PROJECT REPORT ON

AUTOMATIC ONLINE TIMETABLE GENERATOR

Presented By

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DEPARTMENT OF COMPUTER ENGINEERING
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CERTIFICATE

This is to certify that SWAPNIL SURESH SOMAWANSHI ,
YASH VIPUL TAILOR ,HET GOPAL SHETH of Third Year Diploma in
Computer Engineering has satisfactorily completed the
project titled "Online Timetable Generator" for the academic year 2018 – 2019
as per the curriculum laid down by MSBTE in partial fulfilment of the award of
Diploma in Computer Engineering.

_____   _____

Internal Project Guide   Head of the Department

_____

Principal

_____   _____

Internal Examiner   External Examiner

ACKNOWLEDGEMENT

We have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them.

We are highly indebted to Prof – Ajay Chawda Sir for his guidance and constant supervision as well as for providing necessary information regarding the project & also for her support in
completing the project.

We would like to express my gratitude towards my parents & member of B.V.P Polytechnic for their kind co-operation and encouragement which help me in completion of this project.
We would like to express my special gratitude and thanks to industry persons for giving me such attention and time.

My thanks and appreciations also go to my colleague in developing the project and people who have willingly helped me out with their abilities.

With Regards
SWAPNIL SURESH SOMAWANSHI
YASH VIPUL TAILOR
HET GOPAL SHETH

Overview

Abstract

Automatic Online Timetable Generator Website allows one to Generate time-table scheduled easily through Website. It requires Internet connection. This is Automatic Online Timetable Generator Website it's a Web project for college institute, offices as well as for other Users that means this Automatic Online Timetable Generator can be used by an entire Institute separately that means only the institute members can use that Automatic Online Timetable Generator. It's a Server client software application developed in PHP. Here the user can generate multiple timetables at a single time. Need of internet connection is requied. This software can be used in all offices where scheduling is required. This software is error free.as well as teachers can share the files on these websites to students so the media and documents sharing becomes possible at one palce. All the messages on this website will be encrypted so there is much privacy as compared to another Websites.the students can check their notes in their automated generated accounts, Anyone can use this Website very Easily.

In order to develop Automatic Online Timetable Generator, a number of Technologies must be studied and understood. These include HTML programming CSS, PHP relational databases (such as MySQL). This is a project with the objective to develop a basic website where a User can create Timetable's within few minute so that the human required time can be saved and the human occurring errors can be avoided.

This document will discuss each of the underlying technologies to create and implement an e-commerce website.

Introduction

Scheduling is the most impoprtant prospect of human life to complete all your task on time the planning and management is required and these can be done by creating a proper time management in table. Not only individuals requires the timetable management but it's also required in Schools, Colleges, Institutes and Offices as Well.It not a easy task to withdraw or plan something the generation timetable manually requires a lot of time human time to overcome these problem these website has been designed so that the generation of timetable can be done easily.The human generation may also lead to error these phenomenon can be avoided in these website.

Automatic Online Timetable Generator is a method of using technology to bring people and ideas together despite of the geographical barriers. The technology has been available for years but the acceptance it was quit recent. Our project is an example of a automation server.

It is made up of many languages, like HTML, CSS(cascading Style Sheet), PHP and for database we have Use MYSQL, the users can generate timetables easily whether it can be single or multiple. You just have to simply singup and do the one no other extra things are required.

Scope and Focus of the Report

The Scope of the Project is that the human generated timetables or schedule planning can be time consuming or may conatian error but these could be easily done within minutes using our website and multiple timetables can be generated that too error free.The Automatic Online Timetable Generator Website is written in HTML, CSS(cascading Style Sheet), PHP and for database we have Use MYSQL.

For the scope of the project, the project will be tested as the program is being developed.

A database for the users registered will be developed and tested, a menu will be developed and tested, a client/server interface will be developed and tested, and GUI's will be developed and tested, for the users' benefits and more importantly the encryption will be checked, whether it is encrypting all the data or not. When the Automatic Online Timetable Generator Website is near completion, more testing will be done in order to make it less buggy or more user friendly.

Literature Survey

RELATED WORKS

In office/school/colleges the scheduling and time management is most important these could be done with proper planning once the timetable is been put in everyone's day to day work. The all carried work could achieve within a goal time.

The admin of office/school/college, can be able to design the timetable.The website would generate the different account for the each and every member of the institute for example:-

- In Schools:- Teachers and Students account where teachers can share the files and change their lectures prior to requirements with mutual conversation to other staff members as well as the teachers can share the files to the students and the students can view the same in their automated generated account by the Admin aka"The Principal or HOD" of the school/college.

- In office:- The employees can create their daily work schedule for their target. As well even they can have their own personal accounts which are automatically generated by the admin of the office aka"The Manager" of the office.

- In Hospital :- Their Attendent timetables and task could be assigned.

FEASIBILITY STUDY

The feasibility study investigates the problem and the information needs of the stakeholders. It seeks to determine the resources required to provide an information systems solution, the cost and benefits of such a solution, and the feasibility of such a solution. The analyst conducting the study gathers information using a variety of methods, the most popular of which are:

- Interviewing users, managers, and customers.

- Developing and administering questionnaires to interested stakeholders, such as potential users of the information system.
- Observing or monitoring users of the current system to determine their needs as well as their satisfaction and dissatisfaction with the current system.
- Collecting, examining, and analyzing documents, reports, layouts, procedures, manuals, and any other documentation relating to the operations of the current system.
- Modeling, observing, and simulating the work activities of the current system.

The goal of the feasibility study is to consider alternative information systems solutions, evaluate their feasibility, and propose the alternative most suitable to the organization. The feasibility of a proposed solution is evaluated in terms of its components. These components are:

TECHNICAL FEASIBILITY

Technical feasibility can be evaluated only after those phases during which technical issues are resolved- namely after the evaluation and design phase of our life cycle have been completed. Today very little is technically impossible. Consequently technical feasibility looks at what is practical and reasonable. Technical feasibility addresses three major issues:

- ✓ Is the proposed technology or solution practical?
- ✓ Do we currently possess the necessary technology?
- ✓ Do we possess the necessary technical expertise, and is the schedule reasonable?

Requirement Gathering

❖ <u>**Software and Hardware Requirements:-**</u>

➢ SOFTWARE REQUIREMENTS:

             Server, Hosting Space
             PHP version 5 or greater
             MySQL (for database)

➢ HARDWARE REQUIREMENTS:

             Smart Phones
             Smart tv
             computers
             laptop
             Any compatible web browser

System Model

Description

The website which we have developed is a Timetable Generation website whose main purpose is to generate the schedule Hasle freely without any human error and in less time as soon as possible. It will include a login and logout system, CSS-style features, and will also offer support for multiple users. While developing the Website we have use languages like HTML(Hyper Text Markup Language), CSS(Cascading Style Sheet), PHP(Personal Home Page) and for storing all the data like all the timetable/messages that admin will create in his/her account. The details of the user that will sign up in that website, will be stored in database, for database we have used MySQL Database all the data will be stored in that database. And all the data in that database will be encrypted like user personal details like password and messages. All that data will be encrypted by some encryption method. So, that encryption features make that accounts on Website more Secure

We have started developing this Website by creating our first file called index.php. This index page is the first page that will show when the user will enter to that Website. This page is the basic as well as the Important page of our Website since this is our important page of our website, so we have added css on that page as well as all the pages in our Website.

