TIME TABLE AT A CLICK

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Abstract- *The hand operated system of time table preparation in colleges is very monotonous and time-consuming which results in either the same teachers ending up with more than one class at a time or a number of classes conflicting at the same classroom. Due to a non-automatic perspective, absolute utilization of resources has proven ineffective. In order to deal with such problems, a mechanized system can be designed with a computer aided timetable generator. The system will take different inputs like number of subjects, teachers, maximum lectures a teacher can conduct, priority of subject and topics to be covered in a week or a lecture, considering which, it will create feasible time tables for working days of the week, making excellent application of all resources in a way which will be best suited for the constraints. A suitable timetable is then chosen from the optimal solutions generated.*

Key word: **class room constraint, Algorithm, Flow Chart**

1.   INTRODUCTION

Even though most college administrative work has been computerized, the lecture timetable scheduling is still mostly done manually due to its inherent difficulties. The manual lecture-timetable scheduling demands considerable time and efforts. [1] The lecture-timetable scheduling is a constraint satisfaction problem in which we find a solution that satisfies the given set of constraints. A college timetable is a temporal arrangement of a set of lectures and classrooms in which all given constraints are satisfied. Creating such timetables manually is complex and time-consuming process. By automating this process with computer assisted timetable generator can save a lot of precious time of administrators who are involved in creating and managing course timetables. Generating a timetable is one of the challenging time consuming problems facing institutions belonging to the complete class of problems. Our main challenge is to be able to automatically time table four year associate degree Programs' courses' so that students belonging to different programs can easily register for courses with no timetable clashes for the semester they are studying for. A general studied paper by [1] investigates examination and course timetabling providing up to-date important information and citations for further research and possible implementations of automated timetabling for use in educational settings. The college lecture-timetabling problem asks us to find some time slots and classrooms which satisfy the constraints imposed on offered. Bhaduri A [2] evolutionary techniques have been used to solve the time table scheduling problem Algorithms, have been used with mixed success. In this paper, we have referred the problem of educational time table scheduling and solving it with resource scheduling algorithm**.**
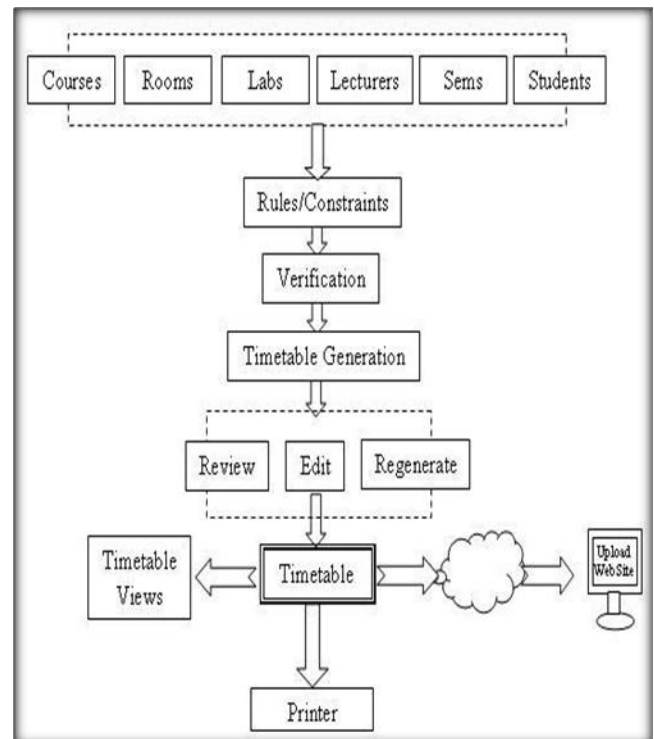

Fig 1: General view of timetable

The proposed system is a data flow dig, [4]which allows the good user interface to admin & faculties, and they can easily get the required information. It provide variety of facilities to admin and faculties. The main modules of the proposed system are Administrator and faculties .

