Bearable: Make Your Tasks a Little More Bearable
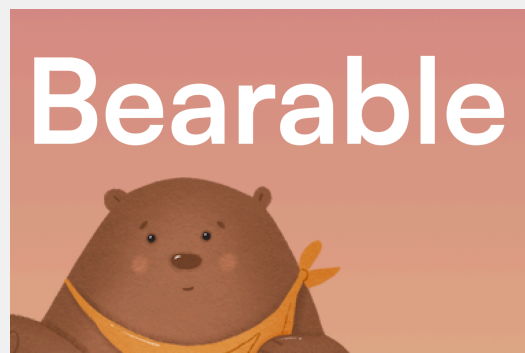
iSchool Undergraduate Project Capstone

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Bearable: Project Overview Document

Team Introduction

For the capstone project of the iSchools undergraduate Informatics department, five students take on a previous project that tackles the cultural reception relating to ADHD (Attention Deficit Hyperactivity Disorder). After evaluation of the previous concept and conduction of additional literature review, team TechnoTrailBlazers made the executive decision to shift the focus of cultural reception regarding ADHD to a web application that helps the individual with ADHD break down tasks into manageable chunks, improve focus, productivity, and symptom management called Bearable.

Problem Context

ADHD, which stands for Attention Deficit Hyperactivity Disorder, is a common neurological syndrome that can inhibit people's daily tasks and abilities. This can include symptoms such as procrastinating, inattentiveness, hyperactivity, anxiety, and several other mental aspects. It is estimated that about 6.76% of people worldwide are diagnosed with ADHD, with 2.58% of the global population having persistent ADHD (diagnosed as children and continue to have consistent ADHD symptoms).

Many current solutions to counter ADHD symptoms include therapy, medication, to-do lists, timers, and meditation. However, with ADHD symptoms stretching to varying aspects of everyday life, most of these solutions only counter some of the symptoms people experience. Evolving research suggests that using gamified aspects could help increase the retention rate of ADHD users, thus more willing and engaged with symptom management products. This falls short, however, because most research in this area is targeted towards children. There is yet to be a solution that involves gamified aspects that tries to alleviate all symptoms of ADHD.

The symptoms of ADHD are not life threatening; however, inaction can have various effects on people's lives. An example could be educational underachievement due to inattentiveness or procrastination. Social aspects could also be affected, such as demotivation or isolation. ADHD also has a heavy correlation with other mental disorders such as antisocial personality disorder and substance abuse. Leaving ADHD untreated could spiral to worse conditions, thus making it an important area to research.

Problem Statement

How might young adults aged between 18–25 achieve better management of their ADHD symptoms through a task management tool so that they can implement organizational strategies that help their daily routines?

Key Research Insights

From our marketing research and user interviews we have identified one key issue among stakeholders. That issue is the lack of organizational skills regarding time management and task management within those who are diagnosed with ADHD or have symptoms. Also through our research we have found that there are several key insights in tackling this problem. First, we have found that gamification techniques nearly double the concentration of those who suffer from ADHD and the implementation of such techniques like streaks and achievements are the most popular regarding concentration. Secondly, we noticed that pomodoro timers are quite useful in helping our stakeholders not only stay focused but help reduce the effects of time blindness and procrastination of their tasks. Then, we identified that task management tools such as planners or calendars are helpful in building organizational skills that they lack. Overall, from this research we took everything into consideration and combined them when designing our features for our web application. Lastly, it should be noted that this is not a solution to cure ADHD symptoms regarding this problem but rather an aid to help reduce those symptoms.

Personas

Andi Beck | College Student

Basic Info

- Female, 20 years old
- Second year, Informatics major at UW
- Diagnosed with moderate ADHD/Inattentive

Story

Andi is a second year student at UW, and is an Informatics major, but is still figuring out what career pathway she wants to follow through with. She has many hobbies and is part of many clubs, which include co-captain of the badminton club and Hackathon Director of WINFO. Most of her time is spent on completing her coursework and fulfilling her roles and responsibilities of the clubs she is a part of.

Andi has always found it difficult to stay organized and stay focused on her tasks, especially with her busy schedule. She often feels overwhelmed with keeping track of all of her responsibilities and finding the motivation to get them done as efficiently as possible so that she has time for her hobbies. Andi has been diagnosed with ADHD for one year now, but she is wary about taking medication to manage her symptoms. As a result, she has been on the lookout for apps that can help her improve her task management skills. So far, however, none of the current existing apps have been compelling enough for her to stick with them.

