

Milestone 2: Planning

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MS 1 Post-Mortem Analysis [10%]

- MS 1 Postmortem analysis [10%]
 - Record (a) what worked or went well in MS 1, and (b) what didn't.
 - Risks: adjusted, ranked, and classified high, medium, low, with a solution plan for each (see [Risk Analysis](#) resource)
 - These should at least address "what didn't" above, as your project is at risk of having them recur in MS 2. The solution plan includes tweaks to your Agile process to ensure "what didn't" doesn't happen again.
 - Calculation of Velocity with justification based on MS 1 results

What went well:

- Our team worked well together, such as paired programming

What didn't go well:

- We didn't stick to the plan that we had started with, as we didn't really make much progress on Iteration 1.
- Merges were a mess
- We weren't able to properly test changes in backend getting reflected in the front end
- Lost time trying to figure out previous person's additions

Risks

Risk: Not sticking with the plan that we start with

Description: Last time, we said that we were going to get certain stories done by iteration 1, but we ended up not completing those, which put us in a big time crunch for iteration 2.

Severity: High

Resolution: Start earlier, and treat Iteration 1's deadline as a hard deadline that we have to meet.

Status: Resolved

Risk: Merges were a mess

Description: Last time, merging into main was a huge headache as we all were working on separate user story branches at the same time (due to time crunch), and we almost lost some critical functionality.

Severity: High

Resolution: As a team, have a maximum of two branches being actively worked on. Really emphasize completing a branch as soon as possible, so that it can be merged and the next story can work off of the previous work. Additionally, if a branch is merged into main, active branches need to rebase to make sure they're up to date.

Status: Resolved

Risk: Inadequate Testing

Description: Last time, while we were able to test some parts pretty thoroughly, like we weren't able to properly test changes in the backend getting reflected in the front end.

Severity: High

Resolution: Emphasize completing testing before moving on to working on other stories. Also start using proper UI testing frameworks like Espresso.

Status: Resolved

Risk: Lost time trying to figure out previous person's additions

Description: Last time, we spent valuable time trying to decode the previous person's additions (when working on their work in a branch that is actively in development, so pre pull-request write up).

Severity: Low

Resolution: Document our work more, let the Slack know what changes you made and why.

Status: Resolved

Calculation of Velocity

Justification based on MS 1 results:

Total hours worked: 124

Total hours of work: 40

$40 / 124 = 0.323$

User Stories [40%]

1) Title: Goal Adding Options for Today and Tomorrow Views

Description: *As a user*

I want to be able to add goals to today's success list or to add a recurring goal centered around today's date

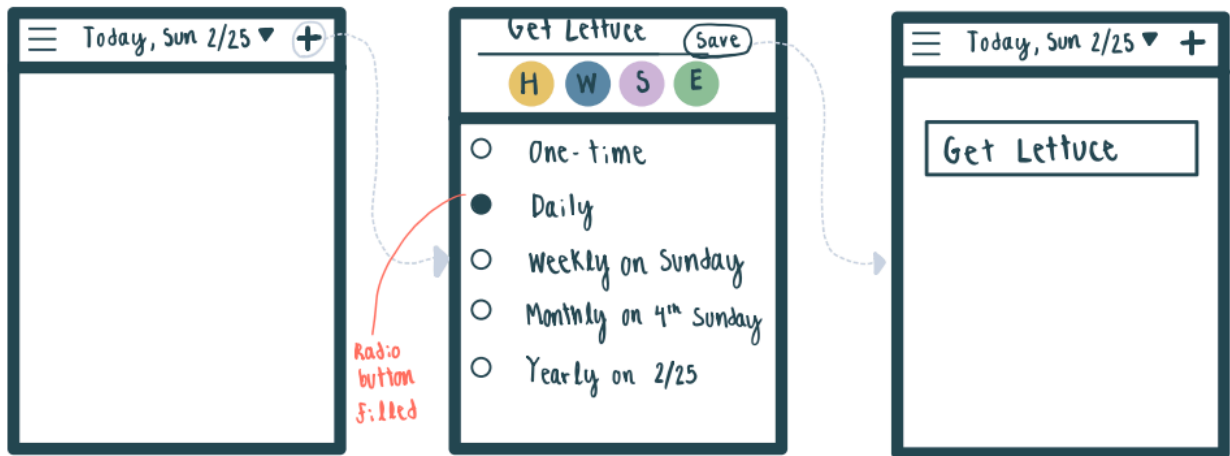
so that I can better organize my life.

Estimate: 8

Priority: High

Acceptance Criteria:

US 1: Goal Adding Options for "Today" and "Tomorrow" Views



Scenario 1: Add a one time goal to today/tomorrow

Given that today is Sunday, February 25, 2025

And I'm on the 'Today' tab

And I click the + button

And the goal adding popup should appear with the following options: One time, Daily, Weekly on Sunday, Monthly on 4th Sunday, Year on 2/25

When I choose One time, and type in "Get Lettuce",

And I click the "Save" button

Then "Get Lettuce" should appear on today's list as an incomplete goal.

Scenario 2: Add a daily goal to today

Given that today is Sunday, February 25, 2025

And I'm on the 'Today' tab

And I click the + button

And the goal adding popup should appear with the following options: One time, Daily, Weekly on Sunday, Monthly on 4th Sunday, Year on 2/25

When I choose Daily, and type in "Get Lettuce"

Then "Get Lettuce" should appear on today's list as an incomplete goal.

