

AUTOMATIC TIME TABLE GENERATOR

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ABSTRACT

AutomaticTimetableGeneratorisapythonbasedsoftwareusedtogeneratetimetable automatically. Currently timetable is managed manually. It will help to manage all the periods automatically and also will be helpful for faculty to get timetable in their phone by using application. It will also manage timetable when any teacher is absent ,late coming or early going. Maximum and minimum work load for a Faculty for a day, secondment will be specified for the efficient generation of timetable.

By using this software users can apply for leave by providing leave required date, and also with substitute faculty. When selecting a faculty as substitute it allows to view timetable of that faculty for ensure that the faculty is free at that particular period. Substitute can approve or reject request Principal can also view the request send by faculty and can also view substitute response.Principal can approve reject request.

It is a comprehensive time table management solutions for Colleges which help to overcome the challenges in manually setting the timetable. By using this software it will be very easy for faculty to get time table in their phones.

1 INTRODUCTION

A timetable is a schedule that outlines the specific times at which certain events are planned to occur. When educationalists manually prepare a timetable, their main task is to ensure the availability and workload of faculty members for each subject. Additionally, they must generate a timetable that adheres to the predefined government scheme for each subject of a particular grade. It is crucial to schedule time slots for each subject smoothly, without any overlap with slots assigned to the same faculty member teaching different grades. To simplify the process of setting and managing timetables, our project proposes a machine learning-based system that takes inputs such as grade-wise subjects, faculty members, and faculty workload. The system will use these inputs to generate a possible timetable for the working days of the week, ensuring optimal use of all available resources. Our suggested solution aims to tackle the limitations inherent in the conventional method of generating timetables, alleviating the monotonous task of manually creating timetables. With the use of machine learning algorithms, this proposed system will eliminate the complexity of manually generating and managing timetables, providing an efficient and effective solution to this challenging task. It will help educationalists prepare timetables in a smooth and streamlined manner, improving the overall efficiency of the educational institution.

2. LITERATURE SURVEY AND RELATED WORK

We can see from a look at the current system that timetable generation is done manually.It is a significant difficulty for the automatic timetable generator to manage the timetable automatically when any faculty member is missing. Manually adjusting the schedule when any faculty member is absent.

Since every institution and organization has its own schedule, controlling and keeping these will not be challenging. This scheduling will be more challenging when workload is taken into account. As previously said, the maximum and lowest workload that is present in a college should be taken into account while creating a schedule. In certain circumstances, creating a schedule will be more difficult. Additionally, it is a lengthy process.

3 EXISTING SYSTEM

Normally timetable generation done manually. As we know all institutions/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 time table generation will be come more complex. Also , it is a time-consuming process.

4 PROPOSED WORK AND ALGORITHM

AutomaticTimetablemangerisapythonbasedsoftwareusedtogeneratetimetableautomatically. Will help you to manage all the periods automatically and also will be helpful for faculty who will get timetable in their phone as a notification. It will also manage timetable when any Teacher is absent late coming or early going. Proposed system will help to generate it automatically also helps to save time . There is no need for Faculty to worry about the period details and maximum workload. By using this software users can apply for leave by providing leave required date, reason and also with substitute faculty. When selecting a faculty as substitute it allows to view timetable of that faculty for ensure that the faculty is free at that particular period. Substitute can approve or reject request. Principal can also view the request send by faculty and can also viewsubstituteresponse.Principalcanapprove/rejectrequest.ItisacomprehensivetimetablemanagementsolutionsforCollegeswhic h helps to overcome the challenges incurent system.

5 METHODOLOGIES

MODULES

- Application function tests

Thefunctionalityofclientapplicationsistestedusingthemethodsdiscussedbelow.

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 with out error. Network testsarealsobeingconducted.Thestrategyfortestingc/sarchitectureisanalogoustotestingofotherarchitecture.