[5]The security feature is very strong therefore record can be only updated by Admin & related faculty to that subject. The home page contains three categories of user. By clicking on any of them the related login screen will come. Password screen includes the username and password. On being entered, the password is evaluated and the entry is given only to the correct password entry. There are two types of login, administrator login, faculties login . The new faculties can update or can register to the system with the help of admin.

The proposed system is used to generate time table automatically. This ensures the following features
• Easier slot assigning
• Less time consumption
• NO slot clashes
• Always considers the other department slots first
• Various possible slot combinations can be acquired
• User friendl

2. PROBLEM STATEMENT

Generally, the hand operated system of time table preparation in colleges is very monotonous and time-consuming which results in either the same teachers ending up with more than one class at a time or a[6] number of classes conflicting at the same classroom. Due to a non-automatic perspective, absolute utilization of resources has proven ineffective.

The proposed system is used to generate time table automatically. This ensures the following features:

• Easier slot assigning

• Less time consumption

[7]. *Hertz A.*, "Tabu search for large scale timetabling problems",

• NO slot clashes

3. DESIGN

3.1 Use Case Diagrams
Fig: use case
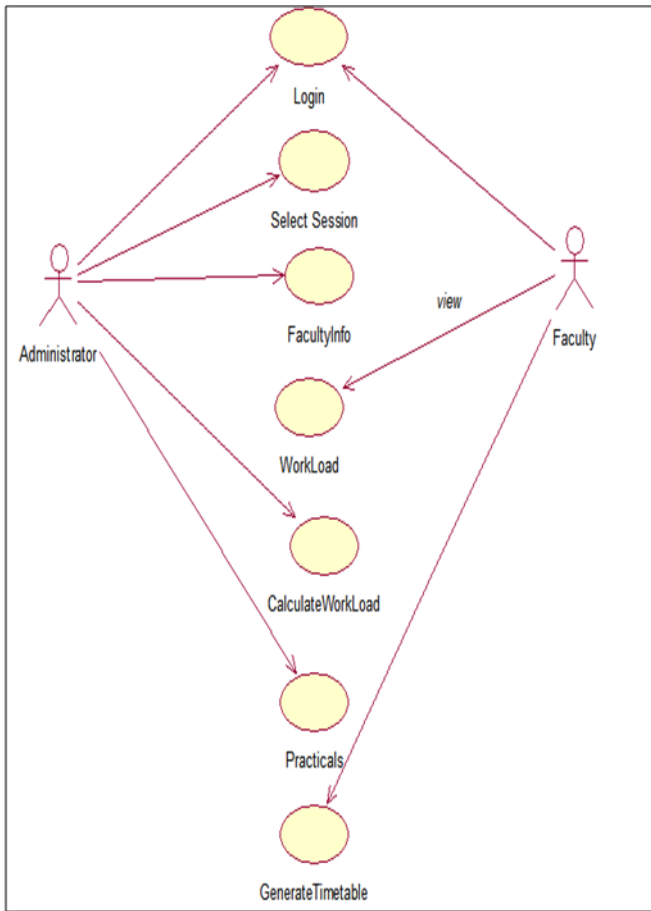
3..1 Use Case Diagrams

Fig: use case

of our project there are two actors such as administrator and faculty .The use case is consist of login, select session, faculty info, work load, calculate workload , practical , general timetable .Administrator have authorize to access all the attribute and faculty can access login , workload , generate timetable. Use Case
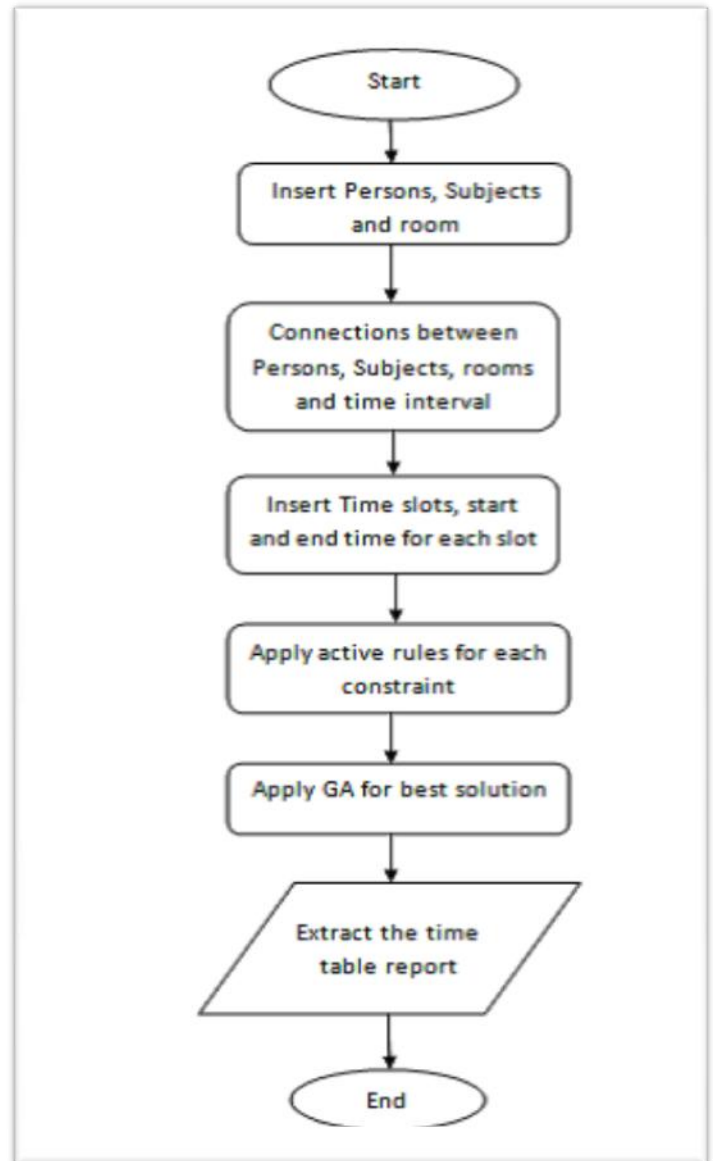
3.1 Flowchart

Fig: *Flow chart*
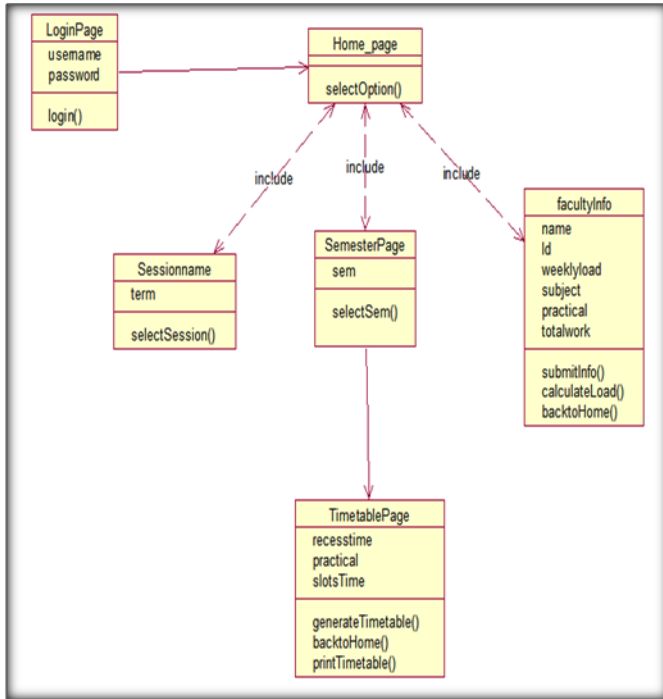

3.3 CLASS DIAGRAM

Fig: Class diagram

Class diagram consist 6 classes.
1. LoginPage
Contain attributes such as username and password and operation for allowing authenticate user to get login ().

2.HomePage
This class contain the selectOption() operation for selecting select option.

3.Sessionname
This class contain attributes term and operation selectsession () .

4.SemesterPage
This class contain attributes sem and operation selectsem () .

5.Faculty
This class contain attributes name, id weekly load ,subject ,practical, total work and operation submit info(), calculate workload() backtohome().

6. TimeTablePage
This class contain attributes recess time, practical,slotsTime and operation GenreteTimeTable (),backtohomepage(),printTimetable() . This a main class of our project.