And If I switch to the 'Tomorrow tab', "Get Lettuce" should also appear as an incomplete goal.

And If I switch to the 'Recurring' tab, I should also see "Get Lettuce" as an incomplete goal.

Scenario 3: Add a daily goal to tomorrow

Given that Tomorrow is Sunday, February 25, 2025

And I'm on the 'Tomorrow' tab

And I click the + button

And the goal adding popup should appear with the following options: One time, Daily, Weekly on Sunday, Monthly on 4th Sunday, Year on 2/25

When I choose Daily, and type in "Get Lettuce"

Then "Get Lettuce" should appear on tomorrow's list as an incomplete goal.

And If I switch to the 'Recurring' tab, I should also see "Get Lettuce" as an incomplete goal.

Scenario 3: Add Weekly/Monthly goal in "Today" view

Given that today is Sunday, February 25, 2025

And I'm on the 'Today' tab

And I click the + button

And the goal adding popup should appear with the following options: One time, Daily, Weekly on Sunday, Monthly on 4th Sunday, Year on 2/25

When I choose Weekly/Monthly, and type in "Get Lettuce",

And I click the + button

Then "Get Lettuce" should appear on today's list as an incomplete goal.

And If I switch to the 'Recurring' tab, I should also see "Get Lettuce" as an incomplete goal.

2) Title: Calendar picker for recurring events

Description: As a user

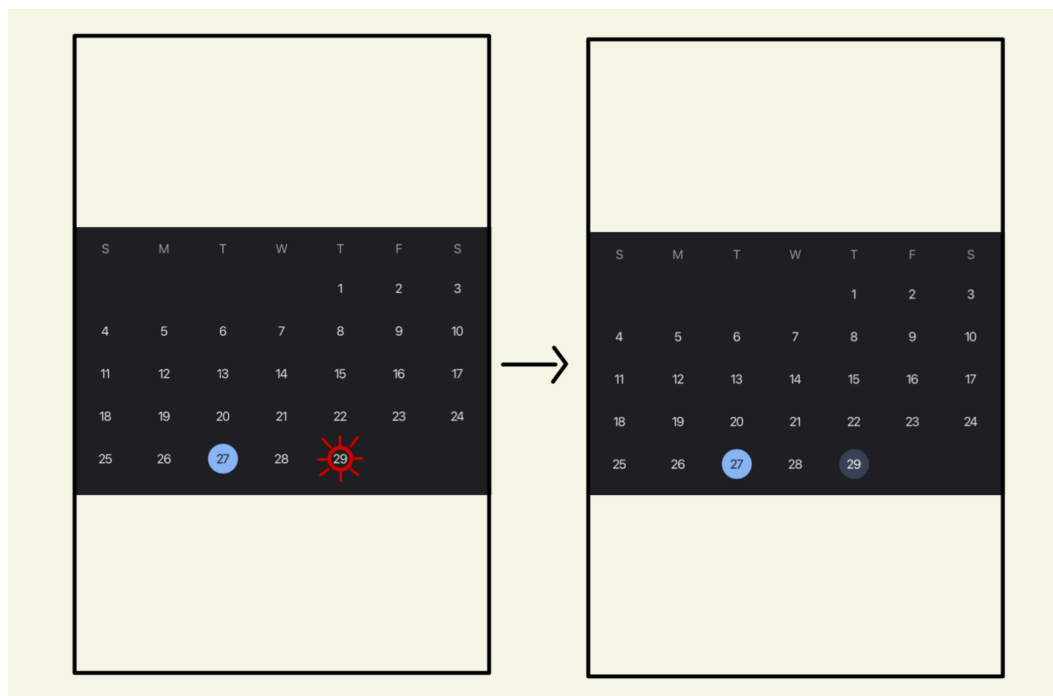
I want to see a dropdown calendar when i make a new recurring goal

so that it i know what day of the week and date i an choosing in relation to the month

Estimate: 4

Priority: Low

Acceptance Criteria:



Scenario 1: Starting date is today

Given that today is February 22nd 2023

And I click '+' a new pop-up shows up

When I click the date at the bottom "February 22nd, 2023"

Then a Calendar picker will pop up showing a dark green filled circle with a light green outline around my current date "22nd"

And there's a month and year picker at the top

Scenario 2: Starting date is in the same month

Given that today is February 22nd 2023

And I click '+' a new pop-up shows up

When I click the date at the bottom "February 22nd, 2023"

And I click February 23rd

Then the dark green circle disappears from February 22nd

And reappears on Feb 23th

Scenario 3: Starting date is in a different month

Given that today is February 22nd 2023

And I click '+' a new pop-up shows up

And I click the date at the bottom "February 22nd, 2023"

When I click the dropdown that says February 2023 above the dates

Then a dropdown of the next months show up

And I click "March 2023"

Then the calendar month displayed at the top changes to March

And the calendar monthly view of March is displayed.

