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An Online Automatic Timetable Generation System

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ABSTRACT: Time table generation is tedious job educationalist with respect to time and man power .Providing an automated time table generator would help to generate time table automatically. Our project's proposed system to generate it automatically also helps to save time. It removes the complicated setting and manually handling time table. We are going to algorithms such as genetic, heuristic, resource scheduling in our project to minimize these timetable generation shortcomings.

KEYWORDS: MYSQL, JAVA, JSP, SERVLETS, AJAX, JAVASCRIPT, HTML, CSS, TOMCAT VERSION 7.01

I. INTRODUCTION

Time table scheduling is an NP-hard problem using genetic algorithm timetable scheduling and thus polynomial time verifiable using genetic algorithms. It is a common scheduling issue that appears to be a boring job once or twice a year in any academic institution. In previous days, time table scheduling was performed manually with a single person or group involved in manually scheduling tasks, which requires a lot of effort and time. One of the most difficult and error-prone applications is the scheduling of time tables.

Timetabling is the process of establishing a timetable while following those constraints. There are essentially two kinds of constraints, soft constraints and hard constraints. Soft constraints are those where they are broken in scheduling, the performance is still valid, but hard constraints are those where we break them; the timetable is no longer valid. A timetabling problem's search space is too large, there are many solutions in the search space and few of them are not feasible. Feasible solutions here imply those that do not violate hard constraints and aim to fulfill soft constraints.

II. METHODS AND MATERIAL

Profile:

It contains login page. Every Faculty Consists different user id's he/she has to login first. After logging in, the login information will be redirected to home page. In the home page, it has a view of time table which is already scheduled.

Faculty:

In the case, at times the faculty could take a leave as well. The faculty is responsible to send the reason, date and on which period the leave is to be taken. Then the Substitute faculty gets the request.

The Substitute faculty has the facility to either accept or reject the substitute hour. Then this is sent back to the faculty informing about the request.

Generation:

In this module, generation is done by considering the maximum and minimum workload for each faculty. This will be generated by the admin and viewed by the faculty.

Feedback:

In this module, we can see the feedback given by the Faculty, i.e. One who use this Automatic Timetable Generator can review their experience in this section and the other users can see those reviews in this module.



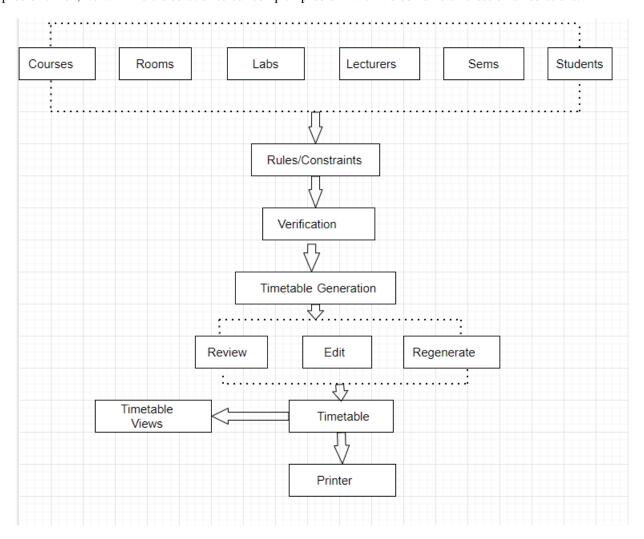
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III. SYSTEM ARCHITECTURE

Abstractly speaking, software architecture explains the elements of a system. It also illustrates the relationship between these elements, the models that control their composition, and the constraints of these models. The best way is to break it down into sections that are simpler to solve with simple solutions, usually normal when facing a complex problem. Then, we will find the solution to our complex problem when we combine all these small solutions.



The above architecture makes the process more efficient based on principles and properties related to each other.

IV. CONCLUSION

It is difficult to manage several faculties and physically assign subjects for them at a time. So our proposed framework can help to solve this constraint. So we can generate timetable for any number of courses and multiple semesters. This system will help create interactive pages so that we can make use of various resources widely available and free to use for the implementation of such system.

V. FUTURE WORK

In the future, the Automated Time Table Generator System can also be used for the attendance system, which will solve the problem of teacher and student attendance. You may add different roles to improve the security of the time table, such as administrator, user, etc.

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REFERENCES

- 1. M.NANDHINI, AND S.KANMANI, "IMPLEMENTATION OF CLASS TIMETABLING USING MULTI AGENTS", (2009).
- 2. S. Abdullah, E. K. Burke and B. McCollum, "A Hybrid Evolutionary Approach to the University Course Timetabling Problem", Proceedings of the IEEE Congress Evolutionary Computation, Singapore, (2007).
- 3. Albert Cliai Meng l'att, Chia Wee Kee, Lee Chee Heong, Ng How Seng, Karen Ng Sor Har, Puah Suet Ni, Alvis Yeo Kok Yong, Mark Yeo Soon Hock, and Edmond C. Prakash, "SOFTWARE ENGINEERING APPROACH FOR A TIMETABLE GENERATOR", (2000).
- 4. Anirudha Nanda, Manisha P. Pai, and Abhijeet Gole, "An Algorithm to Automatically Generate Schedule for School Lectures Using a Heuristic Approach", (2012).
- 5. Asif Ansari, and Prof Sachin Bojewar, "Genetic Algorithm to Generate the Automatic Time-Table An OverView", (2014).
- 6. Branimir Sigl, Marin Golub, and Vedran Mornar, "Solving Timetable Scheduling Problem by Using Genetic Algorithms".
- 7. Anisha Jain, Ganapathy S C Aiyer, Harshita Goel, and Rishabh Bhandari, "A Literature Review on Timetable generation algorithms based on Genetic Algorithm and Heuristic approach" (2015).
- 8. Dipesh Mittal, Hiral Doshi, Mohammed Sunasra, and Renuka Nagpure, "Automatic Timetable Generation using Genetic Algorithm" (2015).
- 9. Prof Er. Shabina Sayed, Ansari Ahmed, Ansari Aamir, and Ansari Zaeem, "Automated Timetable Generator" (2015).
- 10. Deeksha C S, A Kavya Reddy, Nagambika A, Akash Castelino, and K Panimozhi, "Automatic Timetable Generation System" (2015).
- 11. Antariksha Bhaduri, "University Time Table Scheduling using Genetic Artificial Immune Network", (2009).
- 12. Dipti Srinivasan, Tian Hou Seow, Jian Xin Xu, "Automated Time Table Generation Using Multiple Context Reasoning for University Modules", (2002).









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