

COMPSCI STUDIFY APP

CS 497H - Winter 2017



JZDOUBLER PRODUCTIONZ

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Project Proposal

A brief description of the project:

The CS Life App will be mainly geared towards students in Computer Science who would like to manage their homework, study, and coding time more efficiently. The users of the app will be able to add the current courses they are taking along with the assignments and exams that are coming up. A week before a due date or exam date, the user will get feedback from the app on how much time they need to spend on studying or coding in order to be successful. Since the app will also track how much time is dedicated to studying, coding, and homework, the user will be able to better manage their time to do some relaxing activities as well.

Why this is an important problem:

This is an important problem because it will promote organization and time management. Being unorganized can cause high stress in your life and having an app to help you be organized will reduce your stress, which will lead to a better, healthier life. The amount of time that you have in your life is very limited, it is best to plan your life wisely. Time management part of the app will help you make conscious choices so you can spend more of your time doing things that are most important and valuable to you.

Who are the target users?

We wanted to create something that would help those whom we interact with on an everyday basis. For this reason, we are choosing to target Computer Science students at Western Washington University and other schools. We know firsthand how overwhelming student life is, particularly in the Computer Science department. While presenting our strengths and weaknesses in front of our Human Centered System Design class, the overwhelmingly common weakness people shared was time management. Students often have to balance multiple coding projects, exam preparation, interview studies and extracurricular activities whether it be for clubs, research, or work. We want to create something that helps students manage their time, so they don't need to feel overwhelmed. Studies have proven that frequent daily studying and work is more effective than cramming, and we want to create something that helps students plan out their schedule in a way so that they can organize their responsibilities in a more spread out and efficient manner.

Description of any existing (relevant) systems, what is missing, what you want to improve:

Our initial project idea was to develop a group project-managing system that organizes tasks for specific members of the group, when the tasks are due, and the priority of each task. An example of this system would be like web-based project management application called Trello.

After some research, our group decided that we wanted to create a mobile application that is specifically catered to students in Computer Science. This application would help manage time for students' projects, exams, studying and homework assignments. It would be very similar to

project-managing systems like Trello, but existing systems that are directly for keeping track of study times and due dates include applications such as My Study Life, Brain Focus Productivity Timer, and Study Checker from Google Play, as well as myHomework Student Planner from the Apple App Store.

Task Analysis

Discuss what tasks will be supported in your prototype. You must mention all tasks that you consider to be central to your system.

We will support the layout of our features for users. The tasks that our prototype will support include prioritizing tasks, display the priorities, memory storage, and updating events.

Provide a detailed task analysis for tasks that users will perform using your system.

The first main task we have that we believe to be central to our system is viewing the Calendar. Since this is a scheduling app, the ability to view your schedule is of the main purpose of the application. With this in mind, another crucial task is the ability to easily create new things to add to the calendar, with as little work for the user as possible. Upon asking our peers about why some of them did not use scheduling apps with their busy lives, the overwhelmingly common response was it is just too much work to keep updating it. For this reason, we want to be able to create new tasks as easily as possible. We have decided on breaking up tasks into different types, we will have events which include meetings and class, homework and tests which have strict deadlines, and non obligatory tasks which include studying for future tasks, or cleaning ones room.

The next couple things that are extremely important for this application are saving and loading the application's state in internal storage. If we do not serialize the data each time we add to the application, then upon the android turning off from lack of battery, or the user fully closing the app, the app will delete everything that has been done and the user will lose their full schedule. We believe serialization will be a difficult task for us as designers but is completely essential to counteract this problem. With these several main tasks in mind, we will be able to build a fully functional scheduling application for computer science students.

Explain in detail your process of conducting task analysis. (Did you observe any users using the system? Did you analyze existing similar systems? How did you collect the data?)

We asked multiple students in the computer science department how they organize and manage their course material. We recorded these findings to figure out what was most important to the students and how we should incorporate this into our app. The second step was to compare existing successful calendar apps and see why they are successful and what could be changed.

Using task analysis,

- 1. Please list a subset of tasks that you think you will include in your system and orders in which the tasks must be performed (if you are using HTA)**

1. To manage your time
 - I. Prioritize tasks
 - A. Add title
 - B. Add date
 - C. Add Type
 - a. Add an event
 - b. Add homework assignment
 - c. Add project
 - II. Display Priorities
 - A. Display chronological order (date/day/time/data type)
 - B. Display date
 - C. Display day
 - D. Display time
 - E. Display Priority Type
 - F. Display Color Coordinated scheme
 - III. Memory Storage
 - A. Saving to Internal Storage
 - B. Loading from internal storage
 - IV. Update event dust/dirt container
 - B. Turn on the "Empty the dust container" is
 - A. Delete an event
 - B. Mark projects/homework as completed

Plan 1:

Do III(B) load program when user opens application

Do II next to display app

Do I periodically when user wants to add new events followed by all subtasks of I. Whenever I is performed perform III(A) immediately after, followed by II

Do IV A and B periodically as needed, followed by III(A) and then II

2. [1 point] What were the most challenging aspects of conducting your task analysis process?

Prior to doing task analysis, we had huge plans for a revolutionary application. Upon doing task analysis, we slowly realized our limitations as a team as we have very little Android development experience. While breaking tasks into subtasks, we really realized how much work had to go into all the little pieces that make up one big task. For instance, we had not thought about how we were going to serialize our data. Adjusting our plans for the application and really trying to figure out the essential components that we could realistically complete was the hardest part of this process.