And the 2 green circles are gone

When I click March 1st

Then the dark circle appears

Scenario 4: Starting date is invalid

Given that today is February 22nd 2023

And I click '+' a new pop-up shows up

When I click the date at the bottom "February 22nd, 2023"

And I click February 21st

Then the dark green circle stays on February 22nd

And an alert is displayed saying "Invalid date. Choose a date in the future"

When I click ok

Then the calendar is still there with February 22nd highlighted with 2 circles

3) Title: Goals can be given context (and matching UI)

Description: *As a user*

I want to be able to assign goals a specific context

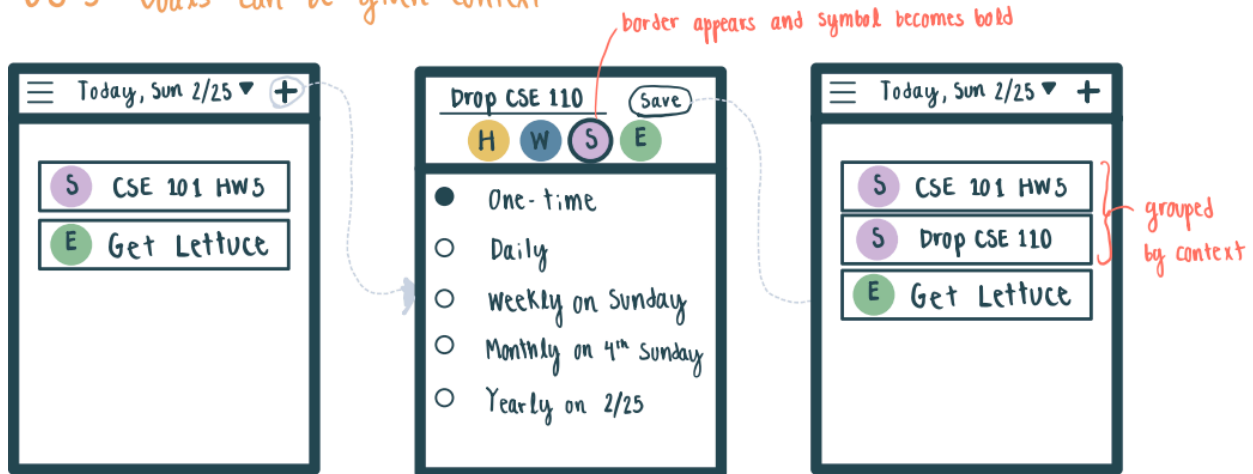
so that I know which context the goal belongs to

Estimate: 4

Priority: Medium

Acceptance Criteria:

US 3: Goals can be given context



Scenario 1: Add a new school goal when other school goals exist

Given there are existing school goals in the list

And the user enters the description for the new goal

And the user selects the context “school” to assign to the goal

When the user clicks “save”

Then the goal should be added to the goals list grouped with other “school” goals

And the school context icon should be displayed next to the next goal

Scenario 2: Add a new school goal when there are existing errand goals

Given there are no existing school goals

And there are existing errand goals

When the user creates a new goal with “school” context

Then the goal should be added to the goals list and separated from the errand goals

And the school context icon should be displayed next to the next goal

Scenario 3: Add a new school goal to an empty list

Given there are no existing goals in the list

When the user creates a new goal with “school” context

Then the goal should be added to the goals list marked as a school goal

And the school context icon should be displayed next to the next goal

Scenario 4: Mark goal as complete

Given the “complete math homework” goal is marked with the “school” context

And is currently incomplete in the list

When the user taps on the goal

Then the goal should be moved to the bottom of the list for completed goals

And the school context icon should be grayed out

4) Title: Filter Goals by Context

Description: *As a user*

*I want to be able only see goals in a specific category
so that I can focus on a task that is very important for me to complete*

Estimate: 4

Priority: Medium

Acceptance Criteria:

US 4: Filter Goals by Context



Scenario 1: Selecting school focus

Given I have 2 tasks that are tagged with school

And one task that is tagged as home

When I click on the hamburger menu icon

Then the focus mode pops up to allow me to select my context focus

When I click on school

Then the tasks that I see are the tasks that were tagged with school

Scenario 2: Selecting focus without tasks

Given I have 2 tasks that are tagged with school

And one task that is tagged as errand

When I click on the hamburger menu icon

Then the focus mode pops up to allow me to select my context focus

When I click on home

Then there are no tasks showing

Scenario 3: Going to another view with filter on

Given I am currently in "today" view

And I have 0 tasks that are tagged with school in "today"

And I have 1 task that is tagged as errand in "today"

And I have 1 task that is tagged with school in "pending"

And I have 3 tasks that is tagged as hame in "pending"

When I turn on the school context filter on
Then today should be empty
When I navigate to “pending” view
Then only the 1 task tagged with school should be displayed

Scenario 4: Going to another view with filter on

Given I am currently in “today” view
And I have 0 tasks that are tagged with school in “today”
And I have 1 task that is tagged as errand in “today”
And I have 1 task that is tagged with school in “pending”
And I have 3 tasks that is tagged as hame in “pending”
When I turn on the school context filter on
Then today should be empty
When I navigate to “pending” view
Then only the 1 task tagged with school should be displayed

