Carpe Diem — Aldebaran

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Students and working professionals are constantly juggling priorities across several aspects of their lives. Whether it’s work, classes, socializing, sports, family, and personal time. We interviewed colleagues to understand the tools they use today to stay organized and what challenges they face. Students and working professionals were asked for feedback on the tools they currently use, what they like and dislike about them, as well as what they would want out of a productivity tool. The research leads us to believe that people want a one-stop-shop for managing their time. They also want something that goes beyond what is on the market today. In order to entice people to change up their current toolbox or consider downloading an app in the first place, it has to have wow factors such as habit tracking, customization, best-in-class alerting, and calendar sharing. This research has resulted in 5 key insights that will influence the functionality and design of our app.

**KEYWORDS**

Productivity; Organization; Calendar; Habits

# Introduction

The goal of this project is to create an all inclusive application that provides users with all the necessary tools to be successful throughout their busy lives. The idea behind the app comes from our team’s personal experience of being busy students, employees, athletes, and much more while balancing a personal life. Our app is made to help users stay organized and on top of their tasks. The target audience that we intend to reach are young adults with busy lives, specifically college students or working young professionals. These young adults may struggle to find balance in their lives as they juggle numerous commitments such as deadlines for work, school coursework, sports practices, and more in addition to maintaining a healthy personal life. Our app will be perfect for people with busy schedules because it keeps everything in one compact app.

This application will include all the basic functionalities such as calendars, to-do lists, notes, and reminders. However, our goal is to take these functionalities to the next level. The application will be customizable to the user’s needs. Users will be able to create and switch between different modes that will allow them to separate and organize different aspects of their lives. Each mode will be customizable as well, allowing users to add the functionalities they need to that aspect of their life. The application will be accessible by allowing users to access their functionalities on mobile and web devices. Additionally, one main functionality will be being able to share calendars with friends, family, coworkers, and more that will allow for easy planning between people.

# Background

In most societies, humans begin receiving responsibilities the second they can start helping with household chores. We typically start school by age 5, and our first job (at least in the United States) is around 16 years old. In the pursuit of college, students take on extracurricular activities throughout middle school and high school. Juggling responsibilities is no easy task especially once they have to manage work, education, personal obligations, and extracurriculars. Eventually they’ll experience an added complexity: relationships and managing dependent schedules. Waking up and knowing what is a priority is difficult to work through without having a complete view into everything going in their lives. They can often miss deadlines because of a forgotten commitment, double-book time slots because work calendars are separate from personal ones, and rely on several apps to manage all these different to-do lists. People are desperately in need of a complete view into all of their responsibilities to stay on top of their day-to-day lives and go to sleep feeling successful.

What we also know about the problem space is that a lot of people procrastinate. According to a study by Darius Foroux, 88% of survey respondents admitted to procrastinating at least one hour per day [1]. We also know as iPhone users that the Reminders app has some eye-catching features like location-based alerts, but really falls short as a planning and time management system. There are many to do list apps on the market. An exact number isn’t known, but searching “task manager” in the Apple App Store produces a near infinite scroll of possibilities. Since it is a crowded market, our application needs to provide people with an extra factor that exceeds competitors.

# Method

## Research Question

The main question we pursued in research was looking at what methods our participants use to keep organized and their purpose in using each method. We also looked at what type of technological background users had and what devices they used to stay organized. Additionally, we asked what makes a user want to download an app and what functionalities would users find useful in a productivity app.

## Research Methodology

Our team’s research was focused mainly on conducting and gathering information from interviews of four different participants. Prior to the interviews, the team met to discuss what information we wanted to obtain. We were able to create a guideline of questions and topics to ask interview participants; however, interviewers were not required to ask each question listed as they were set as sample questions.

Our targeted demographic was college students and young working professionals with busy lives. Each team member choose one interviewee. Interviews took place between October 17-19, 2021 through in-person and phone interviews. Interviewees were verbally asked for consent to document their answers. Recordings of the interviews were not taken but instead detailed notes of the conversation.

## Participant Description

Our research was conducted through interviews of college students and working professionals. Our participant group ranges from 21 to 31 years old all with multiple technology devices and rather advanced technical backgrounds. All participants were verbally asked for consent prior to beginning their interview. Detailed interview notes are included in the appendix.