We have started our html with the usual DOCTYPE, html and body tags. In body tag we have included CSS style, which is on the another page of the Website. The main purpose of this page is to show the login page of the website. When the user(admin,teacher,student or employee) will enter into the Website, this is the first page that the user is going to see. This page include Login Section. In that login Section include User name and Password and offcource the login button. If the user is new in that Website, we have provided the create account button for that. If the user is new he/she can create account on that page by just clicking the create account button. If the user click on the create account button, he/she will be redirected to the new account creation page. In that create account page, the User has to fill all the basic details.
Basic details like First Name, Last Name, Surname, User Name, Password and all the other details. We have also added the recovery option, that is not fully developed but we are working on that part. If the user forgets the Username or Password he/she can recover their account by the recovery option that will be develop in future.

After the User has entered all the details in a sign up page and after clicking the sign up button, all the details that the user has entered will be send to the database. In that database all the details of the user will be stored. In that database, database includes rows and columns all the will get stored in the form of rows and columns. The password that the user will entered during the sign up page will be encrypted by the encryption

method and the password in the database will be stored in the encrypted form. The technique that we have used for encryption is md5 encryption method. This is only used for encryption purpose we cannot use this method for decryption purpose.

Once the user has entered all the details for that Website and
he/she has clicked the create account button. After clicking on the button all the data will be stored in the database with the help of the code that is written on the adduser.php. This page allows the data to get stored in the database. This page includes the connection.php page the connection.php page allows to do connection with the database, without including connection.php page we cannot connect to the database and we cannot stored any data in the database since, we had not made connection to the database. This page will store all the data in database in the
right place like first name of the user, last name of the user and so on. whenever a new user will enter to our website, with the help of this page, all the data of the user will get stored in the database. The password will get encrypted in this page only, we have used md5 encryption method for encrypting the password.
so if the user entered the password it will be encrypted with the help of encryption method. Now if the user click on the create account all the data will be stored in that database and user will be redirected to the index page. Since the user has registered on that website so all the details has been stored in the database now if the user will login to that website, he will get login.

Now user has to entered Username and Password, once the user has entered the username and the password, the user has to click the login page. once the user has click the login page he/she will be redirected to the Home page of the Website. Now redirecting from login page to home page is done with the help of the login.php page. In login.php page, all the data of the user gets checked in the database, since the password is in the encrypted form and it cannot be decrypted because we have used md5 method for encryption so only the encrypted
password will be matched if the encrypted password gets matched with each other, it will get redirected to the home page. If somehow the username and password did not get matched, the error message will be displayed like, if username not found, this message will be shown userid not found and if username mad password did not match, the error message will be display like, username and password do not match.

Now, if the user has login successfully to that Website. The Home Page of that Website will be display to the User.
This Homepage consist of logout button and it will show the username of the person, who has currently login to that website and it will show various option on the home page the options are:

➢ In Admin Login:-

- Create Timetable
- Time Details
- Subject Details
- Add all:Subject and Teacher
- Remove all:Subject and Teacher
- Preview and Print Timeatble
- Teacher Related Accounts Details
- Student Realted Account Deatails

➢ In Teacher Login:-
      The next is the teacher login page here you can see the option realted to teachers that what all features teacher can use. Here teacher can swap the time slot with discussion with other teacher according to his/her priority the main highlight is that teacher can share the files to the students as well the benefit is that teacher can even store the files before showing it to the students the students can only view the files which are allowed by the teacher.

➢ The Following are the options in teacher account:-

- Timetable:Preview and Print Option
- File:Upload,Remove and Change Permission.

➢ The Student Login:-

The next is student account , these accounts are automatically generated by the admin for each an every student of the institute class wise or division wise.The students can view the document or file uploaded by the teacher in their personal account at one place whenever they require. The Required file can be downloaded by the students for their use.
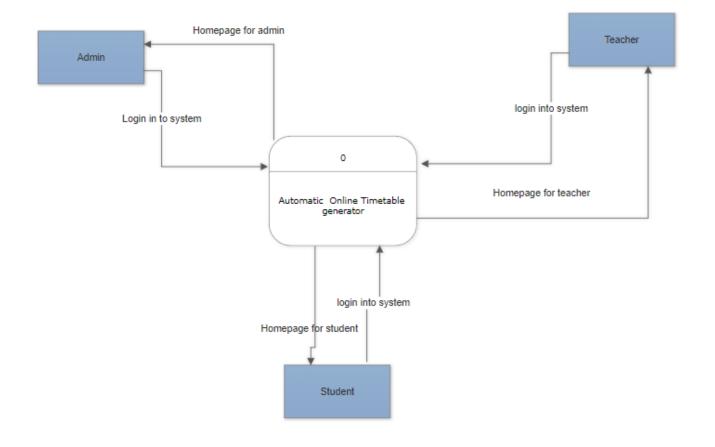
➢ The option viewed are as follows:-

- Preview and Print Timetable.
- File:Search And Download.
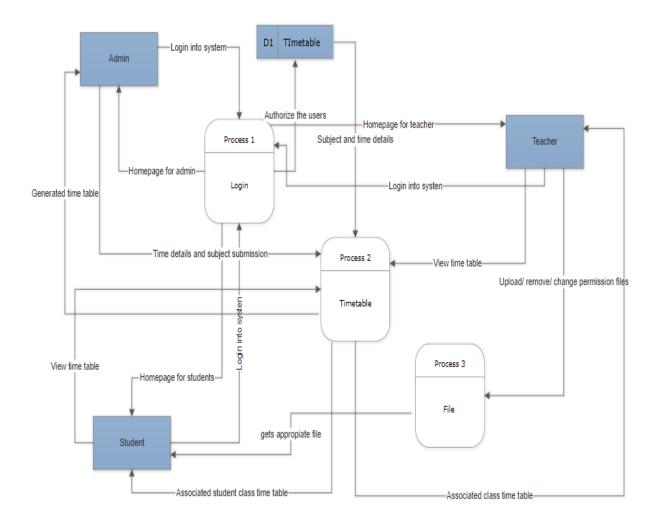
Implementation

- This website can be used for Generation of the Timetables without any error.

- This Website can also be used for private institute or office.

- This Website can also be used for Government offices.

- Since, all the data are protected in this website, it can also be used for army purpose.