5) Title: Pending goals view

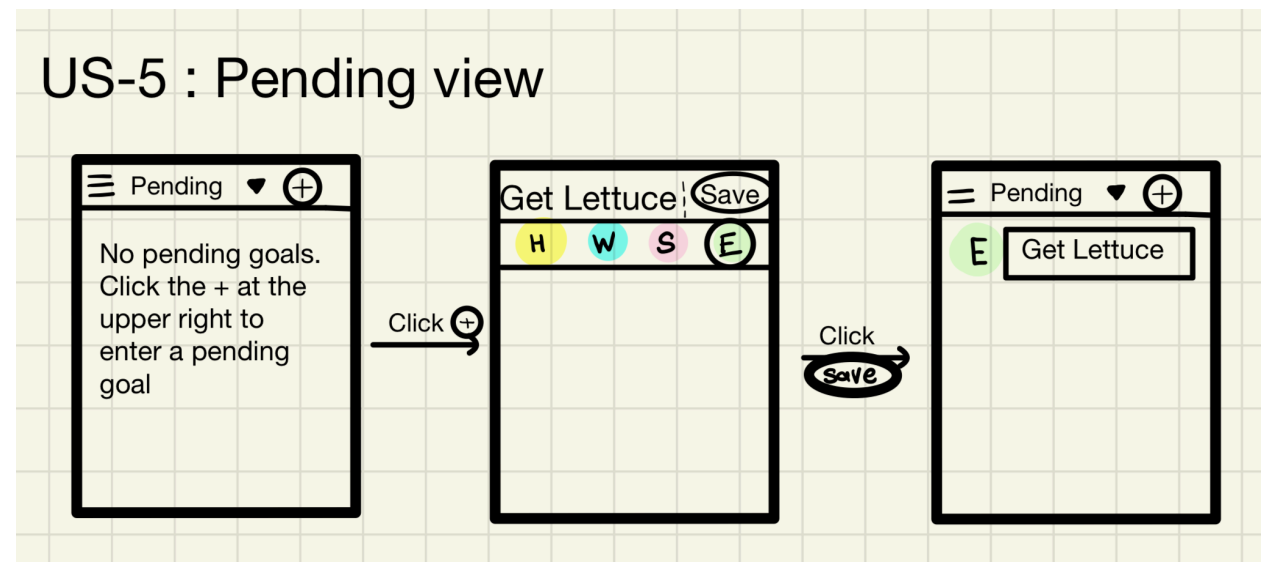
Description: As a user,

I want a dedicated place for my pending goals
so that I can handle tasks that aren’t due today or tomorrow.

Estimate: 2

Priority: High

Acceptance Criteria:



Scenario 1: View empty pending goals dropdown

Given there are no pending goals
And I am on the home page
When click the dropdown button
And then click the “Pending” button

Then I should see an empty list with the ability to add goals

Scenario 2: Add goal to pending goals

Given I am already on the pending goals view

When I tap the “+” button

Then a keyboard comes up and I can enter my goal

When I tap “Save”

Then my goal is added to the list

6) Title: Long press menu for actions on goals

Description: As a user

I want to move pending goals to today, tomorrow, finish, delete

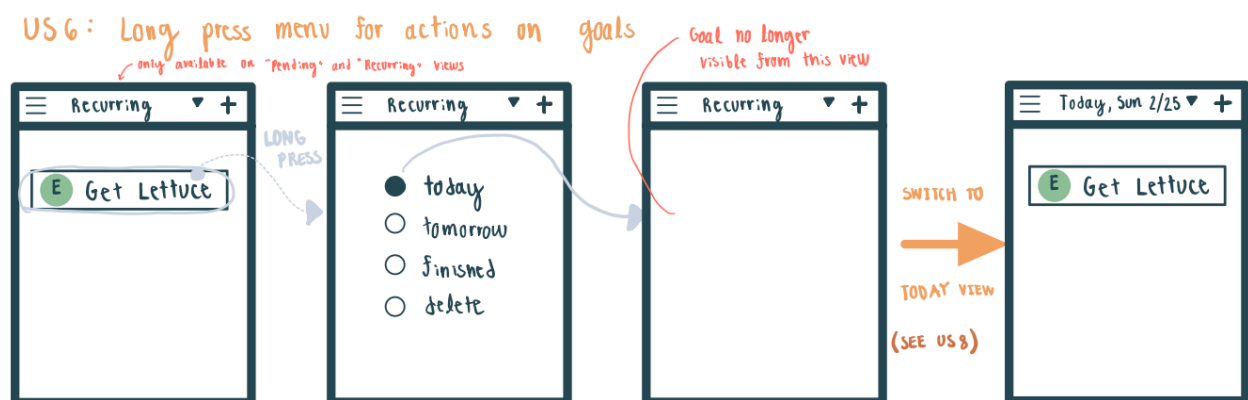
so that I can remind myself to do the goal, and

So that if the goal is already finished, I can remove it.

Estimate: 4

Priority: Medium

Acceptance Criteria:



Scenario 1: Change pending goal to today's goal

Given the goal “research plane tickets” is on the pending goals list

When the user presses and holds on the “research plane tickets” goal

Then a menu appears with the options “today”, “tomorrow”, “finished”, and “delete”

And the user can press on “today”

And the goal will disappear from the “pending” list

And the goal will move to today's goal list.

Scenario 2: Change pending goal to tomorrow's goal

Given the goal “research plane tickets” is on the pending goals list

When the user presses and holds on the “research plane tickets” goal

Then a menu appears with the options “today”, “tomorrow”, “finished”, and “delete”

And the user can press on “tomorrow”

And the goal will disappear from the “pending” list

And the goal will move to tomorrow's goal list.

Scenario 3: Change pending goal to finished

Given the goal “research plane tickets” is on the pending goals list

When the user presses and holds on the “research plane tickets” goal

Then a menu appears with the options “today”, “tomorrow”, “finished”, and “delete”

And the user can press on “finished”

And the goal will disappear from the “pending” list

And the goal will move to today’s completed goal list.

