CSE 110 TEAM 23: LE GROUP

Project Pitch: Work Journal 2024

PROBLEM & SOLUTION

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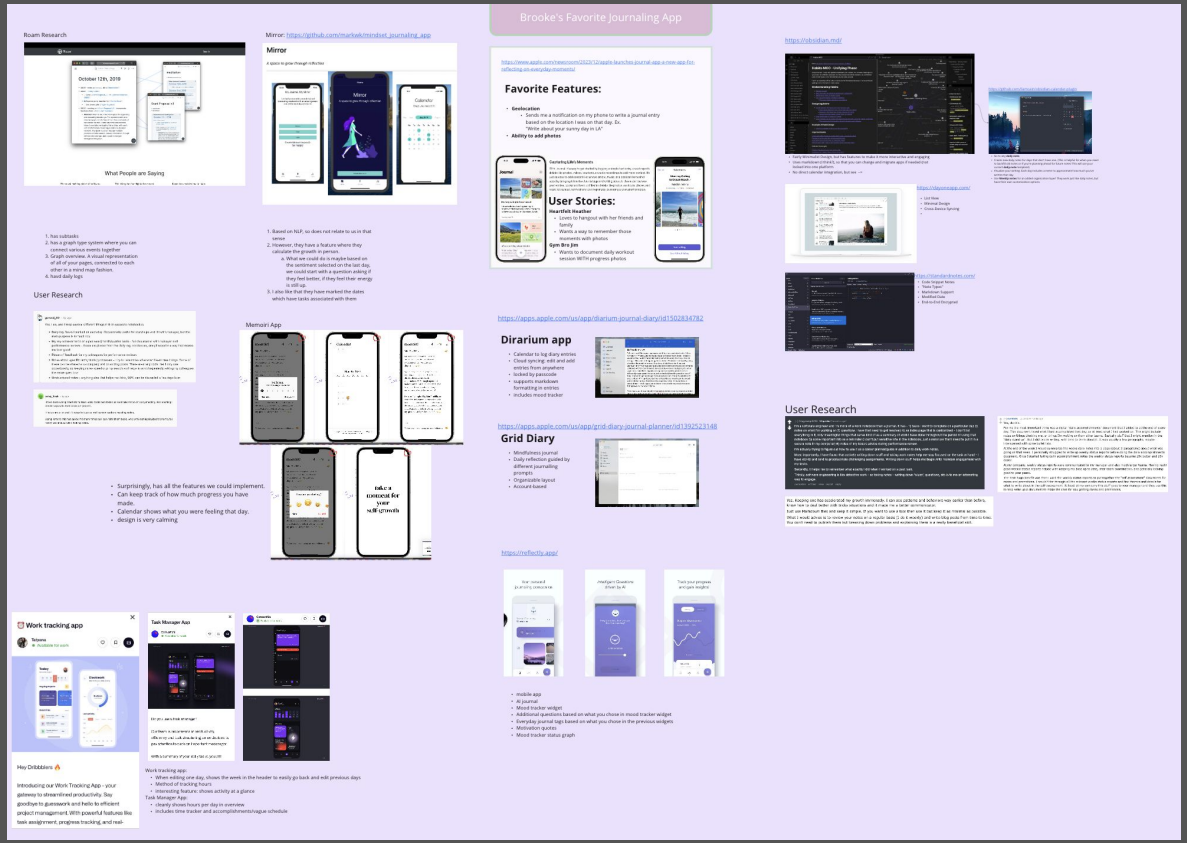
PROBLEM

Developers often struggle with keeping track of their personal workflow, and find it difficult to recall all their accomplishments when communicating with higher-ups

SOLUTION

A streamlined, minimalistic work journal made by and for developers to keep track of daily work and accomplishments over time

Market Research



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Developer Dave

Demographics:

Age: 25
Occupation: Software developer
Location: Seattle, Washington
Pronouns: he/him

Background:

Dave is a novice and ambitious software developer. He has hard deadlines that he has to meet and wants to keep working on side projects he is passionate about. Dave is very organised.

Wants:

- To be able to see his weekly/monthly progress at a glance.
- A way to keep track of his productivity on his ongoing personal projects.
- A tool to help him allocate time for different tasks.

Challenges:

- With everything he wants to do, Dave sometimes struggles with time management.
- Dave is struggling to maintain a good work-life balance.

Possible Solution:

Dave could benefit from a tool that combines task and time tracking features with a weekly and monthly achievements list.

