

ScheduleCMU.org

Pre-Proposal



1. Introduction

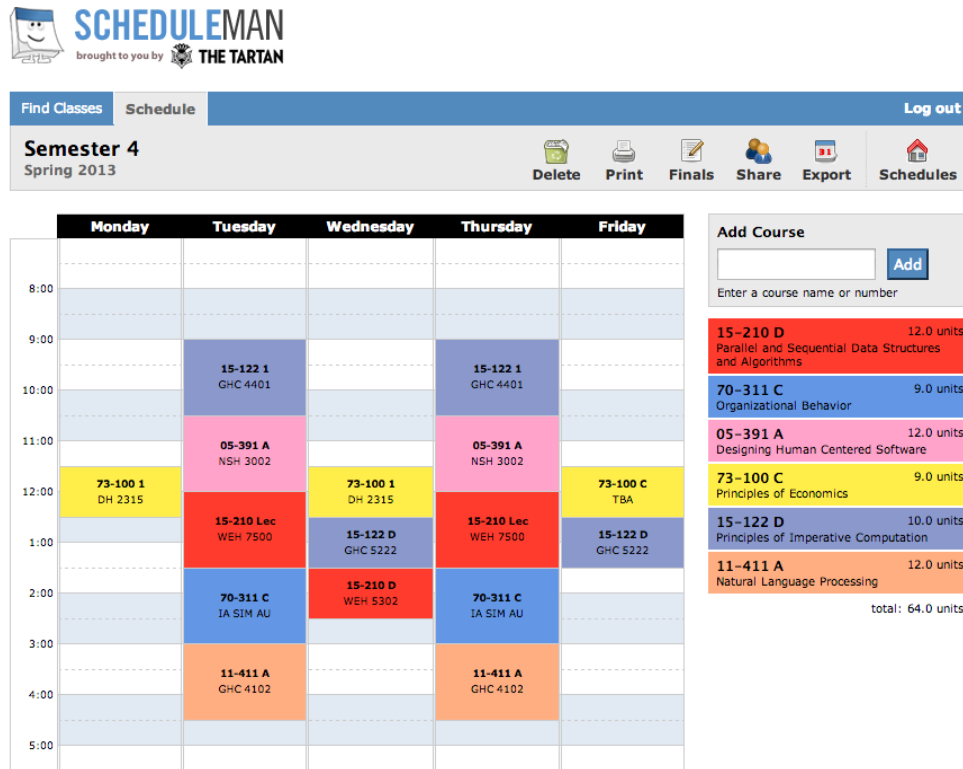
Mobile devices, more specifically smartphones, are ubiquitous nowadays, and typically serve as one's secondary computer. However, mobile web browsers do not have all the features of a desktop web browser and often webpages are not rendered in a pleasing or functional format. We aim to develop an app that allows schedules to be created and viewed as easily on your mobile device as on your computer.

Furthermore, current schedule creation tools at CMU like Student Information Online (SIO) and ScheduleMan do not contain features to allow easy access to major and minor course requirements. This leads to the hassle of having to switch back and forth between multiple tabs on your computer to see whether courses you intend to take meet your major or minor requirements. Our app aims to be self-contained by creating an interface to incorporate the course requirements and electives for majors and minors in an efficient manner and possibly provide options to satisfy multiple requirements with a single course or series of courses. We will thus dispense with the need to look at multiple different applications in order to create a class schedule.

2. Competitive Analysis

ScheduleMan.org:

Probably the most-used scheduling tool on campus.



Pros:

- Very simply UI. Friendly interface that is very easy to use.
- View Finals and books info

Cons:

- UI can be unresponsive at times.
- Very often doesn't show prereq/coreq information. This can be misleading.

SchedulePlus.org:

New contender with nice social features.