Scenario 4: Delete pending goal

Given the goal “research plane tickets” is on the pending goals list

When the user presses and holds on the “research plane tickets” goal

Then a menu appears with the options “today”, “tomorrow”, “finished”, and “delete”

And the user can press on “delete”

And the goal will disappear from the “pending” list

And the goal will be removed from the pending goals list.

Scenario 5: Delete recurring goal

Given the goal “complete weekly homework” is on the recurring goals list

When the user presses and holds on the “complete weekly homework” goal

Then a menu appears with the only option being “delete”

And the user can press on “delete”

When the user presses “delete”

Then the goal will be removed from the “recurring” list.

7) Title: Recurring goals view

Description: *As a user*

I want to be able to see which goals are recurring

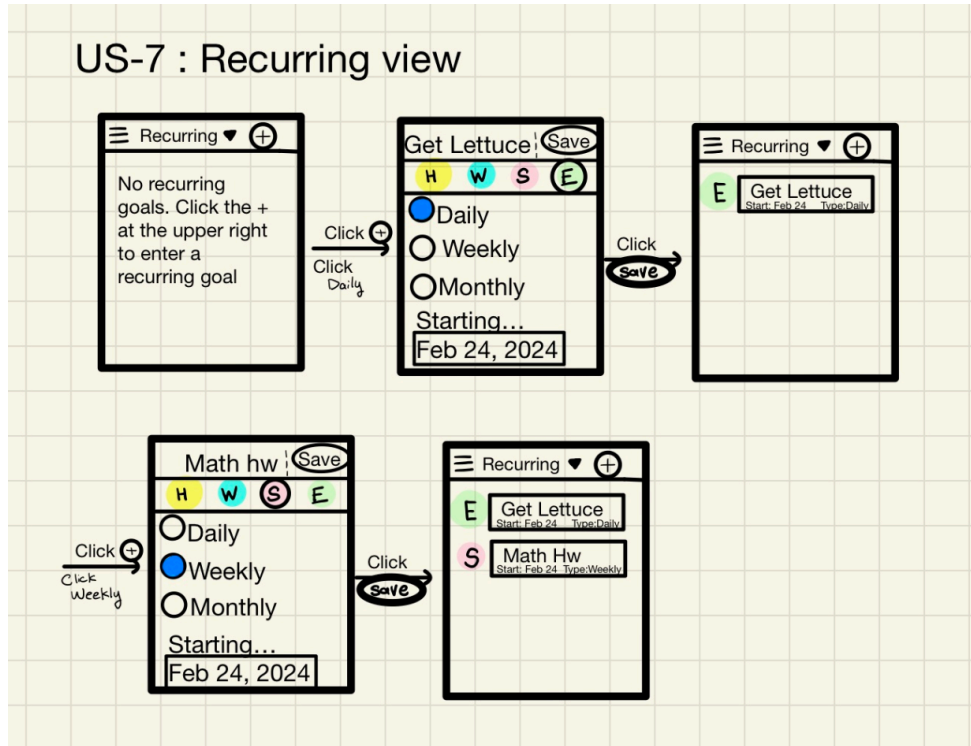
so that I can be reminded of when I need to complete the task again

Estimate: 4

Priority: High

Acceptance Criteria:

US-7 : Recurring view



Scenario 1: Add a new recurring goal to empty list

Given there are no recurring goals

When the user creates a new recurring goal to “take out the trash” every week set to start on Feb 24

Then the goal should show up in the recurring goals view tab

And Feb 24 is displayed as the next date that “take out the trash” should be completed as well as displaying “weekly” as the frequency of recurring goal.

Scenario 2: Add a new recurring goal with a later start date to non-empty list

Given the weekly take out trash goal is already in the list

When the user adds a monthly recurring goal “pay rent” set for the 1st of March

Then the “pay rent” goal should be added to the recurring goals list below the existing goal

And display March 1 as the date and “monthly” as the frequency

Scenario 3: Add a new recurring goal with an earlier start date to non-empty list

Given the the weekly “take out trash” and monthly “pay rent” goals are in the list

When the user adds a weekly recurring goal “complete homework” set for Feb 27

Then the “complete homework” goal should be added to the recurring goals list below the “take out trash” goal

And above the “pay rent” goal

8) Title: Views drop-down menu

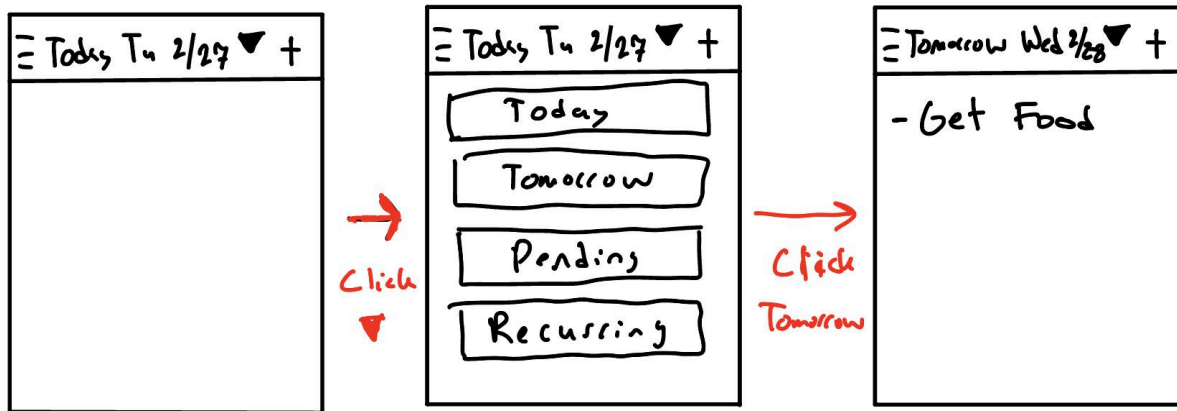
Description: As a user

I want to be able to switch between views for Today, Tomorrow, Pending, and Recurring so that I can focus on goals that are relevant to my current planning.