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Tech-enthusiast Tina

Demographics:

Age: 33
Occupation: Tech Blogger and Freelance Developer
Location: San Diego, California
Pronouns: she/her

Background:

Tina, after working as a software developer for 5 years, switched careers to become a tech blogger and freelancer. Tina works on different projects from different clients, which she sometimes gets by writing about their products.

Wants:

- To track all her different projects and blogs on tech separately.
- To collect all her resources and other opinions to promote continuous learning.
- To be reminded everyday to log in her progress.

Challenges:

- As a freelancer, Tina's days are long and she forgets to log off on some days.
- Tina occasionally faces moments of self-doubt as left her secure job to pursue this

Possible Solution:

Tina could benefit from a tool that reminds her to log in her progress everyday and where she can take notes for her blogs and other resources. An additional feature that might help her would be to be able to keep track of all her projects separately.

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Student Sarah

Demographics:

Age: 20
Occution: Computer Science Student
Location: San Diego, California
Pronouns: she/her/they

Background:

Sarah is a sophomore and is passionate about exploring various aspects of computer science. To build her resume, she has taken up some projects on top her classes. She also likes to engage with various communities to enhance her skills and broaden her knowledge.

Wants:

- To keep track of all her assignments and deadlines.
- To track her projects in her ongoing research and application-based project.
- To have a extended resume of all the big tasks I've accomplished for job applications.

Challenges:

- Sarah often struggles to prioritize tasks and manage her time effectively,
- She is unsure about what to do to stand out from her peers on job applications.

Possible Solution:

Sarah could benefit from a tool that helps her track assignments, deadlines and projects while providing s space for her to keep track of her accomplishments for her resume.

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Experienced Evan

Demographics:

Age: 51
Occution: Senior Software developer and Manager
Location: Austin, Texas
Pronouns: he/him

Background:

Evan is a highly experienced software engineer with almost three decades of experience in the tech industry. He is respected among his peers for his technical expertise, problem-solving skills, and mentorship to junior developers in his team.

Wants:

- To keep track of the progress of the members in his team.
- To take note of interesting things to share with his team.
- To log all his goals for an ongoing project.

Challenges:

- Evan finds the influence of social media trends on his work hard to understand.
- With his position as a manager, he finds it hard to keep track of his personal goals.

Possible Solution:

Evan could find a tool that allows him to track his team's progress and take notes on important resources helpful. Additionally, a tool that simplifies goal-setting so that he can manage his personal goals apart from his responsibilities as a manager.

USER STORIES

As a security professional, I want to make sure my work is secure and private.	As someone who is going up for promotion, I want to be able to view all of my work over the past quarter in one place.	As a developer, I want something that I can easily access for daily standup meetings.	As a designer, I want to be able to include images and other snippets in my entries.
As someone thinking about switching jobs, I want to have some "extended resume" of all the big tasks I've accomplished.	As someone who is serious at gaming, I want a journal where I could note down what I learned from a game every time I play.	As a developer I want to organize my journal by project, and have different tabs for easy access.	As a creative developer I want to be able to customize the look/layout of the journal for each project to match the creative energy.
As someone who wouldn't know what to write down, I want something that provides examples or ideas of things to write about.	As a forgetful person, I want something that will remind me to log my work every day so that I won't lose the habit.	As a developer I want to be able to include hyperlinks when conducting research for better organization.	As a developer I want a place to outline/list my personal goals for the project.

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Risks and Rabbit Holes

As seen in multiple of our user stories, it is helpful for our work journal to synthesize important information that can easily be presented to managers or added to a resume. While this is a practical use case, we will stay away from becoming too focused on managers' needs, since this product's target users are developers looking for a way to log their daily progress.

We have defined several features that we have labeled as crucial for the project as well as several others that are optional, ranked by importance and ease of implementation. If we have extra time, we will implement the optional features starting at the easiest/most important features and moving down. This approach will help us confine our project to the necessary time constraints, mitigating risk, while giving options for improvement if we have enough time.

