Habitual: A Habit Tracker

Morgan Adrales

University of Missouri – Kansas City

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# **Vision Statement**

Habitual is an easy-to-use habit tracking app that allows users to set, monitor, and maintain goals. Studies show that goals that are written or otherwise logged are concrete and motivational, and thus more likely to stick. Habitual aims to increase the user’s goal retention by keeping track of these goals and providing feedback on their progress. The key features include:

1. a goal section where goals are created, modified, and if necessary, deleted. The user can also assess/reflect on the progress they’re making through this page.
2. a progress section where Habitual will keep track of daily, weekly, and monthly streaks. The user will also be able to view their goals on a daily, weekly, or monthly basis.

Upon immediate release, Habitual will have the functionality to record goals and accept user feedback on their progress. In future releases, Habitual will be able to track daily streaks on goals and provide encouraging, positive feedback to the user based on their streaks.

# **Requirements**

A discussion of what your application is required to have in functionality. It should identify user roles and goals/actions, and what the key features of the app should be.

|  |  |
| --- | --- |
| **Actor** | **Goal** |
| Customer | Create and set goals on the goal page |
| Customer | Log additional details and progress on the goal page |
| Customer | View goals on a daily, weekly, or monthly basis |
| Customer | Check overall trends in progress and daily/weekly/monthly streaks on the progress page |
| Customer | Receive positive and encouraging feedback from Habitual based on their streaks and progress |
| Customer | Receive timed reports from Habitual regarding their progress (daily/weekly/monthly) |
| Customer | Customize the appearance of the app with preferences such as setting a preferred name, background color, etc. |
| Developer | System shall include a brief, 3-4 step tutorial on how to perform functionality described in stories 1-4 upon the user’s first time opening the app |

### Product Backlog

This will be updated throughout the semester as new PBIs are added, larger items are broken into smaller ones, and completed items removed.

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| --- | --- | --- | --- | --- |
| **Story ID** | **Story** | **Story Points**  **(in est. hours)** | **Priority** | **Status** |
| 1 | Implement the basic layout of each of the 3 pages: goals, progress, and logging. The user should be able to navigate easily through each of the tabs by swiping | 3 | 1 | Completed in iteration 1 |
| 2 | Add a list view on the goals page | 3 | 2 | Committed for iteration 2 |
| 3 | Add a button to create a goal on the goals page:  On click, the button should open a dialog that prompts the user for more information (i.e. title for goal, duration, description, etc) | 2 | 2 | Committed for iteration 2 |
| 4 | Implement a button on the goal page to remove goals from the list and have them no longer appear on the goal page. User should also be able to select and remove multiple goals at once. | 2 | 1 | New, future work |
| 5 | Implement a progress page – user should be able to view their goals on a daily, weekly, and monthly basis. | 3 | 1 | New, future work |
| 6 | Add logging/journaling capability to the goal page – user should be able to edit the goal to add their progress reflection as text that will be displayed as additional goal details. | 2 | 2 | New, future work |

# **Sprint #1**

Sprint Backlog

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| --- | --- | --- | --- |
| **Story ID** | **Story / Task** | **Estimated**  **Hours** | **Actual**  **Hours** |
| 1 | Implement the basic layout of each of the 3 pages: goals, progress, and logging. The user should be able to navigate easily through each of the tabs by swiping | 3 | 8 (includes time spent learning java) |
| 1 | Implement a goal page – user should be able to create a goal with the touch of a button and have the goal appear on the page. Goals have the following information:   * Title of goal * Occurrence (daily/weekly/monthly) * Duration (estimated time to complete in minutes) * Additional details (space for user to reflect on their goals or provide motivation for setting the goal, blank by default) | 5 | 0 (broke into smaller tasks, moved to future sprint) |
| 2 | Implement a goal page - user should be able to remove goals from the list and have them no longer appear on the goal page. User should also be able to select and remove multiple goals at once. | 2 | 0 (broke into smaller tasks, moved to future sprint) |

## 

Review



Fig. 1: Screenshot of the Goals page where the user will be able to add/remove goals in a future update.