Estimate: 4

Priority: High

Acceptance Criteria:



Scenario 1: Accessing Different Views through dropdown

Given I am currently on the "Today" screen

And the "Tomorrow" view has no goals

When I tap the "v"

Then view options "Today," "Tomorrow," "Pending," and "Recurring" should appear

When I click "Tomorrow"

Then I should be taken to the corresponding "Tomorrow" view, and it should be empty.

Scenario 2: Switching views from "Tomorrow" to "Pending"

Given I am currently on the "Tomorrow" view

And the "Pending" view has one goal "Get pickles"

When I tap the "v"

And I select "Pending" from the drop-down menu

Then I should be taken to the corresponding "Pending" view, which has one goal "Get pickles"

9) Title: Update Today/Tomorrow Goal Lists based on Recurring Goals

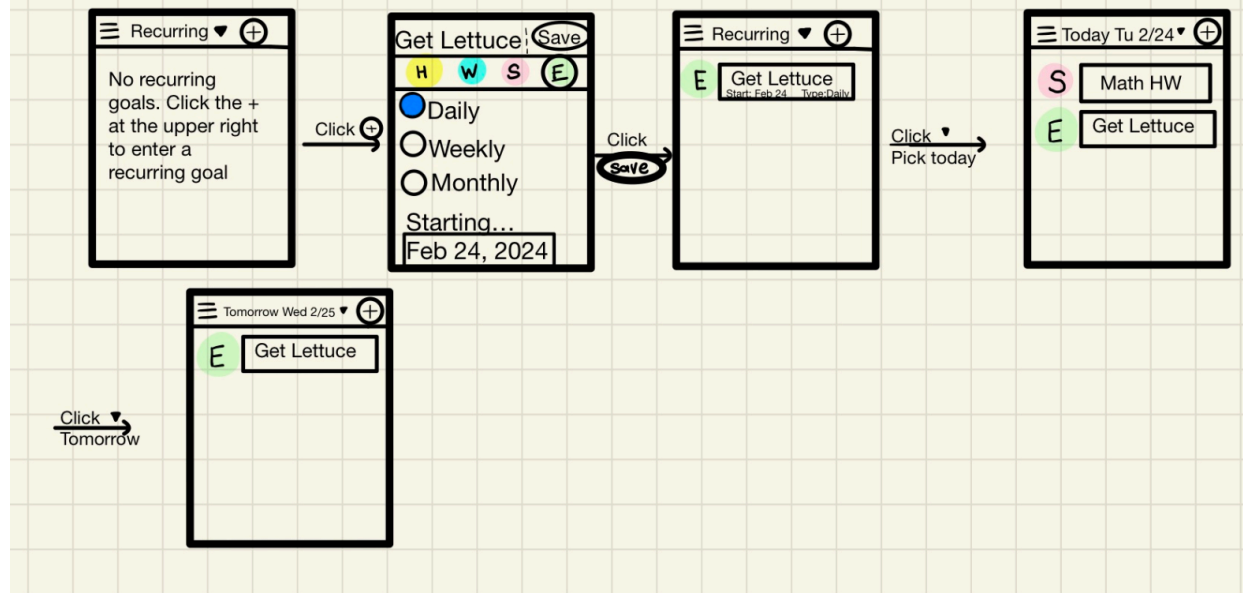
Description: As a user

I want the goals I have set as recurring to automatically appear in my today/tomorrow views on the correct days

so that I can easily know what tasks I have to do

Estimate: 16

US-9 : Updating Today, Tomorrow



Priority: **High**

Acceptance Criteria:

Scenario 1: Date changes and there's a daily recurring goal

Given the user is in the "Today" view

And it is currently 2/26

And there is a recurring daily goal, "Walk the dog" that starts on 2/24

And currently the "Today" view has ~~"Walk the dog"~~ marked as complete, while the "Tomorrow" view has an incomplete "Walk the dog" goal.

When the date changes to 2/27

Then "Walk the dog" should again appear as incomplete in both the "Today" and "Tomorrow" views.

Scenario 2: Date changes and there's a weekly recurring goal

Given the user is in the "Today" view

And it is currently Friday 2/23

And there is a recurring weekly goal, "Take out the trash" that happens every Sunday, and started on 2/17.