6 RESULTS AND DISCUSSION

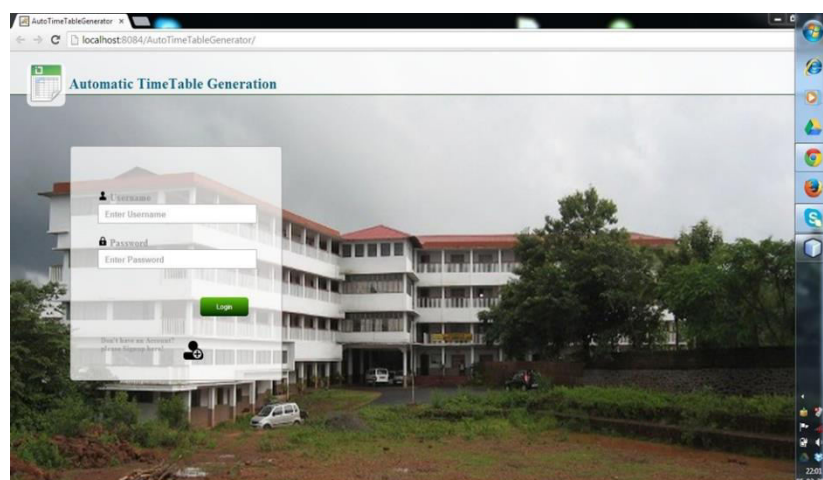


Fig1:Login Page

Semester 2						
Days	period 1	period 2	period 3	period 4	period 5	period 6
Monday	DS Amritha	C++ Bimal	DCN Priya	LAB2 Kavitha	LAB2 Kavitha	LAB2 Kavitha
Tuesday	POA Sandhya	DBMS Shajeer	LINUX AD: Dhanya	SEMINAR Jaya	SEMINAR Jaya	SEMINAR Jaya
Wednesday	DS Amritha	DBMS Shajeer	LINUX AD: Dhanya	DCN Priya	C++ Bimal	POA Sandhya
Thursday	POA Sandhya	DBMS Shajeer	LINUX AD: Dhanya	DCN Priya	C++ Bimal	DS Amritha
Friday	POA Sandhya	DCN Priya	C++ Bimal	DS Amritha	DBMS Shajeer	LINUX AD: Dhanya

Semester 4						
Days	period 1	period 2	period 3	period 4	period 5	period 6
Monday	LIBRARY Hariram	VP Dhanya	CNS Jeena	LAB4 Jaya	AJP Bimal	POA Hariram
Tuesday	LIBRARY Hariram	VP Dhanya	CG Shajeer	SEMINAR Kavitha	SEMINAR Kavitha	SEMINAR Kavitha
Wednesday	AJP Bimal	VP Dhanya	CG Shajeer	LAB4 Jaya	LAB4 Jaya	LAB4 Jaya
Thursday	VP Dhanya	CNS Jeena	CG Shajeer	AJP Bimal	POA Hariram	LIBRARY Hariram
Friday	LAB4 Jaya	AJP Bimal	POA Hariram	LIBRARY Hariram	CNS Jeena	CG Shajeer

Fig 2: Time table

Automatic TimeTable Generation

Enter Username

Enter Password

Login

Firstname

Jipin

Lastname

Sathya

Address

Kakkirikkon House

Contact

9809630105

D.O.B

24.05.1991

D.O.J

20.08.2014

Qualification

MCA

Email

jipinsathya@gmail.com

Mac Address

42452889778

Course Taken

MCA

AJP

DBMS

LIBRARY

SEMINAR

POA

Fig 3: Registration Page

Automatic TimeTable Generation

Enter Username

Enter Password

Login

Firstname

Jipin

Lastname

Sathya

Address

Kakkirikkon House

Contact

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Fig 4 : Apply for leave

Automatic TimeTable Generation

Enter Username

Enter Password

Login

Firstname

Jipin

Lastname

Sathya

Address

Kakkirikkon House

Contact

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POA

Fig 5 : View leave Request

7.CONCLUSION AND FUTURE SCOPE

Automatic Timetable Generator is a web based application for generating time table 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 freed ourselves.

FUTURE SCOPE

The Automatic Time table Generator is driven portal for educational organization and is a web based application which will help in creating Timetables. This project will be a great helpful for in situations 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 time table for faculty with considering maximum and minimum workload and can be managed easily.

8 REFERENCES

[1] Software Engineering Fifth edition by R. S.Pressman, McGraw-Hill Publication, 1997

WEBSITES

<http://en.wikipedia.org/wiki/SQLite>