Project title: The Task GPS

Company description: We are the Nickoloff cohort of faculty developing tools to help students manage time and get things done. We are a group of several teaching and research faculty in a variety of different departments at a variety of different levels teaching students in a variety of different courses. What we do have in common is that – like most of our students – we are overwhelmed with all the tasks we need to work on, while still trying to have a life (sometimes a second one).

The project: Help us develop the first ever app that doesn't just make users realize how much work they have to do, and thereby depress them more. Instead, this app will actually help you and us and maybe everyone juggle multiple tasks, and get them all done in time and perhaps even a little early. It is not unlike when you try to beat your GPS's predicted arrival time when you drive your car, of course not by speeding just a little bit or taking a shortcut your GPS doesn't know about.

The competition: Check out the keyword "productivity" in google play and app stores and you'll see what we mean... (1) There is thousands of apps that just generate endless to do lists that you need to type in yourself, and that you then tick off one at a time. Great. (2) There is your typical calendar which is really meant for appointments and not for other tasks. Great. (3) There are complicated project management softwares for which you need to take courses to understand the gantt charts and other pleasures you'll be bothered with when you work in a company early enough. Great. Actually, the truth is – all of them: not so great.

Approach: The main reason why it is difficult to just tick the tasks in the to do list off is our inate expertise at procrastination. While procrastination can be a great motivating driver, it is also the main reason for stress and all the negative consequences stress comes with such as lack of sleep, weight gain etc.. The purpose of this project is to develop a task planner application that aims to reduce procrastination of the users thereby resulting in stress reduction. That's the long-term goal anyway.

A simple overview of the application is shown on the next page by using wireframes. The crucial information not usually collected and stored in conjunction with the actual task information is time. And time is money as we all know (or will soon learn). We start by asking the user to estimate how long it will take to complete the task. The idea is that by measuring the time it then actually takes the user to complete a task, we can use machine learning algorithms to predict future times for similar tasks. Thus, we can calculate the time taken for each task based on the behavior specific to the user and prompting the user well in advance to complete the tasks. This would be taking into account that not only one task needs to get done, but that progress needs to be made in a timely manner on all tasks that have overlapping completion times. As a first step, the application asks the user to identify and enter tasks either manually or from calendar applications, or other sources of information, such as canvas class schedules etc.. It then records the time taken for each task including break times, or times used on other tasks, stores the information in the database and uses this information to predict the exact time taken by a similar task for the user in future. It uses the prediction to make recommendations on what tasks to work on when the user has time, e.g. in between classes or meetings. This application will be platform independent, and can be used by mobile users of all platforms. Also, the users can use both mobile and web to keep their data in sync. A graphical representation of multi-task planning will help visualize progress and needs to begin working earlier to avoid stressful last minute completions. Freedom is provided to incorporate ideas that may make the application perhaps even useful in the completion of this project.

Team size: 2-5 team members, regular meetings with faculty, and frequent interaction with programmer to help overcome challenges.

Skills required: JavaScript, HTML, CSS.

