"Time Table Generator Software"

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Abstract - The purpose of this research and development project is to create an online application. The app allows the user to create a timetable combination for their content, giving the student the flexibility and flexibility to choose a schedule that best suits his / her preferences. We report on our experiences and step-by-step analysis, design, and implementation methods using the commercial enterprise tool

1. INTRODUCTION

Time table scheduling has been in human need ever since they thought about managing time efficiently. It is widely used in schools, colleges and other areas of teaching and serves as a crash course. In the early days, scheduling was incorporated into the work of scheduling by an individual or group. And time. It can also take a long time when determining small limits and increasing the amount of data to deal with the number or increments of the range. Completely re-designed time tables can be reused for the entire generation with no changes, in such cases they will be slowed down. Other cases occur because the problem is a change in the number of employers or workers, which can immediately change the timetable.

Although most of the college work is computerized, the timetable is largely determined manually.

Manual lecture scheduling requires considerable time and effort.

Lecture-scheduling is a limiting satisfaction problem in which we find a solution that satisfies the given constraints.

Automatic Timetable Generator is a Java-based software that is used to generate periodically and automatically.

The difficulties posed by the time table can be represented as a constraint satisfaction problem with loose parameters and multiple constraints. These constraints can be replicated in a format that can be organized in a systematic manner through a scheduling algorithm. Scheduling involves the use of multiple path restrictions, which can be used to complete tasks. For example, when scheduling classes at an institution, a single time slot is not assigned to a single faculty member who teaches two courses. On the other hand, two different courses should not be distinguished for participation by the same group of students

2. LITERATURE SURVEY

[1] Literature Review on Timetable generation algorithms based on Genetic Algorithm and Heuristic approach Anisha Jain, Ganapathy S C Aiyer, Harshita Goel, Rishabh Bhandari

Automated college timetable generator Adithya R Pai, Ashwitha S, Raksha Shetty, Prof. Geethalaxmi

[2] Time Table Generation Vikas Gawade, Kunal Deokar, Prasanna Retherekar, Shrinath Bhegade, Prof A.D. Bhosale

In this research, the data considered is obtained from the soil testing laboratory in Jabalpur. Two classification algorithm: KNN and Naïve Bayes are used for classifying the soil fertility into low, medium and high and based on the fertility classified the crops will be predicted.

[3] Time Table Generation Vikas Gawade, Kunal Deokar, Prasanna Retherekar, #4Shrinath Bhegade ,Prof A.D. Bhosale

[4] Mei Rui, In this paper, through the analysis and the summarization of the existing problems, a mathematical model for the course timetable system is proposed. At the same time, through the use of the pattern recognition technology in artificial intelligence, aiming at this mathematical model a new 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.



[5] Bhaduri A evolutionary techniques have been used to solve the time table scheduling problem. Methodologies like Genetic Algorithms (GAs), Evolutionary Algorithms (EAs) etc have been used with mixed success. In this paper, we have reviewed the problem of educational time table scheduling and solving it with genetic algorithm. We have further solved the problem with a mimetic hybrid algorithm, genetic artificial immune network (GAIN) and compare the result with that obtained from GA. Results show that GAIN is able to reach the optimal feasible solution faster than that of GA

[6] Dipti Shrinivasan Finding a feasible lecture/tutorial timetable in a large university department is a challenging problem faced continually in educational establishments. This paper presents an evolutionary algorithm (EA) based approach to solving a heavily constrained university timetabling problem. The approach uses a problem-specific chromosome representation. Heuristics and context-based reasoning have been used for obtaining feasible timetables in a reasonable computing time. An intelligent adaptive mutation scheme has been employed for speeding up the convergence. The comprehensive course timetabling system presented in this paper has been validated, tested and discussed using real world data from a large university

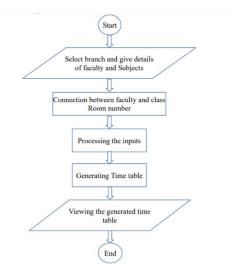
3. ANALYSIS AND PLATFORMS

After analyzing various methods used in various research, we find the following shortcomings:

The system does not focus on all the parameters needed to make the predictions more accurate. Some methods require more time and the results are less accurate. Our system has tried to overcome these shortcomings by developing easy-to-use tools for accurate estimation of the crops we have considered.