- Teachers can freely store their files in their account as the permission setup is been provided.

- The students have benefit of downloading the file from their account which they can preview offline on their preffered device.
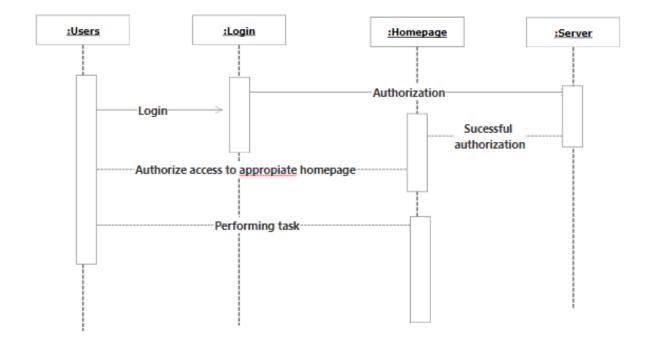
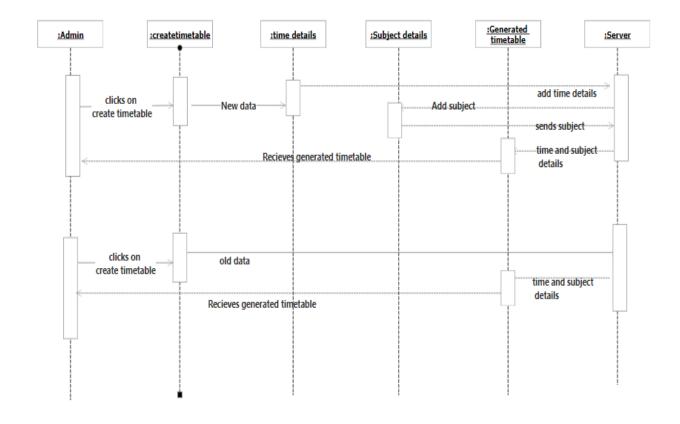# Data Flow Diagrams

Context Flow Diagram/Level 0:-

Admin

Homepage for admin

Login in to system

Teacher

login into system

0

Automatic Online Timetable generator

Homepage for teacher

login into system

Homepage for student

Student

Level 1 Flow Diagram:-

Admin — Login into system → D1 TImetable

Authorize the users

Process 1 — Homepage for teacher → Teacher

Subject and time details

Homepage for admin — Login — Login into system

Generated time table

Time details and subject submission → Process 2

View time table

Timetable

Upload/ remove/ change permission files

View time table

Login into system

Homepage for students

Process 3

File

Student — gets appropiate file

Associated student class time table

Associated class time table

Sequence Diagram:-

Login System Sequence Diagram:-

Timetable Generation System Sequence Diagram:-

:Admin	:createtimetable	:time details	:Subject details	:Generated timetable	:Server

clicks on create timetable

New data

add time details

Add subject

sends subject

Recieves generated timetable

time and subject details

clicks on create timetable

old data
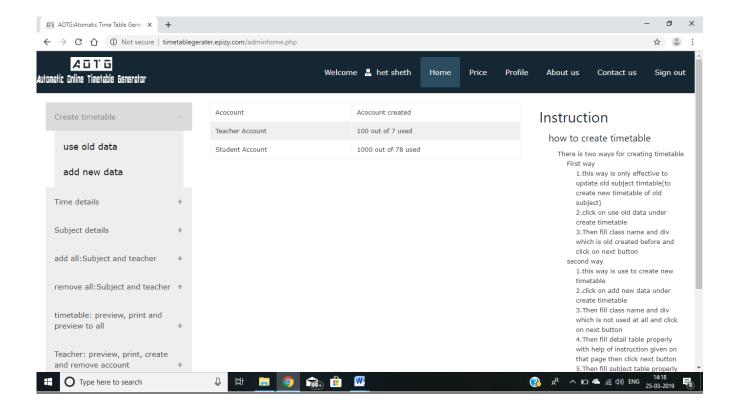
time and subject details

Recieves generated timetable

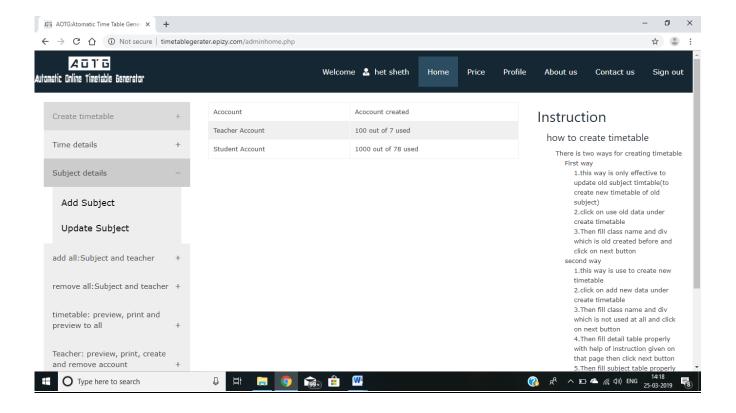# Snapshots, home screen and other screens.
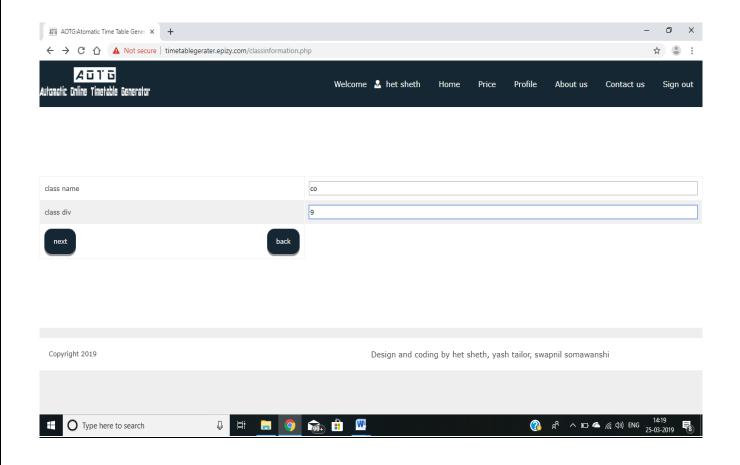
❖ Login Page:-