The screenshot displays the SchedulePlus.org interface for a user named Isaac Lim. The top header includes the user's profile picture, name, and a link to their Facebook profile. To the right are 'Options' and icons for undo, redo, and refresh. The main content area is divided into two sections. On the left, a sidebar lists courses for 'Spring 2013' with a search bar and a list of five courses: 15-210 D (12.0 units), 70-311 C (9.0 units), 05-391 A (12.0 units), 73-100 C (9.0 units), and 11-411 A (12.0 units). Each course entry shows its title and a social indicator (e.g., 'You and 9 others are in this course.'). The total units for the semester are listed as 54.0. On the right, a grid titled 'This is your primary schedule. Your friends will see this as your Spring 2013 schedule.' shows a weekly schedule from Monday to Friday, 7 AM to 5 PM. The schedule includes courses like 73-100 Lec1, 05-391 A, 15-210 Lec1, 70-311 C, and 11-411 A, with some cells showing 'TBD' (To Be Determined).

Pros:

- Quite robust social features.
- Plugs into Facebook and shows friends' courses. Generally works pretty well.

Cons:

- Boring site layout. Colors are too muted to be useful.
- Icons without text are counterintuitive.
- Could there be a privacy issue with the social features perhaps?

SIO:

CMU's default schedule planner.

The screenshot shows the 'Plan Course Schedule' interface. At the top, it says 'View Plan: Spring 2013 for Spring 2013' with '+new' and '-delete' links. A yellow warning banner states: 'Your registration start time is 15 Nov 2012 6:00 AM EST (Pittsburgh)'. Below this, a table shows the schedule for Monday through Friday. The time slots range from 9 AM to 5 PM. Courses are represented by colored blocks with their IDs and names. For example, on Monday, there is a blue block for '70-321 :: A Negotiation and Conflict Resolution' from 9 AM to 10 AM, and a purple block for '73-100 :: 1 Principles of Economics' from 11 AM to Noon. On the right side, there is a section 'Add course to planned schedule' with a search bar and an 'Add' button. Below this, a list of course cards is shown, each with a title, ID, and units. The cards are: 'Negotiation and Conflict Resolution' (70-321 :: 9.0 units), 'Parallel and Sequential Data Structures and Algorithms' (15-210 :: 12.0 units), 'Organizational Behavior' (70-311 :: 9.0 units), 'Principles of Imperative Computation' (15-122 :: 10.0 units), 'Designing Human Centered Software' (05-391 :: 12.0 units), 'Principles of Economics' (73-100 :: 9.0 units), and 'Natural Language Processing' (11-411 :: 12.0 units). At the bottom right, there is a 'Register in 4 Easy Steps!' section with instructions.

	Monday	Tuesday	Wednesday	Thursday	Friday
9 AM	70-321 :: A Negotiation and Conflict Resolution	15-122 :: 1 Principles of Imperative Computation	70-321 :: A Negotiation and Conflict Resolution	15-122 :: 1 Principles of Imperative Computation	
10 AM					
11 AM		05-391 :: A Designing Human Centered Software		05-391 :: A Designing Human Centered Software	
Noon	73-100 :: 1 Principles of Economics	15-210 :: 1 Parallel and Sequential Data Structures and Algorithms	73-100 :: 1 Principles of Economics	15-210 :: 1 Parallel and Sequential Data Structures and Algorithms	73-100 :: C Principles of Economics
1 PM			15-122 :: D Principles of Imperative Computation		15-122 :: D Principles of Imperative Computation
2 PM		70-311 :: C Organizational Behavior	15-210 :: D Parallel and Sequential Data Structures and Algorithms	70-311 :: C Organizational Behavior	
3 PM		11-411 :: A Natural Language Processing		11-411 :: A Natural Language Processing	
4 PM					
5 PM					

Pros:

- It checks if you have satisfied the prereqs for a course.
- Since it's 'official', it has data that the other clients don't have access to, like class size, real-time enrolment data, etc. Clearly these stats are useful for registration.
- The colors are basic but strangely effective.

Cons:

- Often takes a very long time to load.
- Old-looking and boring interface.
- No social features at all (but then again that's not SIO's purpose)

ScheduleCMU.org:

Our solution to the problem:

- Mobile + Desktop clients (optimized for mobile!)
- Incorporate social sharing features of SchedulePlus
- Allow switching to a view with major/minor requirements
- Simplistic UI of ScheduleMan
- Show prereqs and all other relevant data up front
 - Show only the most important data on mobile, due to lack of screen real estate
- As lightweight as possible, to optimize load times, especially on mobile devices.
- Streamlined UI across the desktop and mobile clients, for coherence sakes.