The proposed method

There has been a great deal of research on this topic, where many different methods have been developed. There are few or no other parameters. In our system, we tried to overcome this problem and we came up with a solution in the form of our system.



Requirements: The first step is to understand what the design looks like and its function, purpose, etc.

System Design: System design assists in defining hardware and system requirements and defining the overall system architecture.

Implementation: With input from the system design, the system is first developed into smaller units and then integrated into a later stage.

Integration and Testing: At this stage, the units are tested to identify any defects

NetBeans is an Integrated Development Environment (IDE) for Java. The software, called NetBeans Modules, allows applications to be developed from a set of software components. NetBeans runs on Windows, MacOS, Linux and Solaris. In addition to the Java development, it also includes extensions to other languages such as PHP, C, C ++, HTML5 and JavaScript. Third party developers can extend applications based on NetBeans, including NetBeans IDE



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Java GUI Swing

Java is a set of computer software and developed by James Gosling in Sun Microsystems and later acquired by Oracle Corporation, a system for developing application software and deploying it in a cross-platform computing environment. Offers. Java is used in a variety of computing platforms, from embedded devices and mobile phones to entrepreneurs and supercomputers. Java applications that are less common than standalone Java applications typically run in a secure, sandboxed environment to provide many features of native applications by embedding them in HTML pages.

My SQL

MySQL is an open source relational database management system (RDBMS). Its name is "My", the daughter of co-founder Michael Widenius and "SQL", an abbreviation of structured query language. MYCQ is free and open source software under the terms of the GNU General Public License. And is also available under a variety of proprietary licenses. MySQL is owned and owned by the Swedish company MySQL AB, which was acquired by Sun Microsystems (now Oracle Corporation). In 2010, when Oracle acquired the Sun, Videnius forked the open source MySQL project to create MariaBDM. MSQL is part of the LAMP web application software stack (and others), an acronym for Linux, Apache, MySQL, Perl / PHP. / Python. MySQL is used by many database-based web applications, including Drupal, Joomla, phpBB and WordPress. MySQL is also used by many leading websites including Facebook, Flickr, MediaWiki, Twitter and YouTube

4. CONCLUSIONS AND FUTURE SCOPE

Our goal is to solve the college lecture fixing problem with our policy. We also hope to show you how to fit our timetable system into a rich desktop application. The user interface (Windows Forms Application) used in this application provides an easy way to understand how the application works and also provides input accessibility. The faculty and subject information is stored in MySQL (database) and then using the available data it generates a lecture-course timetable with minimal time. The timetable production system makes a timetable for each class and teacher according to availability. Is. Capacity of physical resources, such as classrooms, laboratories, and computer rooms) and rules applicable to different classes, semesters, teachers, and subject levels. The great thing is that this timetable generation greatly improves the use and optimization of system resources

REFERENCES

[1] S. Abdullah, e. Kevin. Burke and b. Makkallam, "A Hybrid Evolutionary Approach to the University Course taimeting Problem", Proceedings of the IEEE Congress on Evolutionary competition, Singapore, (2007).

[3] Ni, Elvis Ye Kok Yong, Mark Ye Soon Hawk and Edmund C. Prakash, "Software Engineering Method to Timetable Generator", (2000).

[4] Anirudha Nanda, Manisha p. And Abhijeet Gol, "An Approach to the Algorithm for Automated Scheduling for School Lectures", (2012).

[5] Application of Self-Organizing Map and K-Means at the 2010 IEEE 10th International Conference on Intelligent System Design and Applications.

Mei Ru Computer and Automation Engineering (ICCAE), 2010 2nd International Conference (Volume: 4)

"A University Timetable Using Genetic Algorithm". Advances in Recent Technologies in Communications and Computing, 2009. ARTCom '09. International Conference

[[]] Deepthi Srinivasan Published in "Automatic Time Table Generation Using Multiple Reference Logic for University Modules": Evolutionary Computation, 2002. cec '02. Proceedings of the 2002 Congress (Volume: 2)

[4] Simon Robinson, Christian Nagel, J. Glynn, Morgan Skinner, Carly Watson, Bill Evolution "Professional C #", 3rd Edition, Wiley Publishing, Inc. 2007

[10] Silberschat, H.. Korth and S. Sudarshan, "Database System Concepts", 7th edition, McGraw-Hill International, 2002