

# momentous

saving the day

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## Mission Statement

*Saving the Day*

## Problem/Solution Overview

Many people love to reflect on their memories but have trouble creating and organizing content that accurately captures their daily lives through purely text entries. *momentous* enables you to easily save and write about your day by automatically documenting your digital footprint. It aggregates many different types of content including photos, videos, audio, and location data to create a multi-sensory journaling experience. It also shows you relevant entries from the past to rekindle memories and highlight personal growth.

## Concept Sketches

We created concept sketches (see Fig. 1) with three different design ideas in mind. The feed design (*left*) presented all user content in a continuous feed. The spatial design (*middle*) allowed users to create and discover content in a more visual interface. The tabular design (*right*) partitioned distinct features of the application into separate tabs.

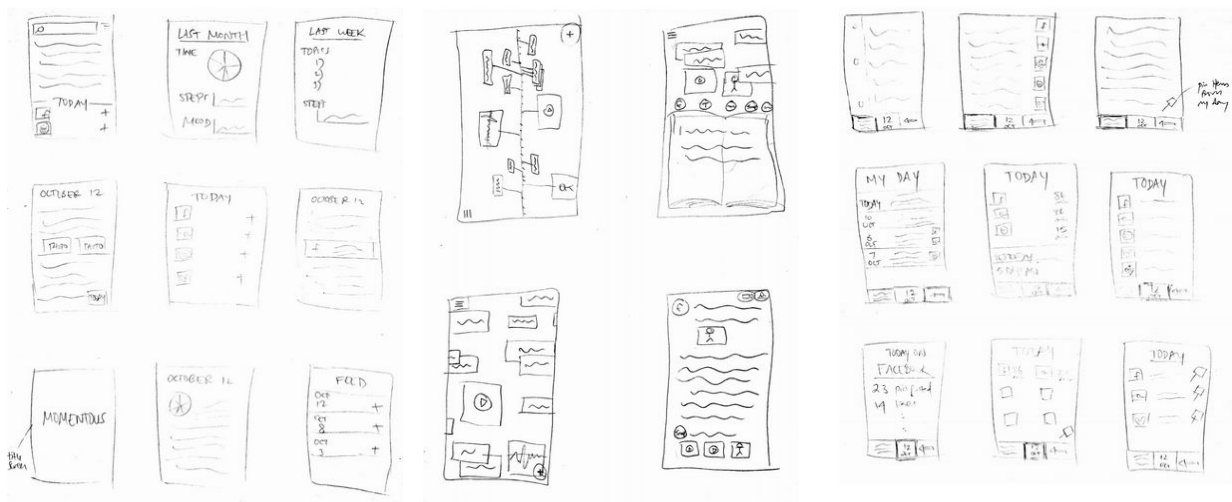


Figure 1 – Concept Sketches

## UI Sketches

We identified the spatial and tabular designs as the top two design ideas from our Concept Sketches and storyboarded these interfaces in more detail.

### Spatial Design

In this iteration of the spatial design, we wanted to tell an even more visual and compelling story with our interface. Here, we sketch the process by which entries are created and rediscovered in a single place.

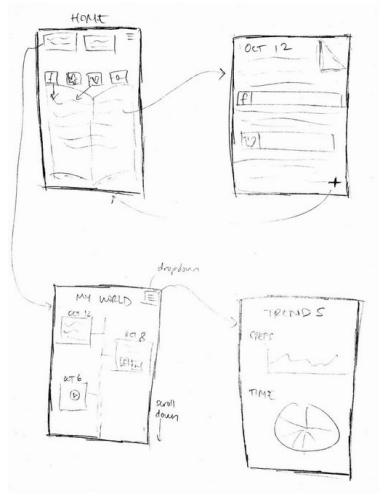


Figure 2a – UI Sketch for Spatial Design

### Tabular Design

In this iteration of the tabular design, we wanted to allow for atomicity between the tasks of creating an entry, viewing a user's digital footprint, and reflecting on the past.