### Participant 1

Participant 1 is a 21 year old college student majoring in computer science with an option in web and mobile development. This participant also works part-time remotely as a site reliability engineer. They own an iPhone, iPad, and laptop which they use frequently for school courses and work, in addition to for their hobbies such as art. In terms of productivity, they use the standard calendar app for events, sticky notes for assignments, and the reminder apps for miscellaneous tasks.

### Participant 2

Participant 2 is a 21 year old college student majoring in interior design. This participant owns an IPhone, iPad, and Macbook which they use for drawing and school work. Their hobbies include drawing, working out, hanging out with friends, and cooking. They currently use a paper planner because they enjoy the physical aspect of writing tasks down, but they also use the calendar app on their phone as a double reminder.

### Participant 3

Participant 3 is a 23 year old college student majoring in computer science. This participant also works part time in construction. They own an iPhone and a PC, which they use for school, coding, and gaming. Their hobbies include working out and hanging with friends. For productivity, they use the calendar app on their phone for keeping a schedule. They also use the alarm app here and there for alerts if they have a lot going on in a day. Although for the most part, they do a pretty good job of remembering when things are.

***Participant 4***

Participant 4 is an energetic 31 year old living in San Luis Obispo. Her full time job is working for Cal Poly in their digital design department. She is a creative soul who enjoys crafts, calligraphy, and does freelancing as a designer. She has a third business as an Arbonne sales rep where she’s managing orders and constantly meeting with her team of associates. This participant uses an iPhone and a combination of Trello and Calendar to manage her day-to-day.

## Interview Guideline

Interviews began with obtaining consent from the participants to document their responses and use them as data. The following includes a detailed description of how the interviews were conducted and structured. The interview question outline is also included in the appendix.

1. Introduction: Obtain demographic information on the participant.
   1. Sample Questions: What is your age? What are your hobbies?
2. Current organization methods: Understanding how the participant stays organized.
   1. Sample questions: What are your current methods of keeping organized? How do you coordinate time with other people?
3. Technology background: Understand the participant’s technical usage.
   1. Sample questions: What mobile devices do you have? Which device do you use most in terms of productivity?
4. Setting push notifications: Getting the participant’s thoughts on notifications.
   1. Sample questions: Thoughts on push notifications/do you have any notifications off on any apps?
5. Setting reminders: Getting the participant’s thoughts on reminders for things like upcoming tasks, events, or deadlines.
   1. Sample questions: How do you set reminders? Do you need reminders to keep track of your tasks?
6. Current organization/productivity app usage: Understand the participant’s experience with productivity/reminder apps.
   1. Sample Questions: Would you download a productivity app? What makes you want to download an app?
7. Closing thoughts: Allow the user to add anything else that our other questions did not address.
   1. Sample Questions: What are you looking for in a productivity app?

## Result Analysis

Once the interviews were completed, the team met up to discuss how their interview went and the participant’s answers to all of the questions. We shared what we believed was interesting and unique from each interview in addition if anything surprised us. After sharing, we were able to come up with similarities and differences between all the participants and highlight the areas we should focus on. Because all the participants were around the same age, either a college student or one in their early career, there were a lot of commonalities. We grouped those together and brainstormed around the dissimilarities, in order to come to our findings and insights.

# Key Findings

## Key Finding 1

Customizability of notifications and interface are important to several of the participants we interviewed. All the interview participants have used a productivity application in the past. The use of push notifications vary from user to user; however, all participants allow notifications for important applications.

Some participants keep their push notifications on to help keep “organized and productive”. Some participants turn off specific applications with excessive notifications such as group messages. Some participants turn off all push notifications except for calendar reminders to remove clutter. This participant states that without push notifications, they “feel in control of where to put their attention”.

Some people stated they need multiple alerts. While others said they only need one alert. Different people need alerts at different lengths of time before an event. Some people want to be notified 2 hours before the event, while others want to be notified the night before. There was a participant that stated they wanted to be notified if they had more than a certain number of events in a week.

Being able to fine tune the productivity application to the needs of the user was a high priority of a couple of the interviewees.

## Key Finding 2

All participants had both a laptop and phone, so accessibility to the productivity app was one of the top priorities.

Participants believed they would use a productivity app if it was accessible on both their phone and laptop. Most participants used some form of an organization/reminder application. Some participants preferred writing down their tasks on their phone, but other participants enjoyed keeping track of their tasks on their laptop. In addition, some participants explained how they would write tasks on their phone but it wouldn’t be accessible on their laptop, so they would need two separate platforms to keep track of their tasks.

