\${DevDiary}

Introducing Every Developer's Dream Journal CSE 110 SP24 Group 18

Introducing \${DevDiary}

\${DevDiary} is a modern developer journaling software created by programmers, for programmers.

\${DevDiary} aims to give developers:

- An easy, efficient way to write and store any notes they wish to save throughout the development process.
- An efficient tool crafted especially for teams, giving organizations the ability to track the various steps they take during their development processes, collaborate with other team members, and the ability to track their finances through a unique budgeting feature.

Purpose and Main Selling Point

- \${DevDiary} is more than just a journal; it's a comprehensive tool designed to enhance teamwork, streamline project management, and empower developers to achieve their goals efficiently.
- Collaboration
 - Our platform distinguishes itself by recognizing the collaborative nature of software development. Unlike standalone journals, our platform prioritizes teamwork by allowing developers to join teams and work together.
 - By centralizing project updates and allowing for effortless collaboration we hope to foster a sense of transparency, community, cohesion, and engagement at every stage of the development process.
- Budgeting and Financing
 - It goes beyond traditional journaling by offering project budgeting features. Developers can
 easily track project expenses and manage budgets within the same platform, streamlining their
 workflow and allowing them to make more financially informed decisions.

Target Audience

• The target audience for our journal is mainly programmers and professionals who are trying to streamline the overall process of software development

David Garcia, Software Engineer

As a software engineer constantly working in teams of 8-10 people, he wants DevDiary to:

- Create and share notes with other colleagues to allow real-time collaboration
- Record all potential expenses of a particular project
- Have a simple interface to find all notes/projects easily

 \dots so that David can streamline communication and resources effectively.

Lisa Wilson, Freelancer Developer

As a freelancer developer working with multiple clients, she wants DevDiary to have:

- Centralized communication platform
- A list of projects organized logically, along with their expenses/budget
- An interface that provides a clear and intuitive option for accessing projects

... so that Lisa can streamline project management and ensure timely delivery of her work.

Requirements

- User-Friendly Interface
 - \${DevDiary} will have an intuitive interface, making it easy for developers to use without a significant learning curve
- Multimedia Support
 - o Supports various types of media, such as text, images, videos, and audio recordings
- Collaboration Features
 - Allows multiple software engineers to be able to add entries, comment on updates and be able to coordinate effectively
- Privacy and Security
 - Effective implementation of security measures to protect sensitive information and ensure only authorized users have access to \${DevDiary}
- Customization Options
 - Allow developers to be able to tailor the appearance and the structure to suit their needs for their specific project.

Tech Stack

Local SQLite Database:

Local database to save all user information and files

HTML, CSS, JS:

We will use a combination of HTML, CSS, and JS to create the frontend and general visual polish for the application. i.e. animations, button hovers, etc.

sql.js:

This is a library that we can use to easily perform calls to our local SQL database.

(Later Consideration) electron.js:

This is a library we can use to make our app native and have easier offline access, etc.

Features

- Optimization for both personal and team journaling
- Option to join a 'team' or a 'project' and work in a collaborative setting
- Integrated accounting system that helps teams track their project budget in real-time
 - Users are given the option to set their total project budget before adding specific, detailed expense reports that automatically update the total remaining budget
- Options for efficient organization of quick notes and journal entries
 - o Tags, and filter options available for sorting items
- Integrated task list that allows users to track what tasks they have completed and what they still need to finish
- Support across all your devices (PC, iPhone, iPad, Android, etc)

Development Process

- We have decided to split our development process into 3 phases
- Phase 1:
 - Focuses on all the basic features
- Phase 2:
 - Focuses on collaboration and allowing people to work in group projects
- Phase 3:
 - Adds all the budgeting-related features

Phase 1

- Process of developing
 - Trial/error
- Sectioning based on idea/project/frame work etc
 - Daily journaling
 - Insert images
 - Text styling (B, I, U, font size, codeblocks, etc)
 - Rendering
 - Organization system for all notes
 - User login/signup

Phase 2

- Collaboration: Join groups/projects

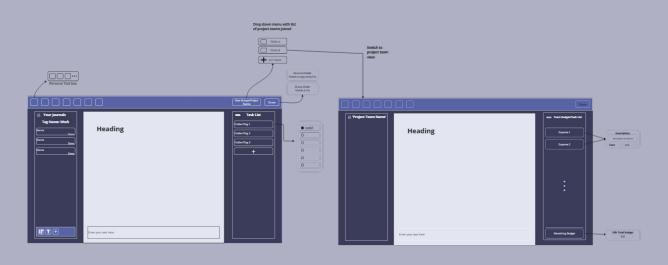
 Theme
 customization
 - Phase 3 (group personalization)
- Budget App for Project Teams
 Allocate budget to
 subteams/specific features/etc
 Expenditure per month on a
 specific database or something
 Group chat log/announcements



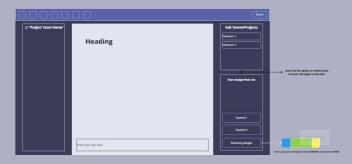


Wireframe - Login Screen/Signup





Wireframe (Main App)



Wireframe - Main App

The minimum required features we identified for this app were:

- Daily personal journaling
- Styling text (top left corner, with 'bolding', 'italics', 'font-size', etc)
- Rendering media
- Organization system: We included these by having a 'Personal' mode which allows for personal journaling (on the left), as opposed to 'Team' mode which allows for collaboration and budgeting.
 - The right bar acts as folders or 'tags' where journals are grouped under, and clicking one pulls up the journals on the left.

Wireframe - Mobile



Wireframe - Mobile

- We agreed that the journaling part of the app would take up the entire phone screen, so we opted for a navigation menu instead of side menus.
- The navigation button switches the main screen for the folder directory which allows users to switch between journals.
- The text styling options are moved to the bottom, and the budgeting option is a button on the bottom right. This allows the user to perform all of the same functions as on desktop.

Risks and Rabbit Holes

Data Security

 Storing sensitive project information and budget details on the platform may raise concerns about data security. Hence, we need to ensure that we build a secure system without any data breaches.

Technical Issues

 Developing a collaborative journaling platform with real-time collaboration features can pose technical challenges. Ensuring scalability and performance while handling several user interactions can be complex.

Future integration

 Integrating \${DevDiary} with existing development tools like IDEs and other apps like Slack or Notion requires careful planning and execution.

\${Thank You}