BRAINSTORMING

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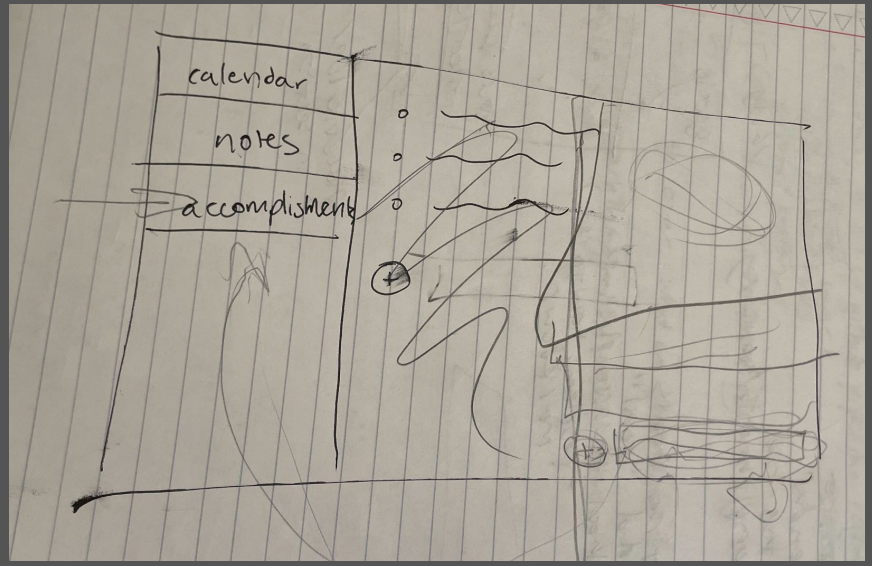
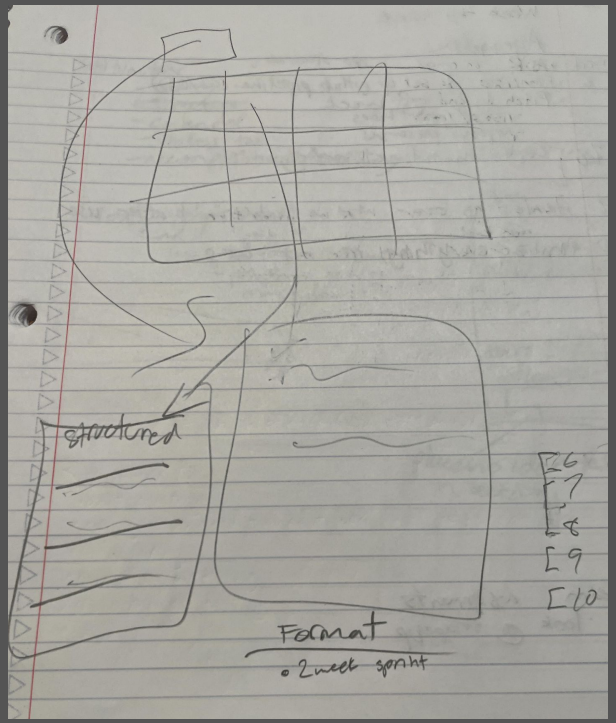


Features
- calendar widget to access days and log hours
- notes tab - like "Grid Diary"
  - folders optional
- structure in daily Note:
  - todo list for tasks & goals
  - hours worked
  - reflection
  - optional: highlight
- Accessibility
  - keyboard accessible → done if HTML does right
  - translation?
  - screen readers
  - different sized screens
  - dark mode (optional)

During our brainstorming sessions, we first decided what functionality we wanted from our application, based off of our user personas and user stories. We then noted down important features that will achieve that functionality, and made rough sketches to figure out the general layout of the application.



Scope + Features

We will focus on a *local* web app design including the following features:

- Daily note with fixed structure (Tasks done, hours worked, reflection, big accomplishments)
- Calendar with clickable days that bring you to daily note for that day
- General notes tab that acts as a folder of several markdown documents the user creates

If we have extra time, we may implement the following features in order:

- Accomplishments tab that lists all accomplishments in a time frame (month, week?)
    - These can also be added through the accomplishments tab but are automatically populated through the daily notes accomplishments section
    - It may also contain total hours worked for that time period
- "Today" tab in navbar that takes you to today's daily note
- Option to add a password to open the journal (security)
- Optional reminders to log notes for the day
- Ability to export notes as markdown files
- Wrap app with something like Electron to make it a mobile app
- Ability to customize/add section headers in daily notes
- Streaks
- Work log sharing

Technology List

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To create our project, we will use the following technologies:

- HTML
- CSS
- JS
- Prettier (for formatting code)

We are also still considering the use of the following technologies

- Some Linter
  - This would be for checking code against in CI/CD pipeline
- Electron or some other wrapper
  - We would only use this if we get to the optional feature of making our site available as an app for a desktop/mobile format.