## Key Finding 3

There is similar behavior with regards to how the participants make plans and check their availability. Most participants check their calendar/reminders before they schedule a plan with someone.

Most of the participants use IOS, so they said they use the Calendar application on their phone to coordinate time with other people. Making plans as a working person or busy student is extremely difficult because your time is very limited. Most participants coordinated their schedules with people who also had extremely busy schedules. Participants expressed how helpful it would be to share their schedule with the people they are trying to make a plan with in order to quickly find a time that works for both of them.

## Key Finding 4

People not only want to organize their day moving forward, they also want to reflect. They want to know if they hit their goals like working out, drinking water, or adhering to a diet. They want to understand how their habits and schedules impact their mood. For example, is a person more likely to feel successful going to bed if they completed their to-do list but skipped a workout? Based on our research, participants are looking for more than just a scheduling app since so many of those exist. Everyone ultimately finds an organization method that works for them. What they want in addition to that is some help reflecting and understanding how their schedule impacts them.

Similarly, we found that participants want to avoid overbooking themselves. If we know that we get extremely fatigued after going out 3 days in a row, then we wouldn’t want to plan that but could mistakenly schedule time with others without realizing we are setting ourselves up for fatigue.

## Key Finding 5

In order to keep separation between different commitments of people’s lives, they have varying methods to organize each aspect. From our interviews, we understand that this is a feature that each participant handled differently. For example, one participant uses the calendar app for work and personal events while using sticky notes for assignments and the reminder app for miscellaneous tasks. Another participant uses a physical planner for school assignments and events while using the calendar app for other commitments. One participant uses the app “Trello” which allows users to create different “boards” to separate to-do lists. From our interviews, we understand each participant has created their own personal system on how to keep each aspect of their lives organized. Participants use these different means as a way to physically and mentally keep tasks categorized.

# Key Insights

## Key Insight 1

People prefer a productivity application that can be tailored towards them. It must have customizable push notifications and interface. People respond to different types of push notifications differently. For example, with the reminders app on the iPhone there are simple options to choose when and how often you are notified for an event in your schedule. Being able to choose how the push notification is delivered to you is crucial. It is similar to alarm clocks; not everybody can wake up to the same alarm clock, so many different variants of alarm clocks and sounds exist. In one of the interviews that was part of our research, the participant mentioned that they want to have flags set for push notifications. Their example was, “you already have three events booked that week; try scheduling some R and R time.” There needs to be different ways of setting up push notifications, so that it allows everyone to be as productive as possible.

The customizability needs to extend to the user interface as well. One user interface is not going to mesh with everybody. Allowing the user to tailor it towards them, so it is more inviting is important to retain users. For example, if you look at the iCalendar app on the iPhone, it is a very monotone interface and it is not very welcoming. In an interview that was conducted, a participant mentioned that they would be more apt to using a productivity app if they were more fun and welcoming, not bland and boring. Being able to customize the app in a way that works for them would separate our application from the others. One simple idea is allowing the user to color fill a whole day block on the calendar.

## Key Insight 2

People with busy schedules need an app that is accessible on different devices, such as smartphones, laptops and tablets. Some people prefer to keep track of their tasks on their phone, and vice versa, so it is extremely important that our productivity app is easily accessible. In an interview that was conducted, a participant explained how they are in need of an app that can be quickly accessible on their phone, but when they sit down on their laptop, they will be able to access their information there as well. When people are in a professional setting, like in class or at work, the use of smartphones is commonly discouraged. Most people use computers or laptops in these settings, but use their phone to quickly jot down important tasks/events. If our app is accessible on all platforms, this won’t be a problem that users have to face. They will be able to access their information in any setting.

The accessibility feature is one that will set our app apart from others because most apps are accessible on only one device, either a phone or a laptop, rarely both. For example, the Reminders app on an IPhone is only accessible on a user’s iphone. This can be an absolute pain because you cannot access all your reminders on your laptop. This provokes the use of two different platforms for users to put their tasks in, one on each different tech device they use. It is highly beneficial to just have one distinct location designated for all your tasks and events in order to avoid disorientation and loss of information.

