. The integration testing is therefore considered as testing the design. Thus in the integration testing step, all the errors uncovered are corrected for the next testing steps.

7.1.3 SYSTEM TESTING

System testing is similar to integration testing, but instead of integrating modules into programs for testing, programs are integrated into systems for testing the interfaces between programs in a system. System testing can be defined in many ways, but a simple definition is that validation succeeds when the software functions in a manner that can be reasonably expected by the customer.

7.1.4 ACCEPTANCE TESTING

Once the system tests have been satisfactory completed, the system is ready for acceptance testing. Acceptance testing is the process whereby actual users test a completed information system in the environment where it will eventually be used, the end result of which is the user's acceptance or rejection. The admin and staff at Company accepted proposed system after testing.

7.1.5 INCREMENTAL INTEGRATION TESTING

Bottom up approach for testing i.e. continuous testing of an application as new functionality is added. This Application functionality and modules are independent enough to test separately. The functionality like view/create group, view/edit profile, view/post notification, view/post news and add/show event are independent to each other.

These functionalities are added separately and tested after the implementation of each. The distributed nature of client/server systems pose a set of unique problems while conduct tests we noted following areas while testing:

- Client –GUI considerations
- Target environment and platform diversity considerations
- Distributed processing considerations
- No robust target environment
- Nonlinear performance relationships

Many different types of tests are conducted at each of this level of detail the following tests are conducted.

→ APPLICATION FUNCTION TESTS

The functionality of client applications is tested using the methods discussed below.

→ SERVER TESTS

The coordination and data management functions of the server are tested. Server performance is also considered.

→ DATABASE TESTS

The accuracy and integrity of data stored by the server is tested. Transactions posted by client applications are examined to ensure that data are properly stored, updated and retrieved. Archiving is also tested.

→ NETWORK COMMUNICATION TESTS

These tests verify that communication among the nodes of the network occur are correct and that message passing, transactions and related network traffic occurs without error. Network tests are also being conducted. The strategy for testing c/s architecture is analogous to testing of other architecture.

7.2 TEST CASES

Seri al No:	Test Case	Input	Expected Output	Obtained Output	Remark
1	Login(Admin)	Username, Password	Navigate to Homepage of Admin	Home page of Admin	Pass
2	Login(Faculty)	Username, Password	Navigate to Homepage of Faculty	Home page of Faculty	Pass
3	Login(Principal)	Username, Password	Navigate to Homepage of Principal	Homepage of Principal	Pass
4	Login Invalid user	Username, Password	Invalid data	Invalid Username or Password	Pass
5	Add Faculty	Username, Password, f_name,l_na me, address,conta ct,dob,doj, qualification, e- mail,macaddr , course	Faculty registered Successfull y	Faculty registered succefully	Pass
6	Manage staff	Staff details	Approve staff	Approve staff	Pass
7	Aplly leave	Date,Reason, Substitute	Approve / Reject	Approve / Reject	Pass
8	Requst for substitute	request	Approve / Reject	Approve / Reject	Pass
9	Timetable Generation	Subject,Seme ste,Faculty	Timetable	Timetable	Pass