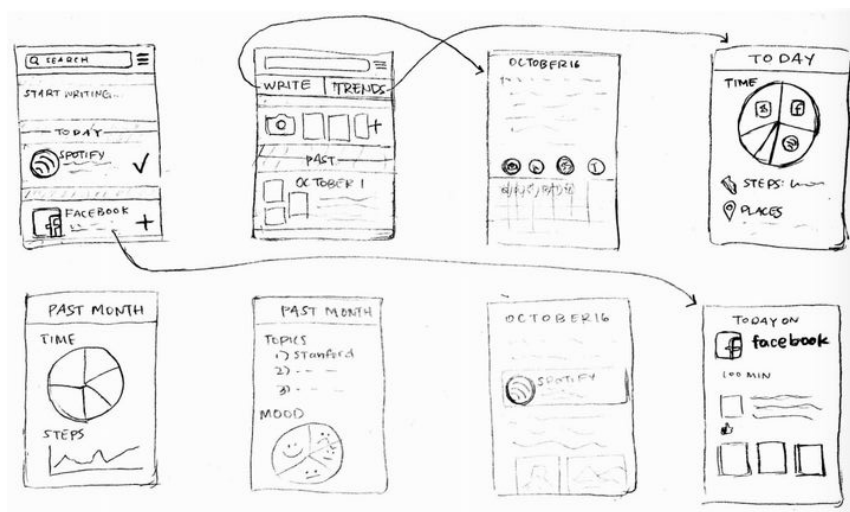


Figure 2b – UI Sketch for Tabular Design

### **Selected Interface Design**

We evaluated each design based on its utility and feasibility.

We felt that both of the designs provided utility to the user. The spatial design leveraged mobile-specific features, like swiping, tapping, and pinching, to offer a compelling visual tool to pan to past memories. The tabular design offered an intuitive approach to perform tasks. Because it partitioned distinct features of the application into separate tabs, this design discretized the tasks available to the user.

In the end, feasibility set these designs apart. We felt that the small screen size of a mobile device would unnaturally constrain the spatial design and limit its effectiveness. We believed that the tabular design was more feasible for a mobile application and provided the most intuitive approach for content creation and reflection on past entries and trends.

Thus, we selected the tabular design for continued exploration.

### UI Storyboards and Prototype Description

From the default view, the user can create new text content by tapping the button at the top of the view labeled “Start Writing” or the tab at the bottom of the view labeled “Compose” (Fig. 3a). We regarded this as our simple task.

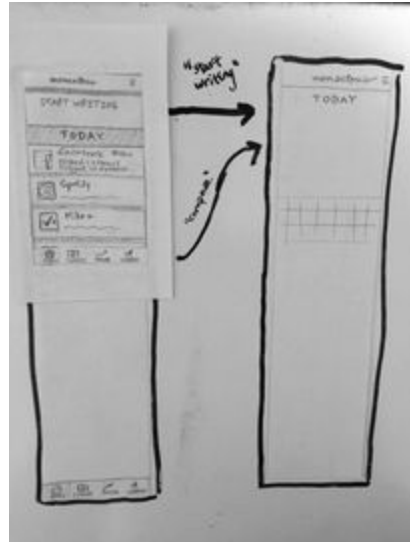


Figure 3a – UI Storyboard for Simple Task

From the default view, the user can write a caption for insights imported from another application and “pin” the result to today’s entry. Here, we detail the actions a user would take to pin an image of their dog from Facebook to his or her Momentous entry. First, the user taps the cell labeled “Facebook” under the “Today” section. This action displays the user’s relevant Facebook activity from today, including a reel of tagged images. Tapping on an image opens a text input labeled “Write something ...” and tapping on this text input allows the user to write a caption for the image. (Fig. 3b). We regarded this as our medium task.