## Key Insight 3

People with busy schedules that use a productivity/organization app need to be able to share their calendar with others. Many users of Google Calendar enjoy the “share calendar” feature because it allows friends and families to coordinate their schedules and keep track of events. Many students use Google Calendar to stay organized, but also have a different organization app to track additional tasks and use different features that Google Calendar does not have. Our app will include everything, like sharing calendars with other people and keeping track of tasks and setting reminders. In addition, our app will not require other people to have the app when sharing your calendar. Many people use Google Calendar to share their calendar with other users, but what if that person does not use that Google Calendar? Our app will avoid this confusion and will allow users to share their calendar with their friends/family in order to coordinate their schedules and set a plan.

Trying to coordinate your time with someone else who also has a busy schedule can take hours. Our “sharing calendar” app feature will hopefully help reduce this time. Most of our interviewees said that they look at their calendar first to see when they are free before making a plan with someone, but what happens most of the time is you suggest a time that doesn’t work for the other person. How much easier would it be if you could just send them your calendar? That way, it’s just one message, and that person can easily view your calendar and find a time slot where both of you are free. Being able to share your calendar with someone is definitely an underrated feature. It saves you and everyone involved time and unnecessary stress.

## Key Insight 4

We know that participants want to understand how their schedule and habits impact the way they feel. They also want to avoid overbooking their schedule to avoid exhaustion. Given the amount of productivity apps on the market today, participants are seeking something that will go above and beyond your basic to-do list manager. To our knowledge, no app exists today that attempts to correlate a person’s mood with their goals, their habits, or their weekly booked rate (aka lack of free time).

For this reason, we will track habits according to their goals. We will also have mood check-ins at a set frequency. Using data analytics we will compare their mood to their habits and provide insights to the user about any potential correlations. We will not only alert people when they should do something, we will alert them when they shouldn’t. For example, letting them know that they should not book any more events in a given week. Through monthly summaries, people can reflect back on how they spent their time and how closely they tracked to their goals.

## Key Insight 5

Based on our interviews, participants are looking for a way to keep separation in school, work, extracurricular, personal, and other tasks. By using different methods such as planners, calendars, sticky notes, different apps, and more for different commitments, participants are able to keep organized and productive without overwhelming themselves.

The goal of our application is to simplify this process in addition to keeping everything in one place. With the same idea of how people create different to-do lists or calendars for different things, our app will allow users to create different “modes”. Each mode will be customizable to the user’s needs such as a “work mode” or “school mode” or “personal mode”. While the user would be able to switch between modes at any time, there would be an option to coordinate each mode with events in their calendar. For example, if there is a work event scheduled, the app would be put into work mode in order to keep users focused on the event at hand.

Additionally, the functionalities in each mode would be customizable. From our interviews, we understand that different aspects of life require different tools. For example, in school, we may need multiple to-do lists for different classes in addition to a calendar to keep track of classes, office hours, group meetings and appointments. We might also want a habit tracker to manage study time. On the other hand, in our personal lives, we may not need as many separate to-do lists or calendars, but more habit trackers to monitor sleep schedules, water intake, or exercise.

By adding these functionalities, we are able to create the physical and mental separation between different aspects of user’s lives while condensing different methods into a compact app.

# References

| [1] | How Common is Procrastinating? A Study. 2019. Darius Foroux. <https://medium.com/darius-foroux/how-common-is-procrastination-a-study-80869467c3f3> |
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# Appendix

## Interview Questions

<https://docs.google.com/document/d/1-jNHeSDkaAtRimEtInss31-Ezam00x4jmSlObP4_1eA/edit?usp=sharing>

## Participant 1 Interview

<https://docs.google.com/document/d/1bxsh86sHlR6Ss0GBQE3pJBXQM9WzGCB6zwv1HQesD_s/edit?usp=sharing>

## Participant 2 Interview

<https://docs.google.com/document/d/1UipxtFHAKbtzhhYznkI27uGqSlTmF6-As7hsXh_m76k/edit?usp=sharing>

## Participant 3 Interview

<https://docs.google.com/document/d/1YQtJpSE7HokVUixTj7BC8QpqbLDebAUbPIuwOfDjVk0/edit?usp=sharing>

## Participant 4 Interview

<https://docs.google.com/document/d/10tsA_bsD_ysj0nBrM1BwC3UsnIBFWxBGHefZywpgE2k/edit?usp=sharing>