❖ Admin HomePage:-
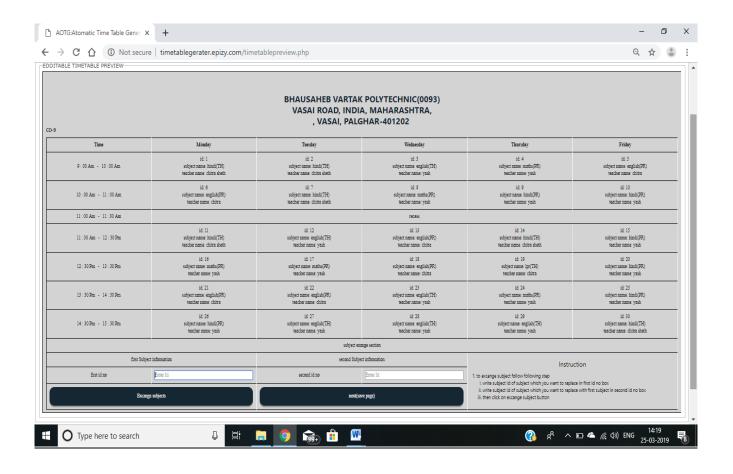
❖ Add Subject Details Page:-

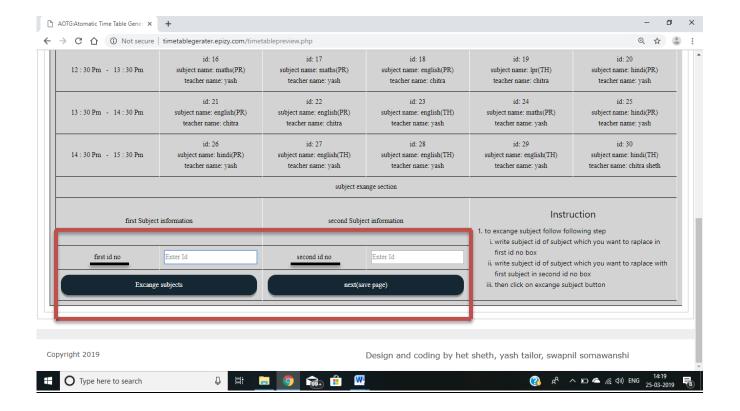Here you can add subjects details by using old data or add new details.

❖ If you are using old data then you have select the existing Class No. and Division No.
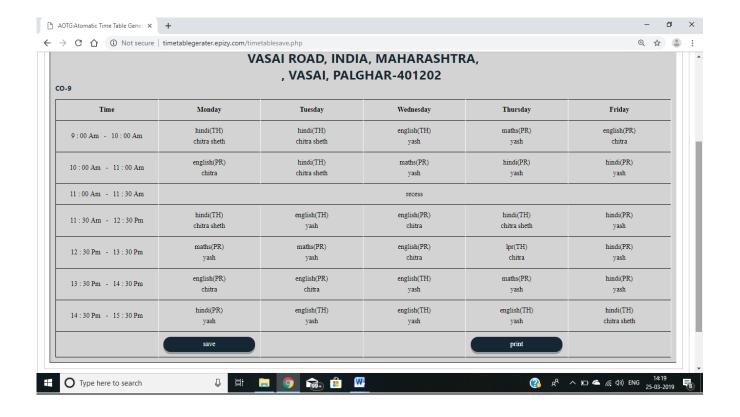
❖ These is the Editable mode of the timetable before final completion of the Timeatable.
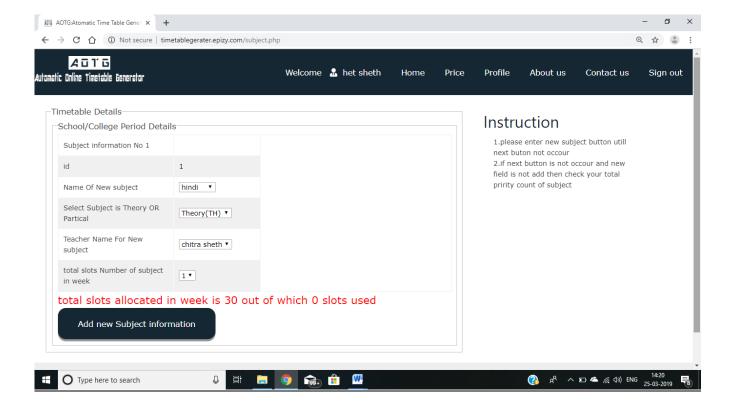
❖ Here you can swap the timeslots manually. With the Help of the ID number Provided.
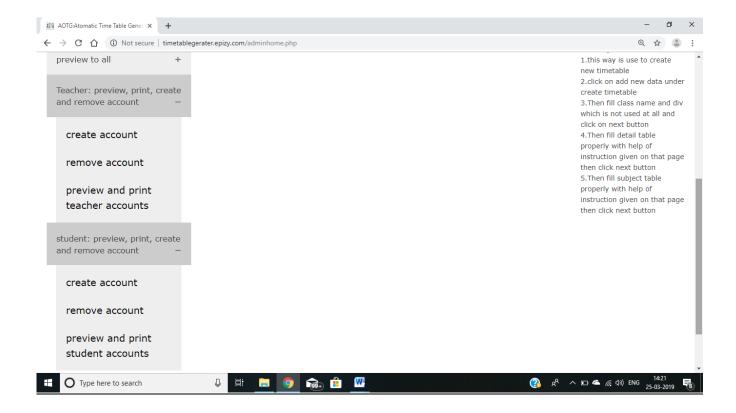
❖ These is final Generated timetable Preview:-

VASAI ROAD, INDIA, MAHARASHTRA, , VASAI, PALGHAR-401202

CO-9

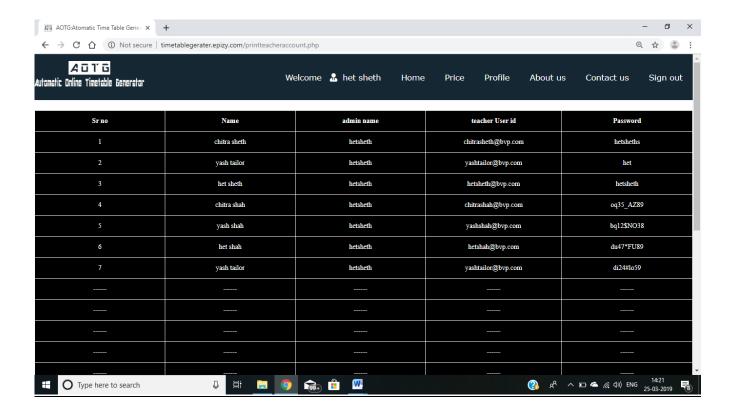| Time	Monday	Tuesday	Wednesday	Thursday	Friday
9 : 00 Am - 10 : 00 Am	hindi(TH) chitra sheth	hindi(TH) chitra sheth	english(TH) yash	maths(PR) yash	english(PR) chitra
10 : 00 Am - 11 : 00 Am	english(PR) chitra	hindi(TH) chitra sheth	maths(PR) yash	hindi(PR) yash	hindi(PR) yash
11 : 00 Am - 11 : 30 Am			recess		
11 : 30 Am - 12 : 30 Pm	hindi(TH) chitra sheth	english(TH) yash	english(PR) chitra	hindi(TH) chitra sheth	hindi(PR) yash
12 : 30 Pm - 13 : 30 Pm	maths(PR) yash	maths(PR) yash	english(PR) chitra	lpr(TH) chitra	hindi(PR) yash
13 : 30 Pm - 14 : 30 Pm	english(PR) chitra	english(PR) chitra	english(TH) yash	maths(PR) yash	hindi(PR) yash
14 : 30 Pm - 15 : 30 Pm	hindi(PR) yash	english(TH) yash	english(TH) yash	english(TH) yash	hindi(TH) chitra sheth
	save			print	