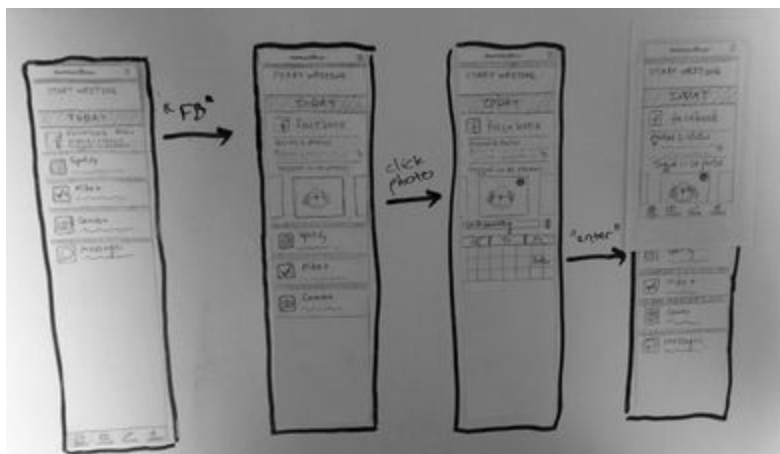


Figure 3b – UI Storyboard for Medium Task

From the default view, the user can see his or her trends by tapping the tab at the bottom of the view labeled “Trends” and view entries by tapping the tab at the bottom of the view labeled “Today”. The latter action loads a list of entries, listed in reverse chronological order from today to the user’s first entry. We regarded this as our complex task.

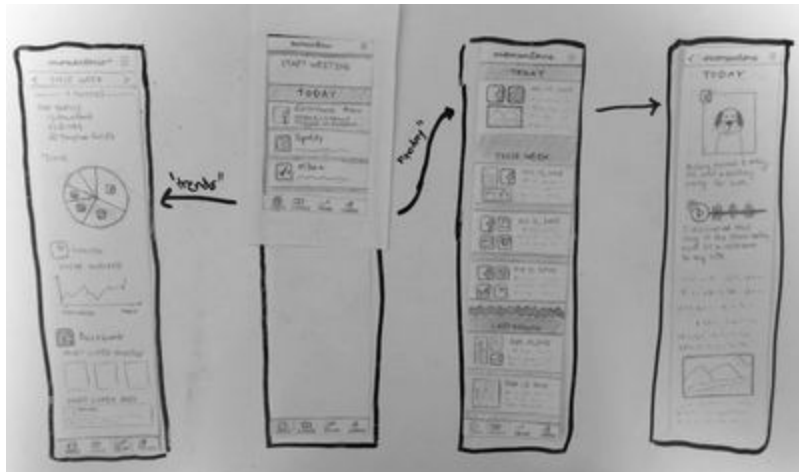


Figure 3c – UI Storyboard for Complex Task

Here, we provide a picture of the entire system (Fig. 4), which integrates the three tasks from our UI Storyboard into a cohesive low-fidelity prototype.

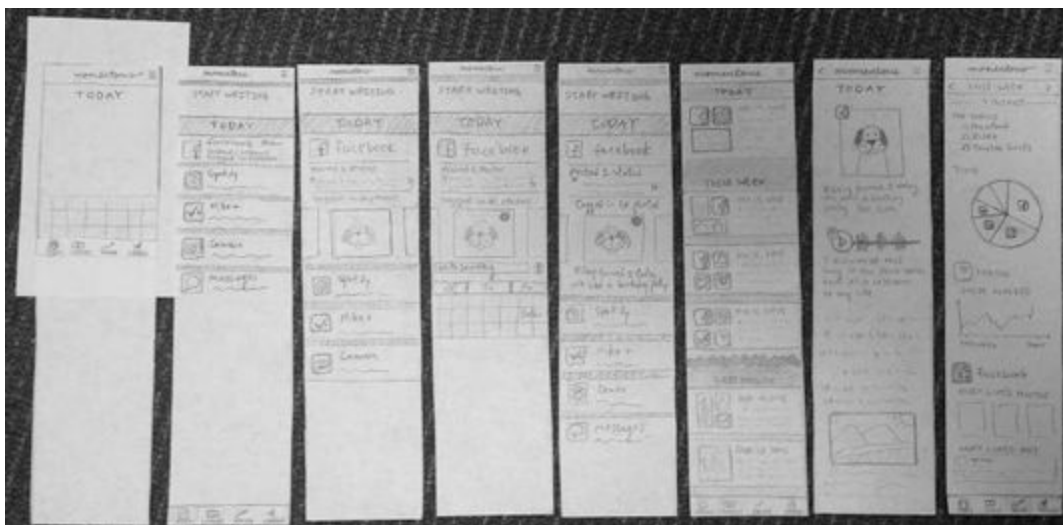


Figure 4 – Low-fidelity prototype

## **Prototyping Method**

### Participants

We chose our 6 participants with smartphone usage in mind. We interviewed 3 males and 3 females between the ages of 16 and 30. We wanted a sample of people who use their smartphones a variable amount and journal a variable amount. Anyone without a smartphone cannot use our app, of course.

