Carpe Diem — Aldebaran

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We found that setting goals or creating habits is a large part of how college students and working professionals stay productive. Given the volume of productivity applications available in the market, we also realized there is a gap in most to-do list managers. Alongside the things we *have* to do every day, there are the things we *strive* to accomplish each day. These are habits we want to build and small steps we choose to take towards a larger goal. Our application and initial prototype combines these two main workflows into a single easy to use tool. Our main focus was to design something that draws upon existing patterns so that the ramp time is low, but offers a rich feature set. Goals and tasks are similar enough in nature where we can leverage the same design patterns, but different enough where they demand their own unique key features. The first set of screens hone in on the key differences of these two major workflows but have a look and feel that we hope will delight our target audience of students and working professionals.

**KEYWORDS**

Goal; Calendar; To-do; Productivity; Progress

## Prototype URL

<https://www.figma.com/file/MTyXdKqDHornhd86U0qzMb/Design-Gallery-Concept>

# Introduction

The goal of this project is to create a compact, all-in-one application that provides users with the necessary tools to be organized and productive throughout their busy lives. This app is built with our team’s personal experience of being busy students, employees, athletes and much more, in addition to balancing a healthy personal life. 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 application’s goal is to be all-inclusive in functionalities in order to help one be successful by being organized and staying on top of their tasks. These functionalities include the basic necessities such as calendars, to-do lists, notes, and reminders. Through our user interviews, we added customizable functionalities like habit and goal trackers with options to set custom reminders. This functionality allows users to not only use the application to organize their future, but reflect on their past and progress. This functionality allows users to not only use the application to organize their future, but reflect on their past. This allows users to better understand how their schedule impacts them and reflect on their goal progress.

Through our user research and feedback, our team decided on Concept #1 due to the visual aspects. This concept is able to effectively break down and display the users daily, monthly, and yearly progress on their goals and habits. Additionally, we are able to implement aesthetic colors and design concepts that make the application visually appealing. We also were able to implement features of Concept #2 and Concept #3 into this iteration of the application. In addition, we are able to apply all the functionalities that allow users to keep track of their future plans as well as look back on their progress.

# Prototype Description

Our prototype anchors around all the things people typically do in a day, whether that is task management or tracking habits and goals. Given the abundance of to-do list apps on the market, our idea was to set ourselves apart by also having a habit tracker. Often we do really well at crossing items off our to do list, but our long term goals suffer. Whether it’s exercising weekly, drinking enough water daily, or getting enough sleep. Having a combined app that serves every aspect of our daily life is what really guided our initial prototype.

Our end-to-end workflows include logging in, setting goals or creating tasks and viewing goal or task progress. We wanted the workflows to resemble each other enough where users can quickly apply learnings to each workflow. Meaning, a user would not need to spend time learning how to manage their goals then make a similar investment in learning how to manage tasks. As an example, when viewing the monthly calendar for tasks we use the dark filled circle on a day to signify that there are events happening that day. This is a common pattern in almost any calendar app. In order to use the same familiarity but make it work for goals, we use the dark filled circle to signify that they met their goals for the day. Here we achieve enough parity so that viewing a month of information is easily digestible while also relaying different information i.e. goals versus task progress. Design consistency and implementing design patterns was extremely important in our initial prototype.

## Prototype Screens/States

### Login

The top of our login page has the name/logo of our application. Then there are text fields for the username and password, with a login button below. There is also an option to click a button that will take you to a new page to create an account.

### Dashboard

The dashboard acts as the home page once the user is logged in. It welcomes the user and has large buttons that correspond to the different screens of the application. At the bottom is a brief summary of today’s goal progress.

### View all Goals

This page shows the date and the percentage of goal completion for the day. Then below that shows each individual goal and it’s progress for the day. It also has a button to take the user to the create goal screen.

### Log Goal

The user is taken to the log goal screen when they click on an individual goal. There is a dial to add progress to the current goal.

### Yearly Progress

The yearly progress screen consists of a bar chart, where each bar is a month out of the year. The y axis is the days out of the month.

### Monthly Progress

The monthly progress screen is a calendar format. If the goals were completed for a specific day, then that day is shaded in.

### Create Goal

On the create goal screen there are several options of things to add to a goal. The first is an option to add an icon for the goal. The name of the goal is next. Followed by a description of the goal. Then the ability to add reminders and the frequency of the reminders. At the bottom is a button to save the goal.

### To-Do List

The to-do list screen is broken up by the categories created by the user. It allows you to view the items on your to-do list, with the option of checking off the items. There is also a button to take you to the create task screen in order to add a new item to the list.

### Create Task

On this screen there is a drop down menu for task section, reminder frequency, and reminder time. There is a text field for task name and description. Then at the bottom is a button to save the task.

### Calendar

On this screen there is a calendar. If a day is shaded then the user has at least one event on that day. There is a button to create an event.