❖ These is for Creation of New Timetable,Here you must add Desired Subjects,Type of Subject,Name of Subject Teacher and Number of Periods to be Appeared in Week.
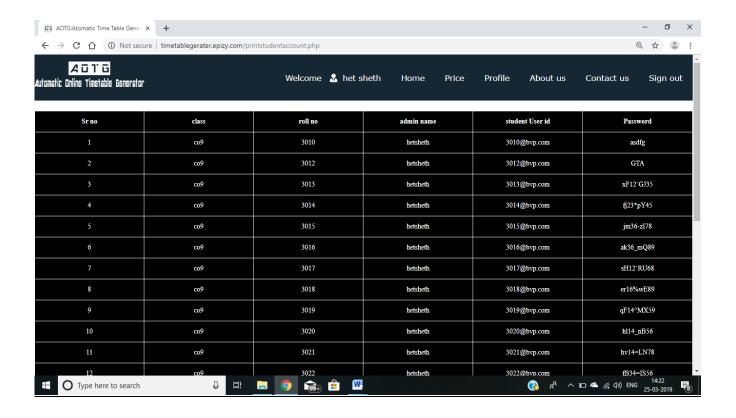
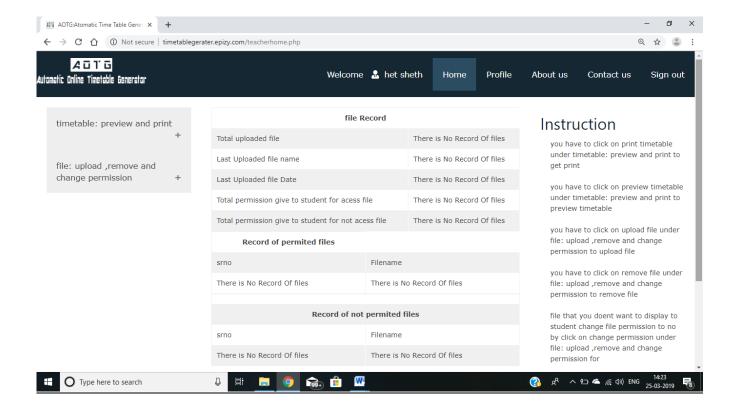❖ Here Admin can operate Teachers and Students realated options:-

❖ These are Accounts Generated list of of Teacher viewed only by Admin:-

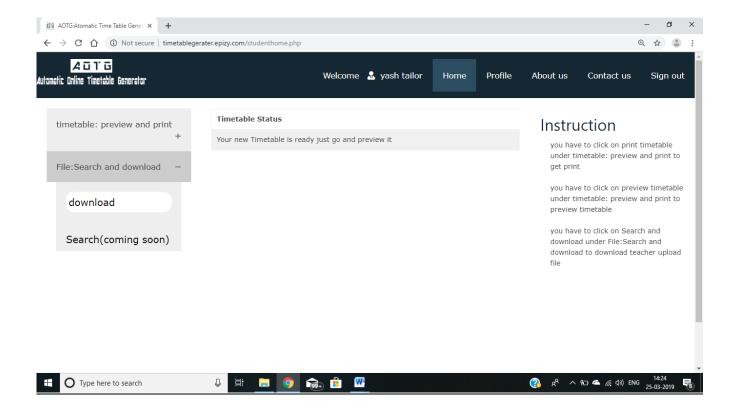| Sr no	Name	admin name	teacher User id	Password
1	chitra sheth	hetsheth	chitrasheth@bvp.com	hetsheths
2	yash tailor	hetsheth	yashtailor@bvp.com	het
3	het sheth	hetsheth	hetsheth@bvp.com	hetsheth
4	chitra shah	hetsheth	chitrashah@bvp.com	oq35_AZ89
5	yash shah	hetsheth	yashshah@bvp.com	bq12$NO38
6	het shah	hetsheth	hetshah@bvp.com	du47*FU89
7	yash tailor	hetsheth	yashtailor@bvp.com	di24#lo59
------	------	------	------	------
------	------	------	------	------
------	------	------	------	------
------	------	------	------	------
------	------	------	------	------

❖ These is the list of students account which is generated for each and Every class with their respective Roll no assigned to them by College/School or Institute:-
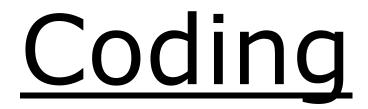
❖ These is the teacher homepage:-