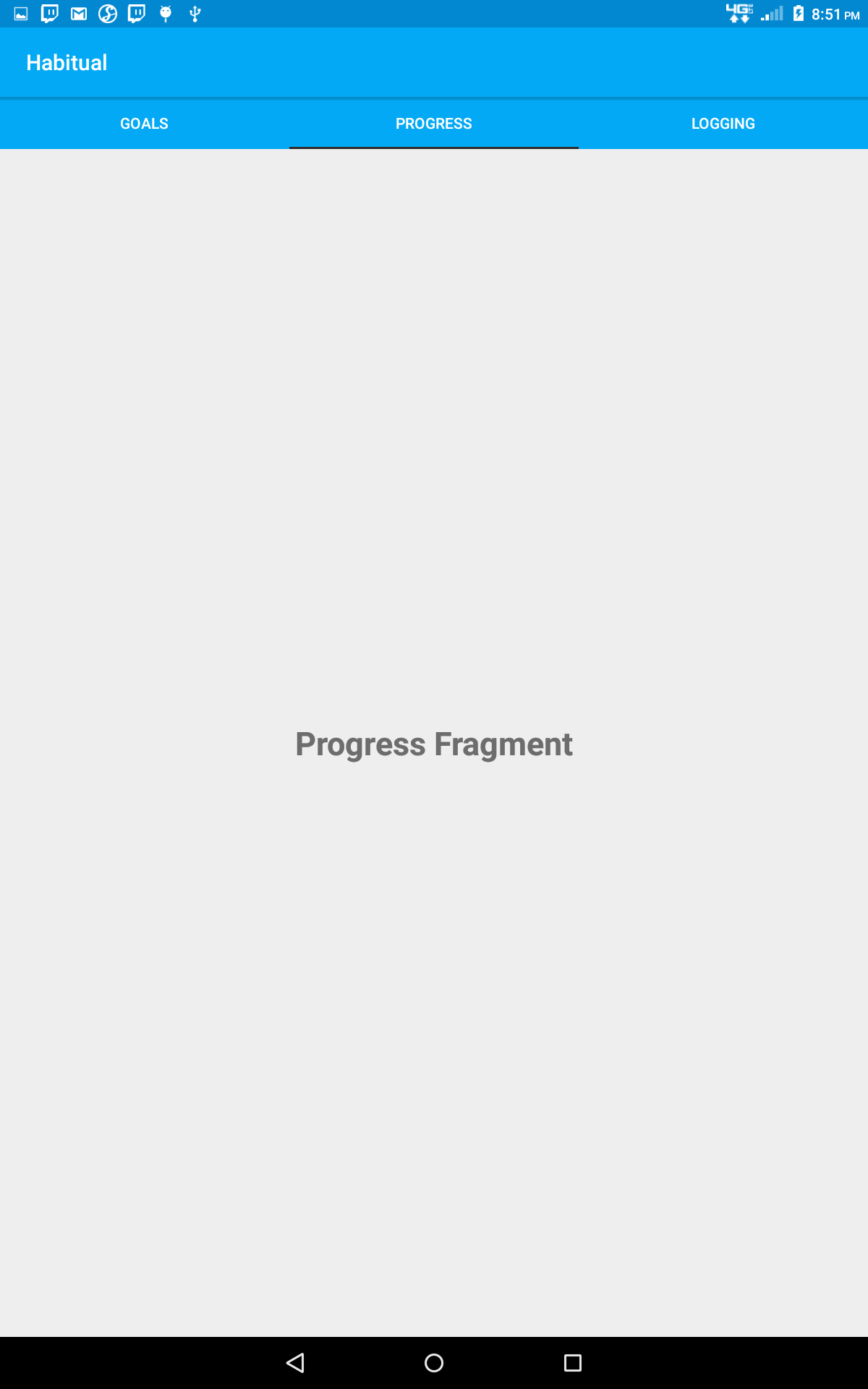


Fig. 2: Screenshot of the Progress page where the user will be able to see their daily/weekly/monthly streaks as well as their targeted or overall progress on the same timeline in a future update.