Reggie Griffin | Microsoft Dev, Recent Grad

Basic Info

- Male, 23 Years old
- Recent Graduate from UW
- Bachelors of Science in Computer Science
- Recently hired at Microsoft as a Front-end Developer
- Diagnosed with Severe ADHD

Story

Reggie is a recent graduate from UW who holds a Bachelor's degree in Computer Science. He was recently hired at Microsoft as a Front-end Developer for their Xbox Web Store and works on making sure everything works and looks clean on the website. He enjoys hobbies such as cooking, working on personal projects, video games, and hiking when he has the free time. Reggie is usually busy with work meetings and coding features for Microsoft.

In addition to the high workload of working at Microsoft, Reggie has had trouble staying on his work responsibilities as well as keeping his life organized especially regarding his social life. He has a hard time starting and finishing his work which has caused him to nearly miss deadlines a few times regarding pushing out features for work. In a similar vein, he also has had to take rain checks on friends as well as miss out on social events in order to meet deadlines because he is disorganized. Reggie is diagnosed with severe ADHD and does take medicine to help manage his symptoms but he feels it alone isn't enough to fully help him. He has tried planning and task management apps to help rebuild his skills, but has dropped many of them because he lacks interest & motivation to keep going. Due to this he is still searching for an app that provides stronger retention.

Solution Approach / Key Features

From what we gathered regarding key insights and takeaways, it led us to develop some of our key features regarding our task management web application. At its core, Bearable, is a task management application that allows you to utilize Pomodoro timers to get tasks done as well as add and mark off tasks that you have lined up for the day, week, and month. The Pomodoro timers allow the user to set a time to work on their tasks as well as take breaks. The next key feature is the task board and calendar views. The task manager board view enables the user to see a general view of the tasks for that week as well as add any that may arise. The calendar view provides an overview of the tasks for that month as well as the coming months. It will also sync up to the User's Google Calendar provided they are logged in with their Google account through the authentication suite. This will help to mitigate users from needing to add tasks manually if they utilize outside resources like Google Calendar.

In addition, playing off the gamification aspect we have implemented achievement tracking and streaks to help users stay engaged with the application and have a sense of novelty. Next, Spotify integration has been added to allow the user to listen to their favorite music while they get their tasks done. Lastly, an Educational page will be added to provide additional resources regarding ADHD symptom management and awareness since this application is not a tool to help cure ADHD, but rather a solution to help manage symptoms within our stakeholders.

User Testing and Validation

To gauge user interest in our app concept, we aimed to validate our initial flower-themed approach and see whether users prefer purchasing in-game mods (customizations) versus self-made rewards (like treating oneself to boba or shopping) using flowers that they've earned from completing tasks. Our findings revealed that the flower theme could easily lose its novelty and lacked broad appeal. Users also preferred purchasing in-game customizations over self-made rewards. Additionally, showing upcoming tasks in advance felt overwhelming to many users.

In refining our design approach, we aimed to create a more customizable theme that caters to diverse user preferences and add companionship for additional motivation. Our next iteration focuses on displaying one task at a time while still providing the option to view future tasks on a separate page within the app.

Ethical Considerations

Our project had three main ethical considerations: data privacy, accessibility, and credibility. For data privacy, we wanted to make sure we were keeping users' personal information secure, whether it be personal emails or journal entries, where users enter personal and private thoughts. We want our website to be a trustworthy site and creating processes to prevent data leakages is an important factor to implement.

In terms of accessibility, we wanted to make our website accessible to everyone. One of the main factors we considered was color schemes. This required us to ensure the color palettes we worked with were easily distinguishable from each other to avoid any confusion for all users when they navigated the website.

For the credibility consideration, our project includes a page that provides resources for users looking to improve their task management habits. It is key that we verify our sources to ensure they are not providing false information and that they are leading our users on the right path to improving their habits.

Next Steps Beyond Capstone

When it comes to the next steps of our project, we are looking into how we can make the bear of the application more interactive for users when they are having trouble concentrating or staying motivated. Through our literature review and user interviews we found that companionship was important in order to help those with ADHD stay motivated in finishing their tasks and future iterations of the bear possibly with the integration of AI (Artificial intelligence) seems like an avenue we would be interested in pursuing. In addition to that we would want to have implementations of journaling and meditation practices integrated into the Bearable application as it will allow our users to reflect on the positives and what could be improved upon.