❖ Student Homepage:-

Coding

Timetable Generator

```php
<?php
    include ("connection.php");
    include('session.php');
    include('userheader.php');

    if($_SESSION['classnames'] == "")
    {
        $_SESSION['classnames']=$_POST['classname'];
        $_SESSION['classdivs']=$_POST['classdiv'];
    }

    $classname  = $_SESSION['classnames'];
    $classdiv  = $_SESSION['classdivs'];

    if(($classname == "") & ($classdiv == ""))
    {
        header('Location:adminhome.php');

        $myfile1 = fopen("error4.php", "w") or die("Unable to open file!");
        $txt1 = '<?php $error="please insert class name and class div proper
        and try it again"; echo $error;?>';
        fwrite($myfile1, $txt1);
        fclose($myfile1);
    }

    $database1=$login_session."_".$classname.$classdiv."details";
    $database2=$login_session."_".$classname.$classdiv."subject";
    $database3=$login_session."_".$classname.$classdiv."timetable";

    $query1="SELECT starttimehrs FROM $database1";
    $result1 = $conn->query($query1);

    $query2="SELECT name FROM $database2";
    $result2 = $conn->query($query2);

    if(($result1  != "" ) && ($result2  != ""))
    {
        $rows=array();

        $sql2 = "SELECT * FROM $database2 ORDER BY RAND()";
        $result2 = $conn->query($sql2);

        if ($result2->num_rows > 0)
```

```php
        {
                // output data of each row
                while($row2 = $result2->fetch_array())
                {
                        $rows4[]=$row2['name'];
                        $rows5[]=$row2['teacher'];
                        $rows6[]=$row2['type'];
                }
        }

        $sql2="SELECT * FROM $database1";
        $result2 = $conn->query($sql2);

        if ($result2->num_rows > 0)
        {
                // output data of each row
                while($row2 = $result2->fetch_array())
                {
                        $totallecture            =       $row2['totallecture'];
                }
        }

        $query3="SELECT srno FROM $database3";
        $result3 = $conn->query($query3);

        if($result3 != "")
        {
                $sql3 = "TRUNCATE TABLE $database3";
                $result3 = $conn->query($sql3);
        }else
        {
                $sql3 = "CREATE TABLE `$database3` (
                            `srno` INT NOT NULL AUTO_INCREMENT ,
                            `name` TEXT NOT NULL ,
                            `teacher` TEXT NOT NULL ,
                            `type` TEXT NOT NULL ,
                            `code` TEXT,
                            `count` TEXT,
                            `classname` TEXT,
                            PRIMARY KEY (`srno`),
                            UNIQUE(`srno`)
                            ) ENGINE=MyISAM DEFAULT CHARSET=latin1;";
                $result3 = $conn->query($sql3);
        }
```

```php
        $n=$totallecture-$count;

        for($j=0;$j<$n;)
        {
                $sql4 = "INSERT INTO $database3 (name,teacher,type) VALUES
                ('$rows4[$j]','$rows5[$j]','$rows6[$j]')";
                $result4 = $conn->query($sql4);
                $j++;
        }

        $sql5 = "INSERT INTO $database3 (classname) VALUES ('$classname-
        $classdiv ')";
        $result5= $conn->query($sql5);

        header('Location:timetablepreview.php');
}else
{
        if($result1  == "" )
        {
          $data="time details";
        }

        if($result2  == "")
        {
          $data="subject ";
        }

        if(($result1  != "" ) && ($result2  != ""))
        {
                $data="time details and subject  ";
        }

        $newtimetable=$_SESSION['newtimetable'];

        if(isset($_POST['next']))
        {
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open
                file!");
                $txt1 = '<?php $error="'.$classname.$classdiv.' class '.$data.'
                not found . insert '.$classname.$classdiv.' class '.$data.' proper
                and try it again"; echo $error;?>';
                fwrite($myfile1, $txt1);
                fclose($myfile1);
```

```php
        }else if($newtimetable == "")
        {
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open
                file!");
                $txt1 = '<?php $error=" '.$classname.$classdiv.' class '.$data.'
                is not proply insert please insert  '.$classname.$classdiv.' class
                '.$data.' proper and try it again"; echo $error;?>';
                fwrite($myfile1, $txt1);
                fclose($myfile1);
        }else
        {
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open
                file!");
                $txt1 = '<?php $error="TRY AGAIN AND MAKE SURE YOU FILL
                '.$data.' OF CLASS '.$classname.$classdiv.'"; echo $error;?>';
                fwrite($myfile1, $txt1);
                fclose($myfile1);
        }
    }
?>
```