And both the "Today" view and the "Tomorrow" view are empty

When the date updates to Saturday 2/24

Then the goal "Take out the trash" should appear in the "Tomorrow" view

When the date updates to Sunday 2/25

Then the goal "Take out the trash" should appear in the "Today" view and no longer be in the "Tomorrow" view

Scenario 3: Date changes and there's a weekly recurring goal, but the previous week's version of that goal has not been completed yet (account for today/tomorrow and advancing a day)

Given the user is in the "Today" view

And it is currently Friday 2/23

And there is a recurring weekly goal, "Take out the trash" that happens every Sunday, and started on 2/17

And the "Today" view still has "Take out the trash" listed since it wasn't done last week

And the "Tomorrow" view is empty

When the date updates to Saturday 2/24

Then today should still have "Take out the trash" listed, and "Take out the trash" should also appear in the "Tomorrow" view

When the date updates to Sunday 2/25

Then the goal "Take out the trash" should still be listed in the "Today" view, but no longer be listed in the "Tomorrow" view

Scenario 4: Date changes and there's a monthly recurring goal

Given the user is in the "Today" view

And it is currently Friday 2/23

And there is a recurring monthly goal, "Men's League match" that happens every 4th Sunday of the month, and started on 1/28

When the date updates to Saturday 2/24

Then "Men's League match" should appear in the "Tomorrow" view

When the date updates to Sunday 2/25

Then the goal "Men's League match" should be listed in the "Today" view, but no longer be listed in the "Tomorrow" view

Scenario 5: Date changes and there's a yearly recurring goal

Given the user is in the "Recurring" view

And the "Today" view has one existing goal, "Get burger".

When the user adds a new goal "Get Lettuce"

Then the goal "Get Lettuce" should be underneath "Get burger" in today's view

Developer Loose Task

Description: *As a developer,*

I want to test all of the stories in an end-to-end scenario

so that I can ensure that my customers are satisfied with their product.

Acceptance Criteria:

Given there are tests to test all of the methods in the app and

And an end to end UI test built in

When the final milestone deliverable is merged to the master branch

Then the build will compile and all tests will pass

Iteration 1 Overall Test

Description: *As a developer,*
I want to test the user stories implemented in the iteration
so that I can check that we have a working product so far.

Acceptance Criteria:

Given the user stories for iteration 1 are complete

And each of them have built in test cases

When each of the branches are merged into master

Then the build will compile and all tests will pass

Tasks [20%]

US 8 Views drop-down menu [4]

- Create dropdown menu UI element [1]
- Implement switch view function/method for today/tomorrow/pending/recurring [2]
- Testing [1]

US 1 Goal adding options for today and tomorrow views [8]

- Add UI for tomorrow's goals [1]
- Add new options for goal adding to popup [1]
- Add new fields to database [2]
 - Today, Tomorrow, Recurring, Pending
 - Add columns for recurrence frequency ({Daily, Weekly, Monthly, Yearly} + {When is next occurrence})
- Add insert method for adding the new goal [3]
- Testing [1]

US 5 Pending goals view [2]

- Duplicate the current view for pending view [1]

Testing [1]US 3 Goals can be given context [4]

- Add new field to database to store context [1]
- Add context options to add goals UI [1]
- Display context icon next to goals [1]
- Testing [1]

US 4 Filter goals by context [4]

- Add new UI elements to turn focus mode on and off [1]
- Create new query methods for the database [1]
- Update UI using new query methods if focus mode is on [1]
- Testing [1]

Iteration 1 Overall Test [2]

Two Iterations [10%]

Iteration 1 March 4 Monday

US 8 Views drop-down menu [4]

US 1 Goal adding options for today and tomorrow views [8]

US 5 Pending goals view [2]

US 3 Goals can be given context [4]

US 4 Filter goals by context [4]

Iteration 1 Overall Test [2]

Total 24 hours

Completed:

US 5, US 8,

6 hours

8 hours

Iteration 2+ 32 hours + 18 hours 50 hours 66

Iteration 2 March 14 Thursday

US 2 Calendar picker for recurring events [4]

US 7 Recurring goals view [4]

US 9 Update Today/Tomorrow Goal Lists based Recurring Goals [16]

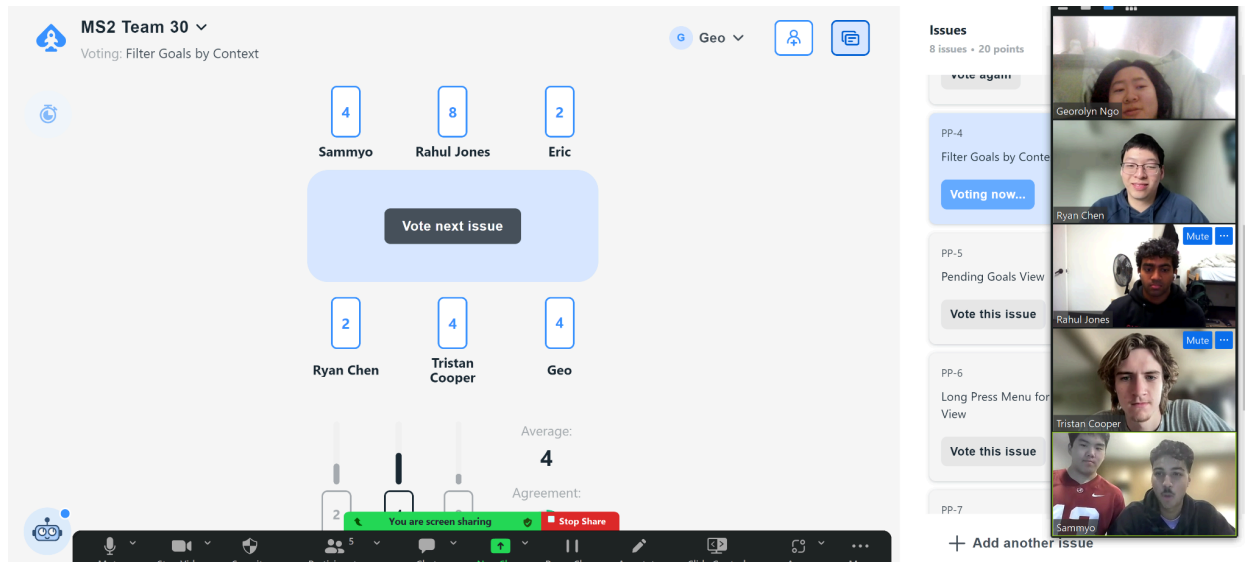
US 6 Long press menu for actions on goals in pending view [4]