### Calendar Event

This screen is the same as “Calendar”. When you click on one of the days that has an event, it goes to this state. It shows the day and the info for the events that day.

## Prototype Scenarios and Tasks

We have created two different scenarios that use the applications in different ways. The first scenario focuses on a user who has just downloaded this application. The task correlating to this scenario includes logging in, creating new to-do items and creating a new habit. The second scenario focuses on a user who has been using the app and needs to log information from the day. The tasks relating to this scenario includes logging a habit for the day, checking off a to-do item, and looking at upcoming calendar events on a particular day. Participants will be presented with the following scenarios and asked to complete the corresponding tasks using the application prototype. These scenarios will prompt the users to complete the following tasks and therefore test different functionalities and flows throughout the app.

# Usability Test Plan

We will be conducting usability test plans of the prototype with two participants in order to collect data. In our usability test, we are measuring user effectiveness, efficiency, and likeability. We are looking at how users are able to navigate through the app and where they are finding success or failure. Through our study, we want to find any issues regarding usability in order to improve the design for our next iteration.

## Research Subjects

We will be recruiting two participants for our usability test. Our target research participants correlate to our target audience which include college students and young working professionals who have a busy life with various commitments to juggle. Each interviewer will determine who they plan to recruit.

## Scenarios and Tasks

### Scenario 1

“You are a senior college student that needs help keeping track of various commitments. You have downloaded this application in hopes to organize different to-do items in order to create more tangible step-by-step goals.”

### Task 1

* Log-in
* Create a new section for your to-do items
* Add a new goal

### Scenario 2

“You just got home from a long, busy day of classes, work, practice, in addition to running errands. You open the application to log your habits for the day, check off completed to-do items, and look at what is on the schedule for tomorrow (November 1).”

### Task 2

* Log a habit for the day
* Check off a to-do item
* Look at your scheduled events for November 1

## Research Method

Our research method will be having our participants interact with our applications. We will give our participants two scenarios and two tasks to complete. Participants will be asked to navigate through the scenarios and tasks while interviewers document where participants are successful and where they struggle to complete the given tasks. In addition, participants will be asked follow-up questions regarding their experience with the application. The follow-up questionnaire will be attached in the appendix.

### Follow-up Questions

1. What were your first impressions when seeing/using the prototype?
2. Difficulty level for each task
3. How enjoyable was it to complete each task
4. Were you able to complete each task? Were they easy to follow or did you have any problems?
5. How long did it take to complete the tasks?
6. Were there any parts that were unclear?
7. What features did you like the most? The least?
8. Suggestions for improvement?
9. How likely are you to use this application?
10. What would you rate this app?
11. Why did you give this rating?

## Consent Method

Before beginning the usability test, interviewers will explain the intended purpose of our application and what the study will entail. We will explain that participants will be asked to complete tasks and answer follow-up questions regarding their experience interacting with the application. Participants do not need to answer all questions and may conclude the study at any point. Interviewers will get verbal consent from the participant to document the test and interview.

## Recording Method

Usability tests may be conducted in-person or remotely through video call. Video or audio recordings will be up to the discretion of the interviewer. During the usability test, interviewers will observe and document the participants of their interactions with the applications but will not verbally or physically interfere with the study. Interviewers will then ask the pre-determine follow-up questions and take detailed notes of participant’s responses.

# Heuristic Evaluation Plan

We are going to conduct a heuristic evaluation plan on our app in order to identify any usability issues in the interface or system. Two members of our group, Hannah Maung and Kayla Hunter, were chosen as the experts of the team to conduct the Heuristic Evaluation. We chose these two partially because we ended up using Abigail’s prototype to build off of. Having Hannah and Kayla perform the evaluation would offer the most unbiased review from the team. They plan on conducting the evaluation separately and ultimately coming together to compare and analyze their results. The process of which is detailed at the end of this section.

## Nominees

Hannah Maung was one of the nominees to complete a heuristic evaluation of our app because she has experience in UX and clearly understands Jakob Nielsen’s 10 universal design principles. Hannah religiously uses different kinds of organization/productivity apps, so her knowledge on these kinds of apps is extensive. In addition, because she uses these kinds of apps, she has an idea of unique features that should be applied to Carpe Diem that other productivity apps do not possess. Hannah has experience designing an app and a website so she will be able to give constructive feedback and apply her prior knowledge to the heuristic evaluation process.

Kayla was nominated to be the second evaluator because of her background in Product Management and UX Design. She is familiar with producing software that is easy to use and delights customers. She also partners with a UX researcher in her full time job and has learned about heuristics in the process.

## Heuristics that Will be Used in Evaluations:

Hannah and Kayla will be following Jakob Nielson’s 10 universal design principles to conduct their heuristic evaluation on Carpe Diem. The following includes the heuristics that the experts will use to review the interface and how they plan to review the interface:

### #1 Visibility of system status

This heuristic evaluation describes how users should always know the current system status. When our experts are reviewing Carpe Diem, they will assess if the app communicates clearly what state the system is at and if there is any slight confusion. They will make sure the app presents feedback to the user immediately and communicates openly.