Fat Marker Sketch

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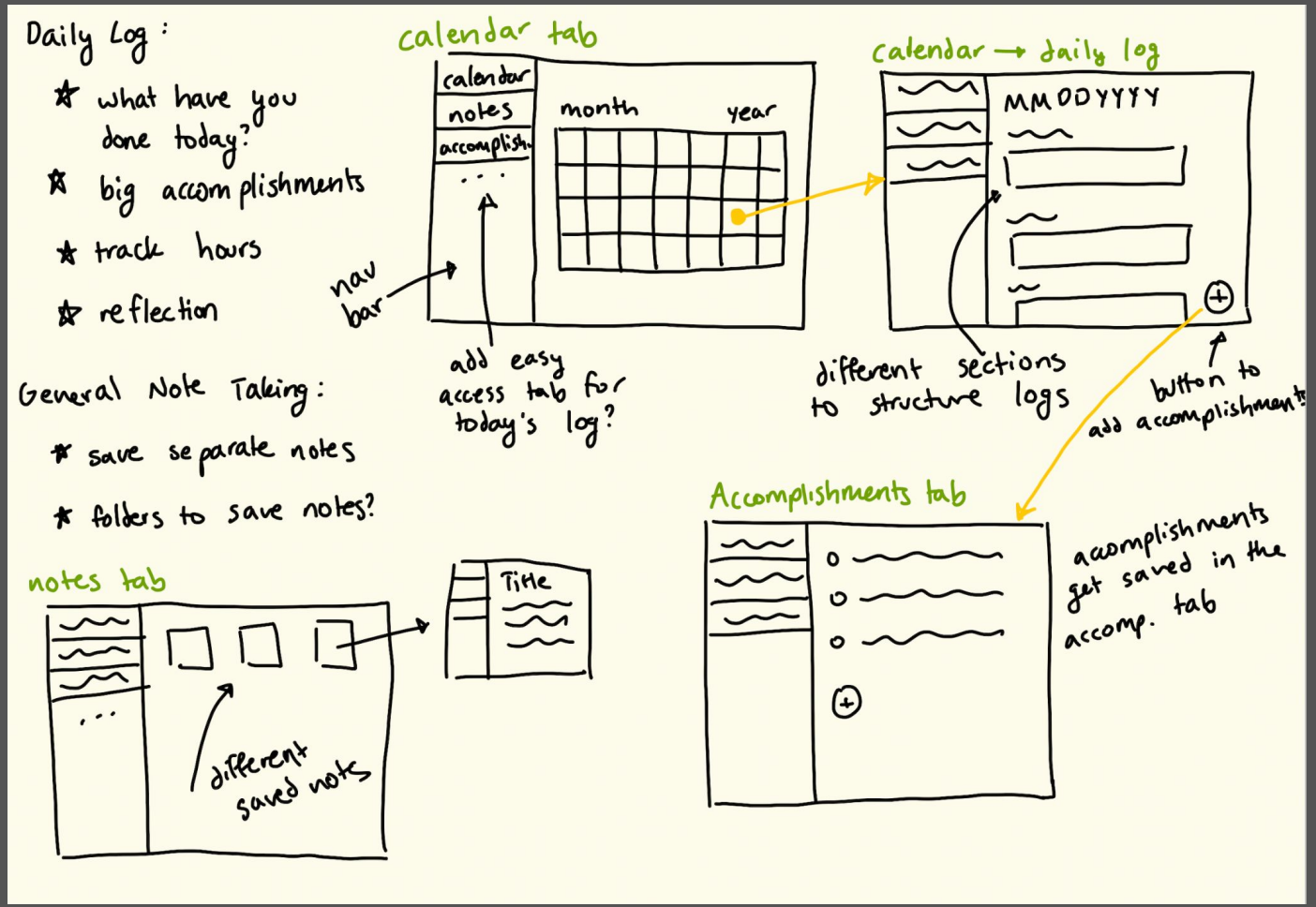

General Timeline by Week

6

DESIGN + SET UP PIPELINES

Finalize layout, CI/CD pipeline, internal documentation

7-8

TWO WEEK SPRINT

Work on developing core functionality with all crucial features, write tests

9

ADDITIONAL FEATURES

Work on developing any additional features, write tests for them

10

REVIEW + REFLECT

Final tests, wrap up sprint and hold retrospective

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