Adding Time Details For Timetable

```php
<?php

include('connection.php');
include('session.php');

if(isset($_POST['startstimehrs']))
{
        $starttimehrss          =       $_POST['startstimehrs'];
        $starttimemins          =       $_POST['startstimemin'];
        $endtimehrss     =      $_POST['endstimehrs'];
        $endtimemins     =      $_POST['endstimemin'];
        $recessstarthrs1s       =       $_POST['recessstartstimehrs1'];
        $recessstartmin1s       =       $_POST['recessstartsmins1'];
        $recessendhrs1s =       $_POST['recessendstimehrs1'];
        $recessendmin1s         =       $_POST['recessendsmins1'];
        $recessstarthrs2s       =       $_POST['recessstartstimehrs2'];
        $recessstartmin2s       =       $_POST['recessstartsmins2'];
        $recessendhrs2s =       $_POST['recessendstimehrs2'];
```

```php
$recessendmin2s        =       $_POST['recessendsmins2'];
$recessess             =       $_POST['one'];
$dailyperiods          =       $_POST['dailysperiod'];
$saturdays             =       $_POST['two'];
$halfdays              =       $_POST['three'];
$saturdayperiods       =       $_POST['periods'];
$amorpm                =       $_POST['amorpms'];
$amorpm1                   =       $_POST['amorpms1'];
$amorpm2                   =       $_POST['amorpms2'];
$amorpm3                   =       $_POST['amorpms3'];
$amorpm4                   =       $_POST['amorpms4'];
$amorpm5                   =       $_POST['amorpms5'];

$classname = $_SESSION['classnames'];
$classdiv  = $_SESSION['classdivs'];

$database=$login_session."_".$classname.$classdiv."details";

if(($classname == "") & ($classdiv == ""))
{
      header('Location:adminhome.php');

      $myfile1 = fopen("error4.php", "w") or die("Unable to open
      file!");
      $txt1 = '<?php $error="please insert class name and class div
      proper and try it again"; echo $error;?>';
      fwrite($myfile1, $txt1);
      fclose($myfile1);
}

if($starttimehrss != "")
{
      if(isset($_POST['updatedetails']))
      {
            $query4="SELECT srno FROM $database";
            $result4 = $conn->query($query4);

            if ($result4 != "")
            {
                  $query1      =      "UPDATE      $database      SET
                  srno=1,starttimehrs='$starttimehrss',starttimemin=
                  '$starttimemins',endtimehrs='$endtimehrss',endtim
                  emin='$endtimemins',recessstarthrs1='$recessstart
                  hrs1s',recessstartmin1='$recessstartmin1s',recesse
                  ndhrs1='$recessendhrs1s',recessendmin1='$recesse
```

```php
            ndmin1s',recessstarthrs2='$recessstarthrs2s',recess
            startmin2='$recessstartmin2s',recessendhrs2='$rec
            essendhrs2s',recessendmin2='$recessendmin2s',rec
            esses='$recessess',dailyperiod='$dailyperiods',satur
            day='$saturdays',halfday='$halfdays',saturdayperio
            d='$saturdayperiods',amorpm='$amorpm',amorpm1
            ='$amorpm1',amorpm2='$amorpm2',amorpm3='$a
            morpm3',amorpm4='$amorpm4',amorpm5='$amor
            pm5'  WHERE srno=1";
            $result1 = $conn->query($query1);

            header('Location:adminhome.php');

            $myfile1 = fopen("error4.php", "w") or die("Unable
            to open file!");
            $txt1 = '<?php $error="time details updated to class
            '.$classname.$classdiv.'"; echo $error;?>';
            fwrite($myfile1, $txt1);
            fclose($myfile1);
    }else
    {
            header('Location:adminhome.php');

            $myfile1 = fopen("error4.php", "w") or die("Unable
            to open file!");
            $txt1 = '<?php $error="error occur because class
            '.$classname.$classdiv.' time details is not presert so
            add time  by clicking on  add time button in time
            details section "; echo $error;?>';
            fwrite($myfile1, $txt1);
            fclose($myfile1);
    }
}else
{
    $query3="SELECT srno FROM $database";
    $result3 = $conn->query($query3);

    if ($result3 == "")
    {
            $query1 = "CREATE TABLE `$database` (
                    `srno` int(11) DEFAULT NULL,
                    `starttimehrs` text,
                    `starttimemin` text,
                    `endtimehrs` text,
                    `endtimemin` text,
```

```
                                          `recessstarthrs1` text,
                                          `recessstartmin1` text,
                                          `recessendhrs1` text,
                                          `recessendmin1` text,
                                          `recessstarthrs2` text,
                                          `recessstartmin2` text,
                                          `recessendhrs2` text,
                                          `recessendmin2` text,
                                          `recesses` text,
                                          `dailyperiod` text,
                                          `saturday` text,
                                          `halfday` text,
                                          `saturdayperiod` text,
                                          `amorpm` text,
                                          `amorpm1` text,
                                          `amorpm2` text,
                                          `amorpm3` text,
                                          `amorpm4` text,
                                          `amorpm5` text,
                                          `totallecture` text,
                                          `loopvalue` text
                                            )      ENGINE=MyISAM      DEFAULT
                                          CHARSET=latin1;";
                              $result1 = $conn->query($query1);

$query2="INSERT INTO `$database` (`srno`, `starttimehrs`, `starttimemin`,
`endtimehrs`,      `endtimemin`,      `recessstarthrs1`,      `recessstartmin1`,
`recessendhrs1`,   `recessendmin1`,   `recessstarthrs2`,   `recessstartmin2`,
`recessendhrs2`, `recessendmin2`, `recesses`, `dailyperiod`, `saturday`,
`halfday`, `saturdayperiod`, `amorpm`, `amorpm1`, `amorpm2`, `amorpm3`,
`amorpm4`,  `amorpm5`,  `totallecture`,  `loopvalue`  )  VALUES  (1,
'$starttimehrss',      '$starttimemins',      '$endtimehrss',      '$endtimemins',
'$recessstarthrs1s', '$recessstartmin1s', '$recessendhrs1s', '$recessendmin1s',
'$recessstarthrs2s', '$recessstartmin2s', '$recessendhrs2s', '$recessendmin2s',
'$recessess',   '$dailyperiods',   '$saturdays',   '$halfdays',   '$saturdayperiods',
'$amorpm',      '$amorpm1',      '$amorpm2',      '$amorpm3',      '$amorpm4',
'$amorpm5','1','1');";

                                    $result2 = $conn->query($query2);

                        if(isset($_POST['newtimetable']))
                        {
                        $_SESSION['newtimetable'] = "newtimetable";

                              header('Location:subject.php');
```

```php
                    }else if(isset($_POST['adddetails']))
                    {
                            header('Location:adminhome.php');

                            $myfile1   =   fopen("error4.php",   "w")   or
                            die("Unable to open file!");
                            $txt1 = '<?php $error="time details added to
                            class        '.$classname.$classdiv.'";        echo
                            $error;?>';
                            fwrite($myfile1, $txt1);
                            fclose($myfile1);
                    }
               }else
               {
                       header('Location:adminhome.php');

                       $myfile1 = fopen("error4.php", "w") or die("Unable
                       to open file!");
                       $txt1 = '<?php $error="error occur because class
                       '.$classname.$classdiv.'time   detail  is   presert  so
                       update time by clicking on  updae time  button in time
                       details section"; echo $error?>';
                       fwrite($myfile1, $txt1);
                       fclose($myfile1);
               }
        }
    }else
    {
            header('Location:adminhome.php');

            $myfile1  =  fopen("error4.php",  "w")  or  die("Unable  to  open
            file!");
            $txt1 = '<?php $error="TRY AGAIN AND MAKE SURE TO FILL
            DATA IN FIELD"; echo $error;?>';
            fwrite($myfile1, $txt1);
            fclose($myfile1);
    }
}else
{
     header('Location:adminhome.php');

     $myfile1 = fopen("error4.php", "w") or die("Unable to open file!");
     $txt1 = '<?php $error="TRY AGAIN AND MAKE SURE TO FILL DATA IN
     FIELD"; echo $error;?>';
     fwrite($myfile1, $txt1);
```

```php
                fclose($myfile1);
        }
?>


            Add Subject For Timetable

<?php
        include('connection.php');
        include('session.php');

        if(isset($_POST['subject1']))
        {
                $classname  = $_SESSION['classnames'];
                $classdiv  = $_SESSION['classdivs'];
                $newtimetable=$_SESSION['newtimetable'];

                $database=$login_session."_".$classname.$classdiv."subject";
                $database1=$login_session."_".$classname.$classdiv."details";

                $query1="SELECT srno FROM $database";
                $result1 = $conn->query($query1);

                function subject($database, $result1, $conn)
                {
                        $_SESSION['post-data'] = $_POST;

                        if($result1 == "")
                        {
                                $sql2 = "CREATE TABLE `$database` (
                                        `srno` INT NOT NULL AUTO_INCREMENT ,
                                        `id` INT NOT NULL ,
                                        `name` TEXT NOT NULL ,
                                        `teacher` TEXT NOT NULL ,
                                        `type` TEXT NOT NULL ,
                                        `piroity` INT NOT NULL ,
                                        PRIMARY KEY (`srno`),
                                        UNIQUE(`srno`)
                                        )       ENGINE=MyISAM        DEFAULT
                                        CHARSET=latin1;";
                                $result2 = $conn->query($sql2);
                        }else
                        {
                                $sql3 = "TRUNCATE TABLE $database";
                                $result3 = $conn->query($sql3);
                        }
```

```php
$n =$_SESSION['post-data']['loopvalue'];

$piority = array();
$subject = array();
$subjecttype = array();
$subjectteacher = array();
$id = array();

$sql4 = "INSERT INTO $database1 (loopvalue) VALUES ('$n')";
$result4 = $conn->query($sql4);

for($i=1;$i<=$n;)
{
        $count1="subjecttype".$i;
        $y = $_SESSION['post-data'][$count1];
        $subjecttype[$i]=$y;
        $i++;
}

for($i=1;$i<=$n;)
{
        $count2="subjectteacher".$i;
        $y = $_SESSION['post-data'][$count2];
        $subjectteacher[$i]=$y;
        $i++;
}

for($i=1;$i<=$n;)
{
        $count3="id".$i;
        $y = $_SESSION['post-data'][$count3];
        $id[$i]=$y;
        $i++;
}

for($i=1;$i<=$n;)
{
        $count4="subject".$i;
        $y = $_SESSION['post-data'][$count4];
        $subject[$i]=$y;
        $i++;
}

for($i=1;$i<=$n;)
```

```
        {
                $count5="piority".$i;
                $y = $_SESSION['post-data'][$count5];
                $piority[$i]=$y;
                $i++;
        }

        for($i=1;$i<=$n;)
        {
                $n1=$piority[$i];

                for($j=1;$j<=$n1;)
                {
                        $sql5      =      "INSERT      INTO      $database
                        (id,name,piroity,teacher,type)                VALUES
                        ('$id[$i]','$subject[$i]','$piority[$i]','$subjectteacher
                        [$i]','$subjecttype[$i]')";
                        $result5 = $conn->query($sql5);
                        $j++;
                }
                $i++;
        }
    }

    if(isset($_POST['newtimetable']))
    {
            $_SESSION['newtimetable'] = "newtimetable";

            if($result1 == "")
            {
                    subject($database, $result1, $conn);
                    header('Location:timetablegenerater.php');
            }else
            {
                    header('Location:adminhome.php');

                    $myfile1 = fopen("error4.php", "w") or die("Unable to open
                    file!");
                    $txt1 = '<?php $error="error occur because class
                    '.$classname.$classdiv.' subjects data is presert so update
                    subject by clicking on  update subject button in subject
                    section"; echo $error;?>';
                    fwrite($myfile1, $txt1);
                    fclose($myfile1);
            }
```

```php
}else if(isset($_POST['updatesubject']))
{
        if($result1 != "")
        {
                subject($database, $result1, $conn);
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open
                file!");
                $txt1  =  '<?php  $error="subject  updated  of  class
                '.$classname.$classdiv.'"; echo $error;?>';
                fwrite($myfile1, $txt1);
                fclose($myfile1);
        }else
        {
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open
                file!");
                $txt1  =  '<?php $error="subjects  are  not  there  so  add
                subject of class'.$classname.$classdiv.' by clicking in add
                subject in subject section "; echo $error;?>';
                fwrite($myfile1, $txt1);
                fclose($myfile1);
        }
}else if(isset($_POST['addsubject']))
{
        if($result1 == "")
        {
                subject($database, $result1, $conn);
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open
                file!");
                $txt1     =     '<?php     $error="subject     added     to
                class'.$classname.$classdiv.'"; echo $error;?>';
                fwrite($myfile1, $txt1);
                fclose($myfile1);
        }else
        {
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open
                file!");
                $txt1  =  '<?php  $error="class  '.$classname.$classdiv.'
```

```php
                                already thier so use update subject button in subject
                                section"; echo $error;?>';
                                fwrite($myfile1, $txt1);
                                fclose($myfile1);
                        }
                }
        }else
        {
                header('Location:adminhome.php');

                $myfile1 = fopen("error4.php", "w") or die("Unable to open file!");
                $txt1 = '<?php $error="TRY AGAIN AND MAKE SURE TO FILL DATA IN
                FIELD"; echo $error;?>';
                fwrite($myfile1, $txt1);
                fclose($myfile1);
        }
?>
```

