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## Survey Paper on Automatic Timetable Generator

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**Abstract:** In today's literate world it is very difficult to create time table manually. Timetables are to be created uniquely for all branches and years respectively. It becomes a very hectic, time consuming, and needs manpower for preparing the timetables manually. In some cases, this process becomes complex when any staff is on a leave or needs to be substituted. It would be convenient if an algorithm creates timetable which will save a lot of time and reduce the load and pressure on the person doing the job. Using software to do the job saves a lot of time and can also create timetables for complex situations. It will also avoid any human error like: subject clash, vacant slots.

Keywords: Genetic Algorithm, Automated Timetable, soft and hard constrains

## REFERENCES

- [1]. Sara Ceschia, Andrea Schaerf, Educational timetabling: Problems, benchmarks, and state-of-the-art results (Survey), Submitted in 2021, accepted in 2022
- [2]. Mrunmayee V. Rane, Vikram M. Apte, Vishakha N. Nerkar Mani Roja Edinburgh, K. Y. Rajput "Automated Timetabling System for University Course" 5-7 March 2021
- [3]. Joo Siang Tan, Say Leng Goh, Graham Kendall, Nasser R.Sabard "A survey of the state-of-the-art of optimisation methodologies in school timetabling problems" 1 March 2021
- [4]. Landir Saviniec, Maristela O. Santos, Alysson M.Costa, Lana M.R. dos Santos "Pattern-based models and a cooperative parallel metaheuristic for high school timetabling problems" 1 Feb 2020
- [5]. Tiny Wijerathna Ekanayake, Pavani Subasinghe, Shawn Ragel, Anjalie Gamage, Suchini Attanayaka," Intelligent Timetable Scheduler: A Comparison of Genetic Graph Coloring, Heuristic and Iterated Local Search Algorithms", December 5-6,2019.
- [6]. Sundresan A/L Perumal, Mujahid Tabassum, Norita MD Norwani, Ganthan A/L Narayana Samy, Sivanathan A/L Perumal," Development of an Efficient Timetable System using AngularJs and Bootstrap3" 2018
- [7]. Namrata Bodas, Jhanvi Shah, Yash Shah, Aishwarya Sontakke, Dnyaneshwar Dhangar. "Exam Cell Automation System and Timetable Generator" 2018

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[8]. Yash Lahoti, Aaditya Punekar, Hiten Patel, Vishal Bhimsariya," Automated Timetable Generator", Jan 2017