Table 7.2. Test Cases

7.3 CODE AND OUTPUT

7.3.1 CODE

```
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
k href="bootstrap/css/bootstrap.css" rel="stylesheet" type="text/css"/>
k href="bootstrap/css/bootstrap.min.css" rel="stylesheet" type="text/css">
<html lang="en">
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <meta name="description" content="">
  <meta name="author" content="">
  <title>Time Table Generator</title>
  <style>
      a{margin-left:15px;text-decoration:none; font-size:20px}
      a:hover{background:#FF0000;color:#FFFFF;}
      .carousel-inner > .item > img,
      .carousel-inner > .item > a >
      img { margin:auto;}
</style>
  <!-- Bootstrap Core CSS -->
  type="text/css">
  <!-- Custom Fonts -->
```

```
link
href='http://fonts.googleapis.com/css?family=Open+Sans:300italic,400italic,600italic,700italic,800italic,400,30
0,600,700,800' rel='stylesheet' type='text/css'>
  link
href='http://fonts.googleapis.com/css?family=Merriweather:400,300,300italic,400italic,700,700italic,900,900ita
lic' rel='stylesheet' type='text/css'>
  clink rel="stylesheet" href="css/font-awesome.min.css" type="text/css">
  <!-- Plugin CSS -->
                     </pr
  <script src="js/jquery-2.1.3.min.js"></script>
<script src="js/bootstrap.min.js"></script>
  <!-- Custom CSS -->
  k rel="stylesheet" href="css/creative.css" type="text/css">
  <link href="css/owl.carousel.css" rel="stylesheet">
  <link href="css/owl.theme.css" rel="stylesheet">
  k href="css/owl.transitions.css" rel="stylesheet">
  <link href="css/style.css" rel="stylesheet">
  <![endif]-->
</head>
  <body>
   <!-- /.navbar -->
   <nav class="navbar navbar-inverse navbar-fixed-top" role="navigation">
 <div class="container-fluid">
```

```
<div class="navbar-header">
  <a class="navbar-brand"><font color="#FF0000">Time Table Generator</font></a>
 </div>
 cli class="active"><a href="#">Home</a>
  <a class="page-scroll" href="#about">About Us</a>
  <a class="page-scroll" href="#contact">Contact Us</a>
  <a class="page-scroll" href="#registration">Registration</a>
  <a class="dropdown-toggle" data-toggle="dropdown" href="#">Login
   <span class="caret"></span></a>
   <a href="../finalproject/staff/index.php">Staff Login</a>
    <a href="../finalproject/student/index.php">Student Login</a>
   </div>
</nav>
 <!-- /.navbar-end -->
```

```
<!-- /.slider -->
<header>
    <div class="header-content">
       <div class="header-content-inner">
         <h1>Time Table Generator</h1>
         <hr>>
         <a href="#about" class="btn btn-primary btn-xl page-scroll">Find Out More</a>
       </div>
    </div>
  </header>
<!--container-->
 <section class="about" id="about">
    <div class="container">
       <div class="row">
         <div class="col-md-12">
            <div class="col-md-12 text-center">
              <h2 class="section-heading">About Time Table Generator</h2>
              <hr class="primary">
            </div>
            <div class="row mb90">
              <div class="col-md-12 text-justify">
```

```
</div>
            <div class="row">
              <div class="col-md-4 col-lg-4 col-md-offset-4 col-lg-offset-">
                <div class="st-member">
                   </div>
                   </div></div></div>
    <!--contact-->
       <br/><br/>
        <section id="contact">
        <div class="row">
       <h2 class="section-heading" align="center">Contact Us</h2>
              <hr class="primary">
         <div class="col-lg-offset-2 col-lg-8 text-center">
            <h2 class="section-heading"> Let's Get In Touch</h2>
              <hr class="primary">
            </div>
       <div class="panel panel-warning bg-primary" style="padding:10px 25px;">
<?php
include('config.php');
extract($_POST);
if(isset($save))
```

```
mysqli_query($con,"insert into contactus values(",'$name','$e','$s','$m')");
       $err="<font color='blue'>Congrats Your Data Saved!!!</font>";
}
?>
 <form method="POST">
<div class="row" style="margin-bottom: 10px;">
<?php echo @$err; ?>
 </div>
  <div class="row" style="margin-bottom: 10px;">
    <input type="text" class="form-control" placeholder="Name" name="name"/>
  </div>
  <div class="row" style="margin-bottom: 10px;">
    <input type="email" class="form-control" placeholder="Email" name="e"/>
  </div>
  <div class="row" style="margin-bottom: 10px;">
    <input type="text" class="form-control" placeholder="Subject" name="s"/>
  </div>
  <div class="row" style="margin-bottom: 10px;">
    <textarea class="form-control" placeholder="Message" style="resize: vertical;max-height: 400px;"
name="m"></textarea>
  </div>
  <div class="row" style="margin-bottom: 10px;">
    <input type="submit" value="save" name="save" class="btn btn-success" />
  </div>
  </form>
```

```
<div class="row" style="margin-bottom: 10px;">
  </div>
  </div>
  </div>
  <!--registration-->
  <br/><br/>
       <section id="registration">
       <div class="row">
       <h2 class="section-heading" align="center">Registration Form</h2>
              <hr class="primary">
         <div class="col-lg-offset-2 col-lg-8 text-center">
               <i class="fa fa-phone fa-3x wow bounceIn"></i>
<!--
           123-456-6789-->
<div class="panel panel-warning bg-primary" style="padding:10px 25px;">
<?php
include('config.php');
extract($_POST);
if(isset($save))
```

```
$que=mysqli_query($con,"select * from student where eid='$eid' and mob='$mobile'");
$row=mysqli_num_rows($que);
       if($row)
       {
       $err="<font color='red'>This user already exists</font>";
       else
       $image=$_FILES['pic']['name'];
    mysqli_query($con,"insert into student
values(",'$stname','$eid','$p','$mobile','$address','$courseid','$s','$dob','$image','$gen','$status',now())");
  mkdir("../student/image/$eid");
   move_uploaded_file($_FILES['pic']['tmp_name'],"../student/image/$eid/".$_FILES['pic']['name']);
       $err="<font color='blue'>Congrats Your Data Saved!!!</font>";
?>
<script>
function showSemester(str)
if (str=="")
document.getElementById("txtHint").innerHTML="";
return;
```

```
if (window.XMLHttpRequest)
{// code for IE7+, Firefox, Chrome, Opera, Safari
xmlhttp=new XMLHttpRequest();
else
{// code for IE6, IE5
xmlhttp=new ActiveXObject("Microsoft.XMLHTTP");
xmlhttp.onreadystatechange=function()
if (xmlhttp.readyState==4 && xmlhttp.status==200)
document.getElementById("semester").innerHTML=xmlhttp.responseText;\\
//alert(str);
xmlhttp.open("GET","semester_ajax.php?id="+str,true);
xmlhttp.send();
}
</script>
<script>
function showcourse(str)
```

```
if (str=="")
document.getElementById("txtHint").innerHTML="";
return;
if (window.XMLHttpRequest)
{// code for IE7+, Firefox, Chrome, Opera, Safari
xmlhttp=new XMLHttpRequest();
}
else
{// code for IE6, IE5
xmlhttp=new ActiveXObject("Microsoft.XMLHTTP");
xmlhttp.onreadystatechange=function()
if (xmlhttp.readyState==4 && xmlhttp.status==200)
document.getElementById("department").innerHTML=xmlhttp.responseText;\\
//alert(str);
xmlhttp.open("GET","course_ajax.php?id="+str,true);
xmlhttp.send();
```

```
</script>
<div class="row">
<div class="col-md-12">
<h2>Add Student</h2>
<form method="POST" enctype="multipart/form-data">
<div class="row" style="margin-bottom: 10px;">
<?php echo @$err; ?>
</div>
      <div class="row" style="margin-bottom: 10px;">
      <select name="courseid" class="form-control" onchange="showSemester(this.value)" id="courseid"/>
  <option disabled selected >Select Department
      <?php
      $dep=mysqli_query($con,"select * from department");
      while($dp=mysqli_fetch_array($dep))
      $dp_id=$dp[0];
      echo "<option value='$dp_id'>".$dp[1]."</option>";
       }
      ?>
  </select>
      </div>
```

