

# **Project Proposal**

## **Title**

Exam Scheduling Assistant

## **Author**

Arukh Sediq

## **Supervisor**

Dr. Alan Amin

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## **Introduction/Overview**

Creating an exam schedule is no easy task, especially in the real world where you have unpredictable situations for instance a student taking CSC101 and ITE412 together, or CIV102 and CIV101 together, these might be okay in the perspective of the student but for the person designing the exam schedule it creates conflicts which results in students having several exams in a day. It's not an easy task to accommodate every student so they can all have one exam per day during finals week.

This is the issue/problem that AUIS's registration department faces, students always complain about having multiple exams & We all know how frustrating it can be to have several exams in one day. Each semester the registration office goes through many hours, days & weeks just to come up with a schedule that satisfies all the undergraduate students.

In this project, I will be providing a solution for this problem, which is a web based application. This application will fetch all the necessary information and dynamically notify the user "Registration office" whenever the problem of having multiple exams occur, the application will provide all the necessary information to the user so they can make critical decisions based on them.

## **Project Type**

Development

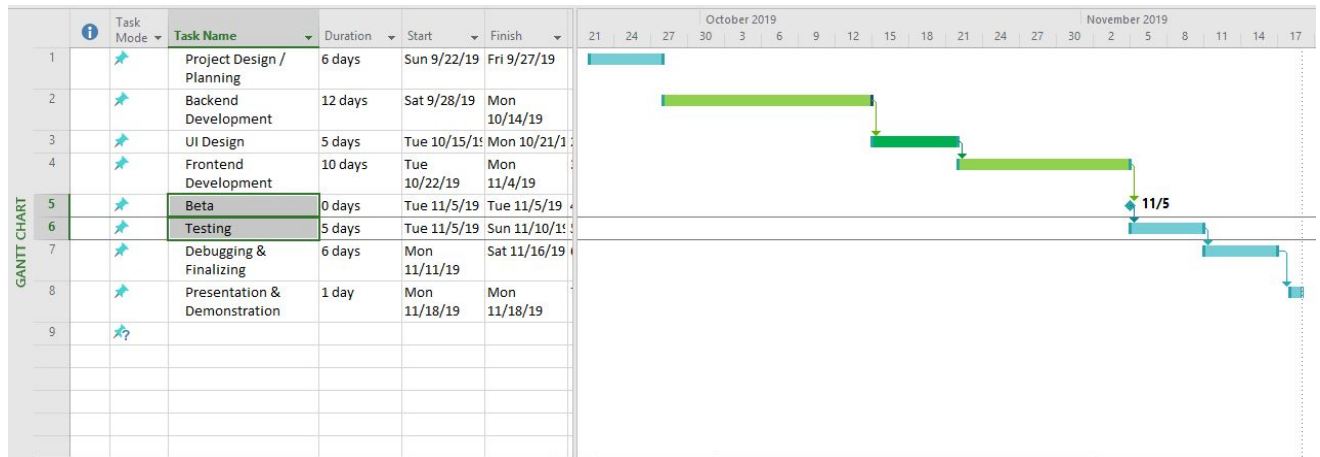
## **Aim**

Reducing the number of students that have more than one exam a day.

## **Objectives**

1. Assisting the registration office in organizing exam schedule.
2. Determine the number of students that have multiple exams based on the current schedule.
3. Provide meaningful information and feedback on the schedule in relation to the students.
4. Creating an interactive interface where the user can drag and drop to easily modify the schedule.
5. Giving suggestions based on the data on how to organise the current schedule.

# Timeline/Gantt Chart



## Technologies

HTML

CSS

JavaScript

SQL

PHP

FullCalender.io

## Repository

[Github.com/ArooxSedq/ITE-412-Capstone](https://github.com/ArooxSedq/ITE-412-Capstone)

## Resource Requirement

- Select/Read Privileges to the university's database (SONIS), in order to gather all necessary data about the students and which courses they are enrolled in, along with information about the courses offered in the current semester.
- FullCalender.io, Which is a library for creating interactive timetables.

## Literature Review

There are many applications that are being used for constructing exam schedules by providing timetables such as Excel, google sheets etc, but these applications don't necessarily improve the process or automating it.

However, I stumbled upon an application that helps automate the process of generating an exam schedule. aSc Timetable 2020 is designed for the same situation but it doesn't tackle the student perspective which is the focus of this project. It's providing an algorithm to generate a schedule based on certain conditions, for example the Instructors availability or classroom availability. It also requires the user to enter all the classes, classrooms.

In terms of interactivity & user interaction, this application possess a very user friendly interface, users can easily drag and drop scheduled exams from a date to another, the exams are colored in unique colors, the auto generator also helps the user a lot in terms of coming up with a draft schedule. However my exam scheduling assistant will provide the user with all the information regarding the courses offered, It will also tackle the bigger issue of accommodating the students needs.

Below is a snapshot of aSc Timetables 2020

The screenshot displays the aSc Timetables 2020 - [high school 1] application window. The interface includes a menu bar (Main, File, Specification, View, Timetable, Options, Help) and a toolbar with icons for file operations and timetable management. A sidebar on the left lists 'Open demos' with various school entries like Turkey 3, Turkey 4, Turkey 5, Turkey 6, UnitedArabEmirates 1, UnitedKingdom 1, UnitedKingdom 2, UnitedStates 1, UnitedStates 2, and UnitedStates 3. The main area shows a detailed timetable for 'high school 1' across four days (Monday, Tuesday, Wednesday, Thursday). The timetable is organized by 'Whole' (rows) and 'Subjects' (columns). The subjects listed are ES1.1, ES2.2, ES3.3, ES4.4, ES5.5, ES6.6, ES7.7, ES8.8, ES9.9, ES10.10, ES11.11, ES12.12, ES13.13, ES14.14, ES15.15, ES16.16, ES17.17, ES18.18, ES19.19, ES20.20, ES21.21, ES22.22, ES23.23, ES24.24, ES25.25, ES26.26, ES27.27, ES28.28, ES29.29, ES30.30, ES31.31, ES32.32, ES33.33, ES34.34, ES35.35, ES36.36, ES37.37, ES38.38, ES39.39, ES40.40, ES41.41, ES42.42, ES43.43, ES44.44, ES45.45, ES46.46, ES47.47, ES48.48, ES49.49, ES50.50, ES51.51, ES52.52, ES53.53, ES54.54, ES55.55, ES56.56, ES57.57, ES58.58, ES59.59, ES60.60, ES61.61, ES62.62, ES63.63, ES64.64, ES65.65, ES66.66, ES67.67, ES68.68, ES69.69, ES70.70, ES71.71, ES72.72, ES73.73, ES74.74, ES75.75, ES76.76, ES77.77, ES78.78, ES79.79, ES80.80, ES81.81, ES82.82, ES83.83, ES84.84, ES85.85, ES86.86, ES87.87, ES88.88, ES89.89, ES90.90, ES91.91, ES92.92, ES93.93, ES94.94, ES95.95, ES96.96, ES97.97, ES98.98, ES99.99, ES100.100. The timetable cells are color-coded and contain subject codes and numbers. The bottom status bar shows 'Ready' and '100%' zoom.

## References

“Perfect Scheduling.” *ASc TimeTables - School Scheduling. Best Timetable Software to Create School Timetable.*, ASc Applied Software Consultants, <https://www.asctimetables.com/>.

Shaw, Adam. “JavaScript Calendar.” *FullCalendar*, FullCalendar LLC, <https://fullcalendar.io/>.