### Environment

We had users test the prototype indoors and in the evening. The location was practical because we needed a large, flat surface where the prototype would be safe and not blow away. We tested in the evening because that is when users would often create the day's entry--when they're tired and have a day's worth of activity from which to draw.

### Tasks

We asked users to complete the three tasks: create a simple text entry, create an entry with a facebook photo (with caption), and look back on old entries.

### Procedure

After we demo'd the prototype on Levi and developed a script for the test, we moved on to user testing. With participants, we first explained what our application tries to do, including its capabilities. Then we gave a brief overview of what the prototype was for and our roles during the testing process. Then, from simplest to most complex we asked users to complete our three tasks, while encouraging them to think aloud. We took notes and shot photos/videos when possible. At the end, we asked for any thoughts, feelings, or feedback (general and specific) they had from the experience. See below for a more detailed test script.

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## **Test Script**

### **Introduction**

We are performing some user testing to evaluate the user interface and task flows of our app, called "Momentous," an app designed to help you save your day. Each day you can make an entry, and you can include just plain text as you would in a journal entry, or you could include relevant information from other apps that you may have used that day, such as Facebook, Spotify, Instagram, Nike+, Fitbit, Venmo, Camera Roll, etc.

### **Confidentiality**

This experiment is completely confidential; no identifying information would be available to anyone beyond our team and class instructor. Here is a simple consent form for you to sign.

### **Describing Testing Procedures**

What we have here are low fidelity prototypes of the app. It is by no means a finished version of the app; this is just a preliminary sketch. We are not trying to judge you at all; we are trying to evaluate how easy Momentous is to work with. We just want to get a feel for what works and what doesn't. We will present you with some papers which you can think of as "screens." You can click on anything, at which point we will switch out screens. We will give you three tasks and ask you to complete them. Feel free to talk through what you're thinking.

**Task 1**

Create a plain text entry of your day.

**Task 2**

Pin a Facebook photo of your dog to your entry with a caption.

**Task 3**

Look back on your past activity.

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Test Measures

In the testing, we were measuring how long it took users to complete a task, if they were capable of completing the task, and if they understood the task at all.

**Results** (most significant results)**Participant 1**

In the beginning, the participant misunderstood the idea of pinning information from outside sources; he thought that the app would post information to these external apps. This resulted in some preliminary confusion, which we then used to tweak the testing script. Once he understood the desired functionality of the app, he voiced appreciation for the comfortable integration with other apps. On the home screen of the app, he kept scrolling past the "Start Writing" section; his eyes were immediately drawn to the "TODAY" header and associated external app logos, which resulted in some confusion on how to compose an entry (task 1). He also had trouble with determining how to navigate back to the home screen, occasionally asking, "wait, so how do I get back home?"

**Participant 2**

Participant 2 did not see the compose button right away. After scanning the screen for some time, he was clicked the "Compose" tab rather than the "Start Writing" section in order to make a simple text entry post. Interestingly, he also clicked the "Compose" button, which brought him to the plain text screen, when he wanted to make a post with a Facebook photo; at this point, he got stuck. At the end of the experiment, he expressed his thought that it seemed more intuitive to create a post and then pull other information from other apps into the post, instead of having to view your daily digital footprint page in order to be able to pin external app activity to your daily entry.

**Participant 3**

Participant 3 completed all the tasks with ease, without much hesitation. Initially she didn't see the "start writing button" because she thought it was just another item on the list along with Facebook and Spotify, but she saw the compose button right away and used that to create an entry. She really enjoyed the experience, particularly looking back. In the end, she provided unsolicited positive feedback about how she felt the app was cool, useful, and intuitive. She said, "everything honestly seemed really straightforward."