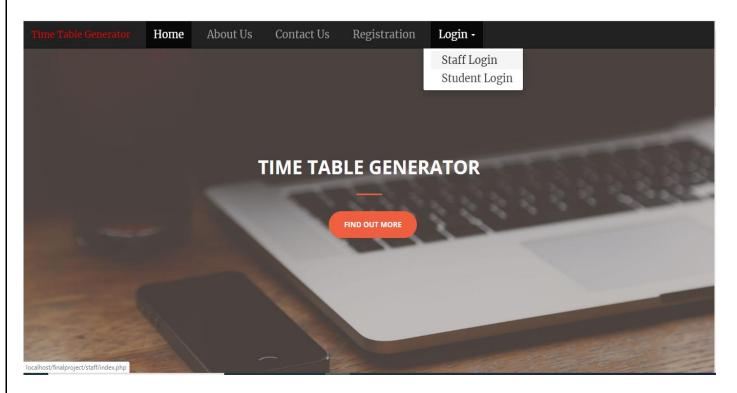
```
<div class="row" style="margin-bottom: 10px;">
     <select name="s" id="semester" onchange="showsemester(this.value)" class="form-control"/>
<option disabled selected >Select Semester
<?php
     $sub=mysqli_query($con,"select * from semester");
     while($s=mysqli_fetch_array($sub))
            $s_id=$s[0];
           echo "<option value='$s_id'>".$s[1]."</option>";
     }
     ?>
     </select>
     </div>
<div class="row" style="margin-bottom: 10px;">
  <input type="text" class="form-control" placeholder="Name" name="stname"/>
</div>
<div class="row" style="margin-bottom: 10px;">
  <input type="email" class="form-control" placeholder="Email" name="eid"/>
</div>
```