Testing tools used with Cases

Testing

Web testing checklists
   1) Functionality Testing
   2) Usability Testing
   3) Interface Testing
   4) Compatibility Testing
   5) Performance Testing
   6) Security Testing

1) Functionality Testing
Test for – all the links in web pages, database connection, forms used for submitting or getting information from the user in the web pages, Cookie testing etc.

Check all the links:
   - Test the outgoing links from all the pages to the specific domain under test.
   - Test all internal links.
   - Test links jumping on the same pages.
   - Test to check if there are any orphan pages.
   - Finally, link checking includes, check for broken links in all above-mentioned links

2) Usability Testing
Usability testing is the process by which the human-computer interaction characteristics of a system are measured, and weaknesses are identified for correction.

•Ease of learning
• Navigation
• Subjective user satisfaction
• General appearance

3) Interface Testing

In web testing, the server side interface should be tested. This is done by verifying that communication is done properly. Compatibility of the server with software, hardware, network, and the database should be tested.

The main interfaces are:
- Web server and application server interface
- Application server and Database server interface.

4) Compatibility Testing

Compatibility of a website is a very important testing aspect.

- Browser compatibility
- Operating system compatibility
- Mobile browsing

5) Performance testing

The web application should sustain to heavy load. Web performance testing include:

- Web Load Testing
- Web Stress Testing

Test Case:-

Sr.no	Testcase_id	Testcase_objecrive	prerequisite	steps	I/P data	Expected Result	Actual Result	status
1	TC-1	To check Internet connection	Device should be connected to lan or wifi	Test internet connection	www.aotg.epizy.com	Home page should be display	Homepage displayed	Test to pass
2	TC-2	User name	User name and password should be registered	Type correct User name and password	Username and password	Should go to the home page of the website	Redirected to the homepage of the website	Test to pass
1	TC-3	To check Whether homepage open or not	Intenet connection should be there	Type proper website address	www.chatwrapper.com	Home page should be display	Home page displayed	Test to pass

<u>System Analysis</u>

Comparative Analysis with respect to similar websites in market:-

There are many other similar websites which are used to generate timetables but our website gives you a complete personalize use for your completion.

- This website gives full right only to the admin of office.

- This Website is one stop application for each and every member with their separate account with password protection.

- This Website gives teachers benefit to swap their timeslots with their prior requirement.

- Teachers can freely store their files in their account as the permission setup is been provided.

- The students have benefit of downloading the file from their account which they can preview offline on their preffered device.

Limitation

- If a Admin makes change in the timetable the students or teachers will not get a notification they have refresh their page for the changed details.

- The clashes of the teacher and slots cant be managed uptill these development stage of website.

- If a any of user close the web browser directly he will not be logout, from the website, to logout from the website the user must click logout button then only user will be logout from the Website.

Future Scope

There is always a room for improvements in any Website, however good and efficient it may be done. But the most important thing should be flexible to accept further modification. Right now we are just dealing with text communication. In future this Website may be extended to include features such as:

- File transfer: this will enable the user to send files of different formats to others via the personal account.
- The Students will get to know the changes on the spot.
- The timetables can be edited and generated within a minutes.

Cost Anlaysis

Since it is a website and we have used all the open sources languages and software and this website is locally so, that why we have not invested any money in this website.

And in the future if we put the our website on hosting on server, then only the cost of the server will be required

By the way this website is free of cost, so any user can use this website.

Conclusion

A project is successfully completed only when there is contribution of all the members of a team. Each member in the project has a required objective to accomplish .In same way to complete this project we divided our work in equal manner .Instead of selecting a particular task to do individually, we divided a single task in multiple subtasks so that we all can work together on the same phase or task of the project. Doing so no team member had to wait to show his or her capabilities.

The main objective of the project is to develop a Secure Automatic Timetable Generator. We had taken a wide range of literature review in order to achieve all the tasks, where We came to know about some of the products that are existing in the market. We made a detailed research in that path to cover the loop holes that existing systems are facing and to eradicate them in our Website.

As a result, the product has been successfully developed and tested in order to meet all requirements that are
- Authentication
- Integrity
- Confidentiality
- Availability

References

- www.phpbuddy.com
- www.mysql.com
- www.w3schools.com
- www.php.net
- https://www.elated.com/articles/php-references/
- www.dev.mysql.com