**Participant 4**

Participant 4 found the first task of creating posts to be obvious; he clicked on the “Start Writing” button in order to create an entry. He particularly enjoyed the format of “Today” and Trends, as he explored tasks 2 and 3. His main pain point was a lack of understanding how to navigate “home,” an issue that was also manifested by Participant 2. Overall, though, he had no trouble creating content at any point.

#### **Participant 5**

Participant 5, age 16, finished all the tasks with ease. In order to compose an entry, she clicked on the “Start Writing” button immediately. She found the Facebook task flow to be very intuitive, but misunderstood the idea of the table view simply expanding; she thought she was being directed to a different screen upon each tap. She was especially curious about all the buttons’ functionality, stating that she “loved to play around and learn by doing.” She was most excited by the “Trends” feature, stating that she would want to look back on statistics about her Facebook usage, since she was trying to cut down.

#### **Participant 6**

Participant 6, age 30, was a single mother of 2 children who very rarely used her smartphone for anything other than the phone camera, email, and her “Notes” app. She found the simple task of creating an entry to be intuitive but the medium task of pinning an insight from Facebook to her entry to be slightly more complex, potentially due to her unfamiliarity with Facebook (she very rarely posts anything on social media). She said that if the task had been for her to pick a photo from her Camera Roll, she probably would have completed it with more ease. She enjoyed the reflection aspects of the app, particularly the trends feature, and found viewing past entries to be very intuitive.

#### **Discussion**

It is clear that users reacted differently to the “Compose button” and the “*start writing*” field. Some understood both immediately, some never used one or the other, and some used one exclusively. . Some people never realized there was a “*start writing*” field at all. This highlights an issue for the task flow because both buttons lead to the same place. “Compose” can be misleading because it implies that the user can use it to access outside information (which it does not do). Participant 2 got stuck with this because he immediately clicked it with the intention of adding a facebook photo but couldn’t get away from the text entry field. He was thinking that the “Compose” button took him away from the home screen and only after he did that would he pin information from external sources. This, of course, is at odds with our design intention of having users create content right on the first screen. So it may make sense to get rid of the “Compose” button altogether because it is redundant and misleading. Its original purpose can be taken care of by the “*start writing*” field and the “Today” button.

Users seemed at a loss after writing or pinning/captioning a photo. This is partly because the tasks we gave did not ask them to return to the home screen. But it is likely that, because we had no “save” button or “back” button, they did not know for sure if they had completed the task. There was no step that assured them that they had succeeded. Participant 4 even asked, “Do I need to save it?” This all shows that perhaps we need a way to show users that they have completed a task and that *momentous* saves their information.

Consistent with this issue, participants mentioned “going back,” to the “home screen.” We did not intend for there to be a “home screen” in the first place. Also, it is possible that the nature of the paper prototype lead



users to think that they were hopping from screen to screen rather than certain sections expanding to accommodate more information (e.g. facebook tab simply expands to show photos and posts and can be collapsed again). That being said, users would probably benefit from a screen that showed information without making it seem like old information was lost. To do this, perhaps we need to fit more on the screen by shrinking the size of information or the amount that we present. Then, animations could visually aid users in the feeling that they aren't jumping between places.

Users enjoyed looking back and observing trends. Everyone did it without hesitation or error. So we know this part of the application is understandable. Perhaps we could make it more complex (without confusing users) in order to include more information.

## Appendix

### Appendix A

Participant	Incident	Severity Rating
1,5	Never saw the "start writing" field	2
1,2,3,4,6	Didn't know what to do when finished with entry	2
2	Clicked compose when trying to pin fb photo and couldn't return	3
2,3	Didn't see "start writing" field right away	2
1,2,3,4,5,6	Looking back on entries and trends was easy/fast	0
4,5	Only used the "start writing" field	0
4	Asked "what does the compose button do?"	2
3,4,5,6	Appreciate formatting of TODAY view	0
2,6	Didn't realize pinning was in-house	1
4,5	Found all 3 tasks very easy	0