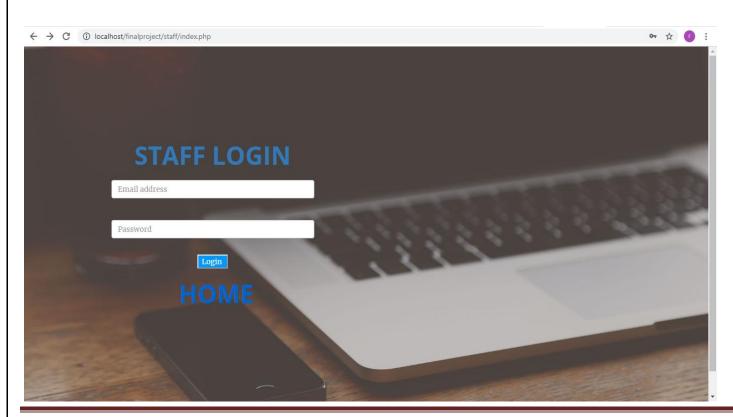
```
<div class="row" style="margin-bottom: 10px;">
  <input type="password" class="form-control" placeholder="Password" name="p"/>
</div>
<div class="row" style="margin-bottom: 10px;">
  <input type="number" class="form-control" placeholder="Mobile" name="mobile"/>
</div>
<div class="row" style="margin-bottom: 10px;">
  <input type="text" class="form-control" placeholder="Address" name="address"/>
</div>
<div class="row" style="margin-bottom: 10px;">
  <input type="date" class="form-control" placeholder="D.O.B" name="dob"/>
</div>
<div class="row" style="margin-bottom: 10px;">
  <input type="file" class="form-control" placeholder="Pic" name="pic"/>
</div>
 <div class="row" style="margin-bottom: 10px;">
<select name="status" class="form-control" placeholder="Status" name="status"/>
    <option value="" selected="selected" disabled="disabled">Select Status
     <option>ON</option>
```

```
<option>OFF</option>
      </select>
      </div>
  <div class="row" style="margin-bottom: 10px;">
male<input type="radio"value="m" id="gen" name="gen"/>
             female<input type="radio"value="f" id="gen" name="gen"/>
</div>
<div class="row" style="margin-bottom: 10px;">
      <input type="submit" value="Add Student" name="save" class="btn btn-success" />
      <input type="reset" value="Reset" class="btn btn-success"/>
</div>
</form>
</div>
</div>
</div>
        </div>
        </section>
      <footer class="container-fluid">
Developed By: Group
</footer>
      </div>
```



7.3.2 OUTPUT





CHAPTER 8: CONCLUSION AND FUTURE ENHANCEMENT

8.1 CONCLUSION

Automatic Timetable Generator is a web based application for generating timetable automatically. It is a great difficult task that to manage many Faculty's and allocating subjects for them at a time manually. So proposed system will help to overcome this disadvantage. Thus we can generate timetable for any number of courses and multiple semesters. This system will help to create dynamic pages so that for implementing such an system we can make use of the different tools are widely applicable and free to use also.

8.2 FUTURE ENHANCEMENT

The Automatic Timetable Generator is driven portal for educational organization and is a web based application which will be helpful for creating Timetable. This project will be a great helpful for the institutions because, it is a great difficult task that to manage many Faculty's and allocating subjects for them at a time manually and this project will help to manage it properly. This manage timetable for faculty with considering maximum and minimum workload, and can be managed easily.

REFERENCES

REFERENCE BOOK NAME

- "IMPLEMENTATION OF CLASS TIMETABLING USING MULTI AGENTS", (2009).
- "Genetic Algorithm to Generate the Automatic Time-Table An Over View", (2014).

REFERENCE WEBSITE

- http://ijarcsse.com/Before_August_2017/docs/papers/Volume_7/5_May2017/SV7I5-0234.pdf
- https://www.researchgate.net/publication/326265336_A_STUDY_ON_AUTOMATIC_TIMETABLE_ GENERATOR

SOURCES USED

- Computer
- Microsoft Word
- Internet
- Sql 2010
- PHP