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Milestone 1: Understanding The Problem

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1. Introduction

1.1. Project Overview

How to be a more productive you

Productivity in most contexts evokes thoughts of homework and projects. In this context, we're looking at productivity as the value you get out of your use of time. Different people view different activities as productive or unproductive based on their individual goals. For example, someone who values time to destress or wants to be a film buff may find watching Netflix productive but someone who is just watching it avoid homework is getting no value out of it. The problem we're looking at is that people spend more time than they'd like doing activities that they're getting little to no value out of.

Solutions exist that track your time, let you plan how you spend your time, list out tasks you need to accomplish, and track your goals and if you've met them. There are overwhelming gaps in the UI/UX of the majority of these applications as well as the functionality of the apps in terms of how you can categorize your time.

1.2. Potential Stakeholders

To our consensus the potential stakeholders for the field of creating a more productive you includes:

- Primary
    - General Audience
    - Students
    - Freshman student
    - Employees
- Secondary
    - Teachers/Instructors
    - Universities
    - Parents

1.2.1. Characteristics of Users

The characteristics of said stakeholders include:

- Primary
    - General - any person who values their time wants to find the balance between their social life, work, personal projects, relaxing, shopping, cleaning, and everything else they choose to spend their time on. Very few can honestly say they've found the optimal balance and therefore we can say the generic individual is a stakeholder in that way.
    - Students - want to better balance their time between socializing, relaxing, and finishing school work in order to get assignments done on time while still getting to enjoy themselves [3].
    - Freshman student - for the majority, this is the first time they've had to manage their time without supervision and therefore may need a lot guidance in how they do that [3].
    - Employees - want to better balance their time so that they can enjoy their time in and outside of work.
- Secondary
    - Teachers/Instructors - While instructors can be primary users as an individual and an employee, as a secondary stakeholder, they want their students to better balance their time so they can align their priorities and get the most out of their education.
    - Universities - Like an instructor, they want their students to better balance their time so they can align their priorities and get the most out of their education. Additionally, the more balance a student has, the more likely that student will keep their grades up and graduate and that goes to benefit the university's ranking and prestige.
    - Parents - They want their children to find that balance in prioritizing time commitments so that their children can pursue the goals that they care about and make the most of their time. Employers - More productive employees will make more profits and happier employees (assuming being more productive in time management makes an individual happier) make a better work environment.

2. Task Analysis

2.1. Existing Solutions

- ATracker, RescueTime, Lifecycle [5]
  - Strengths
    - Good amount of features
    - Easy to understand graphics for users
    - Was able to understand and use apps very quickly
  - Weaknesses
    - User interface leaves much to be desired
    - Features could use more work
    - Having to physically pull out your phone to track activity
- Physical planner
  - Strengths
    - No need to charge
    - Easy to use by all users
  - Weaknesses
    - Cannot accurately track time spent on activities
    - Hard to have constant access to planner
    - No way to display information gathered
- Clear, Todoist, Wunderlist [1]
  - Strengths
    - Able to use app on desktop and mobile
    - Help keep users organized
  - Weaknesses
    - Features hidden under bad user interface
    - Features have trouble syncing

2.2. Characteristics of Tasks Performed by Users

Users of our system will have a variety of different goals and different ideals that they want to work towards. Some users will find social media to be a necessary use of their time in order to relieve stress and detach from working for a time [5]. This allows people to retain their sanity and composure over time, as nobody can work and be ‘productive’ 100% of the time. Of the students we

interviewed in our initial data gathering, about half said that they had no issue managing their time, while the other half said that time management was something they had an issue with. Those who said they had an issue with time management said they would at least be willing to try some kind of technology to help them manage their time better, and said that there is some activity, mainly social media and gaming, that they spend more time than they intend to on, which could be decreasing their overall productivity.

Users of our system could include many different types of people, however. Students are an obvious demographic we would like to help with our design, but this design could help anyone who is willing to take the time to analyze and try to improve their time management to become more productive. This could include employees, employers, teachers, professors, and anyone else who is able to access this technology.

Based on the required tasks performed by users in the problem space, the following characteristics should be implemented in our projects eventual solution:

- Should easily understood and easy to follow
- The tasks should give the user correct information about their time
- Should be quick and unintrusive
- Tasks should help user work towards being more productive

2.3. Characteristics of Task Environment

Based on the problem space that this project entails, the task environment would likely incorporate the following characteristics:

- Environment is essentially anywhere
- May or may not have access to internet
- May not be able to physically interact with device (i.e. behind the wheel of a car)

2.4. Design Implications

Based on the goal of becoming a more productive you, our system seeks the following functionality:

- Keep track of users' time and what that time was used for
- Allow users to categorize their spent time (socializing, work, leisure, etc.)

    - Users can create their own labels
    - Allow users to set priorities on certain categories
- Present a summary of how much time is being/was spent on each category in a given day, week, month, etc.
- Alert users if/when they're spending a large portion of their time on a certain category

3. Response to Studio Feedback

Based on the feedback from other groups we are looking to make users more productive. We hope this will address any concerns in regard to any vagueness or confusion of the problem space. With productivity in mind we are going to address what users find to be productive and unproductive. Each user will have different values and goals which we hope to use in order to help them be more productive [2].

4. Collected Data

We gathered preliminary data this past week through informal in-person interviews to help us narrow down our problem scope and create a formal survey to be done this week. Our preliminary data told us that when it comes to time management, people faced problems with prioritizing their commitments and remembering all their obligations [4].

With our refined problem scope and preliminary data, we are gathering more data this week with a study & survey combo. We are asking individuals to track everything they spend their time on for two consecutive days and to reflect on that time use at the end of each day. We broke up how people generally spend their time into 14 categories from eating & cooking to doing homework. The two metrics we are gathering from their reflection are if they wish they spent more or less time on that activity and how productive they found the time they did spend on it. We are hoping this data will reveal more about how people think they spend their time versus what they get out of it so that we can have more evidence behind our defined needs gap.

5. Criteria of Success for Our Design

After much deliberation, we as a team have reached a consensus on the following criteria

as the mark for success in our design:

- Our design would be a success if it met the functionality we're seeking in section 2.4 Our design would be a success if it fulfilled the gaps we have identified in the functionality of existing solutions
- Our design would be a success if it was more intuitive and user-friendly than the existing solutions we've found that lack in that area.
- Our design would be a success if users enjoyed the user interface and it wasn't a burdensome task to use the design.
- We will go back to the individuals who participated in the time tracking study & survey to gather feedback on how they found our design in terms of usability and functionality.

6. Sources & Documentation

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