

Timetable Arranging Application (TTAP)



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1. Introduction

Timetable Arranging Program (TTAP) is a web application developed by a Universiti Tunku Abdul Rahman (UTAR) Sg Long students to help UTAR students to arrange time table efficiently. This application was intended to help students for time table bidding and it has since replaced the paper-based method used previously for the same task. This application is available in Github and developed with other state of the art open source frameworks. They include React JS, Microsoft's Visual Studio Code, Microsoft's TypeScript, Node.js, Redux, GitHub, Surge, Create-React-App & Material-UI.

TTAP comes in very handy during timetable bidding in which students who are unable to bid for course in the first round, are forced to redo the timetable quickly before the slots runs out. TTAP solves this challenge.

2. Features

| No | Feature |
|----|--|
| 1 | Users can select the subjects to be included into the timetable. |
| 2 | Allow users to set time constraints for the timetable. |
| 3 | Allows users to select timetable from a set of results generated by the application. |
| 4 | Allows user to save the selected timetable as an image file, Text File or save it to their Google Calendar. |
| 5 | Generates timetables by using a complex algorithm that can handle high number of permutations in short period of time. |
| 6 | Allows user to use the system easily with high usability design and Google Material Design implementation. |

3. User Interface

| | sible timetables found. | | | | | | | сот п |
|--------|--|------|-------------------|--------|---|------------|----------|---------|
| Search | | | | Search | by consid | lering wea | k number | - |
| | Actuarial Modelling UECM3363 (AM) | - 1 | 00 | 2:00 | 3:00 | 4:00 | 5.00 | 6:00 |
| | Advanced Biomechanics UEMB4263 [AB] | | 00 9-12 518 | 3:00 | 4:00 | 5.00 | 6.00 | 7:00 |
| | Advanced Database Systems UDCS0203 (ADS) | | PWG KB 1- | 123 | | 1 | | |
| | Advanced Tissue Engineering UEMB4213 [ATE] | | КВ 1- | 522 | K88522 1-14 TNF-P3 K8605 1-2,4-14 |] | | |
| | Analogue Communications UEET2513 [AC] | | | | 12414 | | | |
| | Anatomy & Physiology II UEMB1213 (AP2) | | | | | | 8HOW | SUMMARY |
| | Applied Nonparametric Statistics UECM8253 (AN8) | | , | а | SAVE AS . | | SHOW SLC | TS . |
| | Architectural Design I UEBA1116 (AD1) | | | ū | | | | |
| | Architectural Design II UEBA1126 [AD2] | | | | | | | |
| | Architectural Design III UEBA2116 (ADI) | | | | | | | |
| | Architectural Design Iv UEBA2126 [ADI] | | | | | | | |
| | B SHOW SELECTED SUBJECTS (5) | DONE | | | | | | |





Sample results for selected subjects.



Set time constraints to get optimal results.



Saving timetable in multiple format

4. Users' Feedback

80.6% of users find TTAP useful, and more than half users want to switch to TTAP from traditional methods. More than 93% of users want to use this application again for the coming semesters.

