Proposal - Deliverable
CS 487
Team B
- Mayank Bansal
- Robert Judka
- Paul Myers
- Chanyu Wu

Functionality

The basic functionality of the application will allow students to plan out and create a class schedule given a list of classes they want to take. To create their class list, students will be able to query IIT's available classes and select the ones they want to take. The application will be able to resolve any time-conflicts that may arise with the student's classes, and if multiple schedule options are possible, the application will present them all to the student.

Extended features of the application will allow students to assign priorities to classes (required, optional, etc.) and select various parameters (early classes, classes with professors who have high RateMyProfessor.com scores, etc.) to create a schedule more personal to them. Once a schedule is selected, students will be able to send an email directly to their advisor with the selected classes to be approved. Students will also be able to export the schedule to help them plan other extracurricular activities around their classes.

Value Statement

A few weeks before registration for the next school semester begins, students are given a task that often times takes weeks or months for them to complete. Students are required to select their classes for the next semester, following the guidance of Degree Works™ and their advisors. This task, however, has no right answers and can sometimes be deemed *NP Complete* for humans. There are even a certain set of students who will mull over all their options, accounting for class times, breaks in between classes, and even how popular the professor is. With the help of our application, students can have their perfect schedule generated in seconds, regardless of how picky they can be.

Roles and Responsibilities

- **Project Manager**
  - Robert Judka
    - Guides team along the software development process
    - Ensures team stays on track and meets deadlines
    - Presents reports, ideas and prototypes to the client
- **Architecture Design**
  - Paul Myers
    - Matches technology requirements to user requirements
    - Decides upon proper system design and technologies to utilize
- **Analyst**
  - Chanyu Wu
    - Determine use cases of application by users
    - Ensure functionality of application is in line with user requirements
- **Front End Development**
  - Changyu Wu
    - Focusing on graphical generation and output of application schedule
    - Allowing user to compare multiple schedules efficiently
  - Paul Myers
    - Focusing on consistency between application views
    - Developing a smooth user experience across the application
  - Mayank Bansal
    - Focusing on user interaction with the application
    - Creating user input fields and ensuring data integrity
- **Back End Development**
  - Robert Judka
    - Focusing on algorithmic design of the schedule builder
    - Developing and designing databases to store application data
  - Mayank Bansal
    - Focusing on application deployment and server management
    - Manipulating application environment to match requirements for solution
- **Third Party Integration**
  - Robert Judka
    - Obtaining data from third party services required for application
    - Creating database entries from data obtained
  - Mayank Bansal
    - Establishing connections with third party services
    - Handling events where third party services may not be accessible
- **Quality Assurance/Testing**
  - Changyu Wu
    - Exhaustively testing all possible uses of application across multiple systems
  - Paul Myers
    - Testing edge cases of application usage and environment