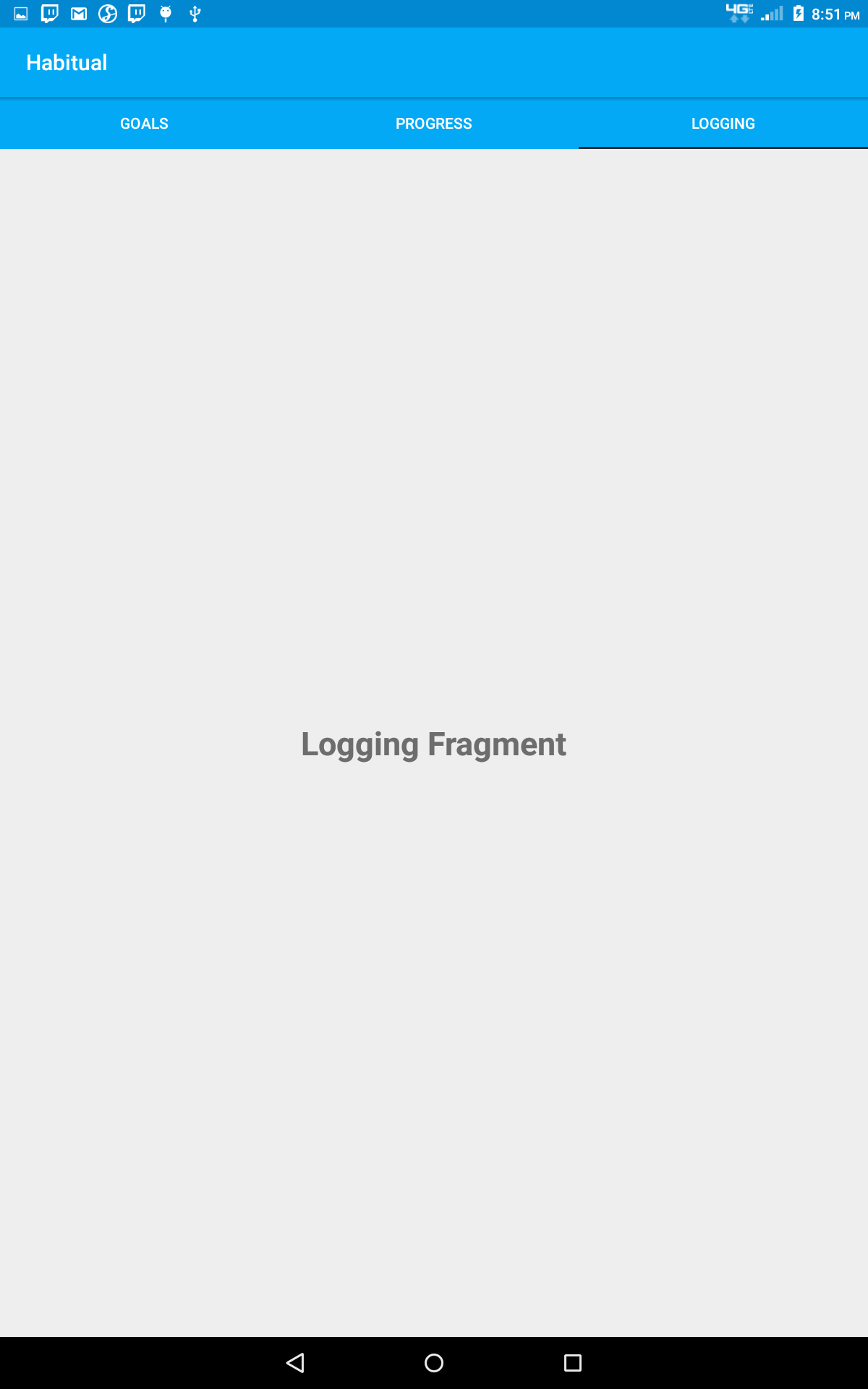


Fig. 3: Screenshot of the Logging page where the user will be able to journal additional details about their goals and progress in a future update.

For this sprint, I initially took on more work than ended up being feasible. Originally, I wanted to implement the Goals page almost entirely and work on the other two in future iterations. I found that that didn’t really make sense. Instead, I needed to setup the basic layout for all 3 pages, then worry about their actual implementation later. So, for this sprint, the work that was actually done included setting up all 3 “pages” (they’re really tabs) and making sure that the user can easily navigate between each one. The user can navigate between each of the tabs pictured above (Fig. 1-3) by swiping left or right.

## Retrospective

There are several ways of implementing a tab-based control but many of the ways that I tried at first weren’t as easy to navigate. For example, I tested a tab layout where the user navigated from page to page by clicking on the tab at the top. I felt that that wasn’t as easy to use and didn’t look as fluid, so I ended up spending 4-5 hours learning how to implement each of these tabs in a way that the user could swipe back and forth between each tab. I struggled with this because learning how to use a tab layout with custom fragments and ViewPager proved to be a cumbersome task to take on. My experience with UI design and app development is limited, so much of this was completely foreign to me. Eventually, I did get the layout that I wanted after a total of 8-10 hours of work. For the next sprint, I plan to replace the placeholder text (i.e. “Goal Fragment”) with some kind of list viewer that will let the user add and remove their goals from the list. I plan to focus on breaking the PBIs into even smaller tasks that will emphasize one feature at a time.

# **Sprint #2**

Sprint Backlog

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| **Story ID** | **Story / Task** | **Estimated**  **Hours** | **Actual**  **Hours** |
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## Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done. ]

## Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn’t go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

# **Sprint #3**

Sprint Backlog

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| **Story ID** | **Story / Task** | **Estimated**  **Hours** | **Actual**  **Hours** |
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## Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done. ]

## Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn’t go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

# **Sprint #4**

Sprint Backlog

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| **Story ID** | **Story / Task** | **Estimated**  **Hours** | **Actual**  **Hours** |
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## Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done. ]

## Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn’t go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

# **Sprint #5**

Sprint Backlog

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| **Story ID** | **Story / Task** | **Estimated**  **Hours** | **Actual**  **Hours** |
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## Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done. ]

## Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn’t go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]

# **Sprint #6**

Sprint Backlog

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| **Story ID** | **Story / Task** | **Estimated**  **Hours** | **Actual**  **Hours** |
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## Review

[Screenshots, etc go here. This is where you discuss the product, describing what was done this sprint (potentially shippable product increment) and what was planned for the sprint but was not done. ]

## Retrospective

[This is where you discuss the process. What went well (and are you planning to do more of that?) What didn’t go so well (and do you have a way to do less of that)? What changes are you planning to make in how you plan & carry out the next sprint?]