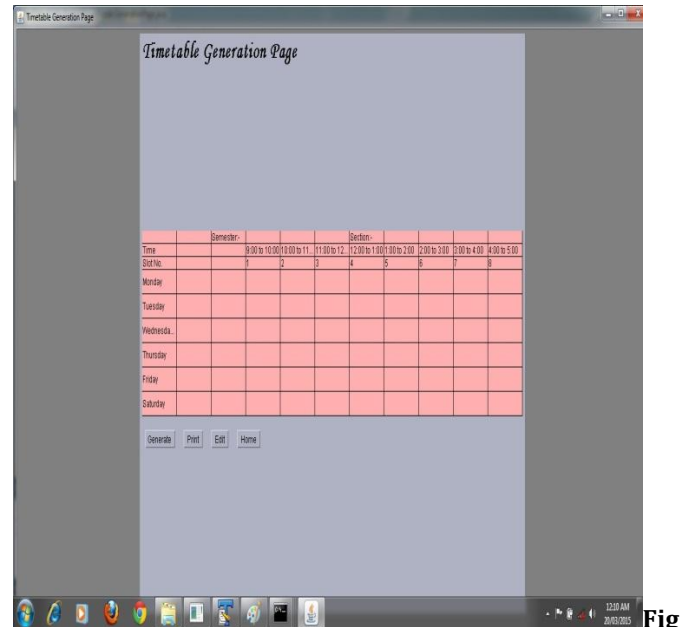## 4.   OUTPUT

.OUTPUT TIMETABLE   FRAME

Fig : *Output*
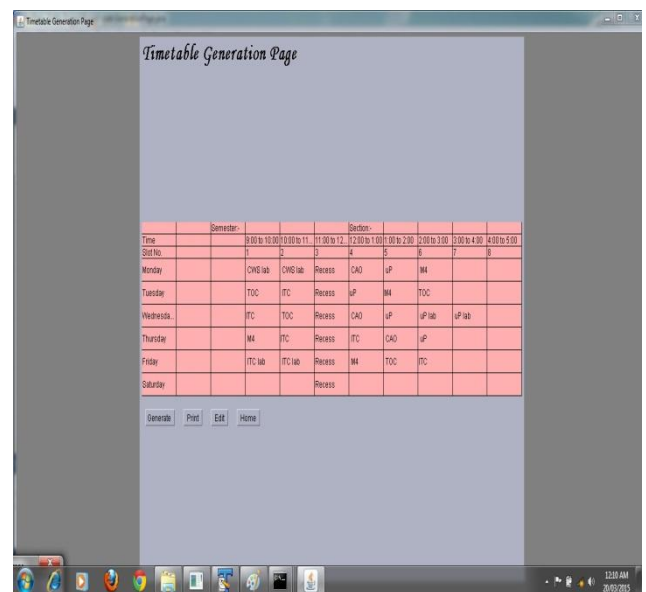
2. GENERATED OUTPUT IN TIMETABLE:

Fig: output with subject

5.   FUTURE SCOPE

This software is a solution for the time table generation problem manually. It's main scope is to save the time and efforts for time table generation process.

1. The data of faculty in the data base can further be used to maintain record of faculty's experience for particular subjects .

2. Attribute Correctness of project will give more corrective approach toward generation of this timetable. This project will generate most corrective output with no errors.

3. The future enhancement that can be developed from the project is to generate the master timetable for the departments and to the entire college. This enhancement can be achieved my

making further modifications keeping the approach and techniques used in this project

6.   CONCLUSION:

Separate timetable for the individual class, faculty and labs are generated automatically by this system. Various slot combinations can be acquired so that another timetable is generated as of need. The project reduces time consumption and he pain in framing the timetable manually. The project is developed in such a way that, no slot clashes occur providing features to tailor the timetable as of wish. The future enhancement that can be developed from the project is to generate the master timetable for the departments and to the entire college. This enhancement can be achieved my making further modifications keeping the approach and techniques used for this project.

7.   ACKNOWLEDGMENT

8.   REFERENCES

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