### #2: Match between system and the real world

This heuristic evaluation describes how the design should speak the users’ language. All words and phrases used should be familiar to the user so there is no confusion. When Hannah and Kayla are reviewing our app, they will ensure that phrases and words used on the app aren't open to interpretation to each user and have a conventional meaning. They will conduct user research on users’ familiar terminology and find the true meaning of words that will match the users.

### #3: User control and freedom

This heuristic evaluation describes how there should always be a clear exit or undo button for the user. We do not want our users to accidentally do an action and have no way of knowing how to undo their mistake. This will cause a lot of confusion and disorientation for our users. When our experts are reviewing our app’s design, they will navigate through the app like a user and click on different actions. They will note if there is or not a clear way to exit the current interaction.

### #4: Consistency and standards

This heuristic evaluation is all about making sure that our app’s actions, features, and phrases are very clear to users and there is no second guessing behind any meaning. It is extremely important to maintain consistency throughout your app in order to avoid any confusion. In addition, inconsistency can increase the users’ cognitive load, which is the opposite of what we want. Hannah and Kayla plan to navigate through our application and double check that we maintained consistency. In addition, they plan to research established industry conventions beforehand to have a sense of valid standards and consistency within an application.

### # 5: Error prevention

This heuristic evaluation is really important because it describes how to prevent errors and clearly disclose an error effectively to the user. Our app should have a clear statement as to why the error has happened, a resolution or help menu, and a suggestion to prevent this error from happening again in the future. Our experts plan to make sure that when they come across an error within the app, there is a clear message that explains all the essential things. In addition, they will note what is causing the error because our developers should try and prevent these errors by warning users or removing memory burdens.

### # 6: Recognition rather than recall

The evaluators will look at any instance where the user is viewing or creating data and assess what might be running through the person’s head while on the screen. For example, when they are entering a new task is it important to know the current date or whether or not there’s an existing task with a similar name.

### # 7: Flexibility and efficiency of use

Since the app must serve novice and experienced users, the evaluators will put themselves in both positions. The aspects to consider will be: how many clicks does it take an experienced person to perform a critical function? Conversely, how would a first-time-user’s experience unfold?

### # 8: Aesthetic and minimalist design

Everyone at some point has felt overwhelmed by the amount of information on a page. Keeping the design minimal and only surfacing what is important is crucial for good design. As well as design consistency and a color scheme that is appealing to the eye. The assessors will review the designs and consider both scenarios: what if a person had 0 tasks or goals, and what if they had 50 tasks or goals? Does the design maintain minimalism while conveying important information in both scenarios?

### # 9: Help users recognize, diagnose, and recover from errors

To assess this heuristic, the evaluators will think through their own experience with task management applications. What are some errors they have encountered in the past? Is it possible a person might make a similar error here? Important checkpoints are any time a person is creating, updating, or deleting data.

### # 10: Help and documentation

This is an important aspect because the design must service people who learn in a variety of ways. To successfully evaluate this heuristic, the assessors will check for all learning types and levels. Would a person that has never used a task manager app before know how to use this? Would a person that prefers to learn things side-by-side against a help article have the ability to do so?

## Recording Usability Problem Instances

| **Heuristic name** | **Score** | **Details** |
| --- | --- | --- |
| Name | 0-4 | Justify the score and give examples of the what works or is wrong with the design |

Tab. 1. Heuristic analysis.

## Consolidation

The plan is for Hannah and Kayla to separately score the design against each heuristic using the 0-4 definitions provided in Module 6. Each person will include why they scored it as such and will document examples of where the design either does well or poorly against the heuristic. If the 2 have disagreeing scores, they will reference the details. Perhaps one person missed something that the other person caught. In the event that the 2 disagree, they will pull in a third team member to provide their feedback. At the end, the output will be a single ranked list in priority order of what needs to be fixed first for the team to work off of.

# Appendix

| Log in |  |
| --- | --- |
| View dashboard |  |
| View goals |  |
| Log daily progress for a goal |  |
| Create goal |  |
| View progress (default monthly toggle) |  |
| Toggle to yearly progress |  |
| View to do list |  |
| Create new task |  |
| View calendar |  |

## Prototypes in Figma <https://www.figma.com/file/MTyXdKqDHornhd86U0qzMb/Design-Gallery-Concept>

## Heuristic Evaluation <https://drive.google.com/drive/folders/1Jd8UQFePTWefacG8VbNP6OYRUjlWXNtO?usp=sharing>

## Usability Test

<https://docs.google.com/document/d/1Fd-JABl2B00khHQG_6rnW0QOXtFk_2bbX5R1eOmVaOc/edit?usp=sharing>