Developer Loose Task [4]

Total 32 hours

We picked Iteration 1 to have most of our high-priority user stories and user stories that other user stories depend on. For example, our first user story, a high-priority user story, is in the first iteration since we need to be able to use those elements for the first user story, the eighth user story, and the second user story. Another example is user story 5 (in iteration 1), a high-priority user story, which user story 6 (in iteration 2) depends on. Also, our group put the user stories that give goals context (US 3 and 4) into the second iteration because it doesn't depend on anything, and we thought that those were medium-priority user stories. We also split the time for each iteration somewhat evenly, with iteration 2 having a few more hours and some more user stories. This makes sense, as in the first iteration the group will have less time overall, as most of our group's midterms are week 8, during the first iteration. Additionally, we also have 1 week for the first iteration, and the second iteration has around 1 and a half weeks, so time-wise it would be responsible to put more user stories in the second iteration than the first iteration.

Planning Poker documentation [5%]



S#	Name	Hand	False assumptions uncovered
1	Goal Adding Options	8 8 4 8 8 8	None
2	Calendar picker for recurring events	4 8 2 8 4 4	Weekly goal doesn't need to go to "Today" for that day
3	Goals can be given context	2 2 8 4 4 4	Displaying context icon next to goal?
4	Filter Goals by Context	4 8 4 4 2 2	Fragment shouldn't be that easy
5	Pending goals view	2 2 1 4 2 2	Tag needed for type of goal?
6	Long press menu for actions on goals in pending view	4 4 4 2 8 4	Clarify how finish and delete are going to look. How is rollover going to look?
7	Recurring goals view	4 4 4 4 4 4	None
8	Views drop-down menu	4 4 4 4 4 2	Need a bunch of switch view functions
9	Update today/tomorrow goal lists based on recurring goals	16 8 8 8 16 8	None

Scenario-Based System Tests [8%]

Jessica Struggles, and becomes a serial planner

1. Start the app by tapping the app icon. You should see a mostly empty screen with "Today, Tues 2/20" at the top.
2. Tap the + button and a menu should pop up with options to for the goal to be one-time, daily, weekly on Sundays, monthly on every 1st Sunday, or yearly on this date. [User Story #1]

3. She left "one-time" selected and typed "finish revising paper" into the text box and tapped Save. [User Story #1]
4. There is a little v-type symbol that suggests a dropdown. She tapped it. It showed a list of options, it looked like different views: Today, Tomorrow, Pending, and Recurring. Ah. She selected Tomorrow. It looked just like a Success List, but it said "Tomorrow, Weds 2/23" at the top. She tapped the +, and, and got a menu just like the above, but for Tomorrow. [User Story #4] [User Story #8]
5. She entered "Turn in paper" and tapped Save.
6. She tapped the "v" again and selected Pending. Another empty list, titled "Pending". [User Story #5]
7. She tapped the + and entered "Research plane tickets" and tapped Save. She did a long press (press-and-hold), and a menu popped up: Move to Today, Move to Tomorrow, Finish, Delete. [User Story #6]
8. She tapped the "v" again and selected Recurring. Another empty list, titled "Recurring". She tapped the +, but the popup was a little different than the ones for Today and Tomorrow, as shown below. [User Story #7] [User Story #2]
9. She selected the starting date as Sunday February 25th, entered "Put out trash" in the text box, and tapped the Save button. The upcoming goal was now shown in the Recurring view as "Take out trash, weekly on Sunday". [User Story #9]

Jessica becomes an expert Juggler

1. Start the app by tapping the app icon. You should see a mostly empty screen with "Sunday 2/3" at the top.
2. Tap the + button and a menu should pop up with options to for the goal to be one-time, daily, weekly on Sundays, monthly on every 1st Sunday, or yearly on this date. There are also circles at the top that allow her to label the goal with a context (Home, Work, School, Errands) [User Story #3]
3. She clicks the bar at the top and types in Caffe Calabria - coffee as the name of the goal when the keyboard pops up. When she taps the E circle and then clicks save, a green circle shows up next to the new goal "Caffe Calabria - coffee". [User Story #3]
4. Then she added a Home goal for cooking dinner, a School goal for completing a draft of her paper, and another Home goal for cleaning out the boxes of papers from the dining room. They are grouped by Context, in the order Home, Work, School, and Errands, not in the order she had created them. [User Story #4]
5. When she clicks on the hamburger menu icon, a focus mode menu appears which lets her choose a context mode. There is also a cancel button that allows her to exit focus mode. She chooses the school focus mode and the view now shows the one school labeled goal that she created. [User Story #4]

- Population of GitHub Project with the above [6%]

Github Projects Link [6%]

<https://github.com/orgs/CSE-110-Winter-2024/projects/202>

- **Complete Participation Survey (assigned per individual) [1%] (separate submission)**