SlugQuest

Release Plan CSE115A, Winter 2024

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Product Vision:

A gamified to-do list web app with collaborative features

All Possible Features:

- Task Organization:
 - Basic to do list functionality: users can create tasks
 - Daily/weekly/monthly
 - Schedule a task (time and day) or a to do task (more flexible due by a certain day)
 - o Calendar view: drag and drop tasks
 - Repeat tasks MWF or custom repeats and other calendar functionalities

Gamification

- Users earn points for completing tasks
 - Tasks completed damage the boss or give you more stats to do more damage
 - Skipping tasks could mean losing stats/health
- Can search for and add friends.
 - Leaderboard to compete with friends: complete most tasks, have the longest streak, etc.
- Reach: Like the name suggests, it would be cool to have some sort of long running quest that users can work towards by completing daily tasks

Collaboration

- Users can create shared task lists if there's something they need to work with friends for
- Visibility for tasks: public, private, friends only
- Use-case: friends to work together and motivate each other, not professional teams
- Reach: gamification ideas for groups

- Forming guilds: depending on how many people in the group complete their assigned task you are either penalized or get a bonus.
 - Individual rewards still happen to slightly outweigh negative
- Play against each other; do tasks to earn points to do damage to opponents or heal teammates / streaks can also count for extra points
- Customizable Avatars:
 - Users can personalize their avatars based on points they earned
 - Shop for customization options for profiles: currency in the form of points earned from tasks completed
- Notifications
 - Notify users for upcoming tasks/achievements unlocked
- Calendar Integration
 - Allow syncing with Gcal (<u>link to API</u>), iosCal
- Statistics display
 - Display streaks and productivity trends
 - Metrics to show: %tasks abandoned/not completed
 - Most productive days and least productive days
 - Trends: tasks assigned and completed each day

User Stories:

- As a busy college student, I want a way to track and organize my tasks so that I stay on top of my course schedule (5)
- As a team member, I want to easily collaborate with my team on our project so that we can easily divide responsibilities and stay on track for deadlines. (8)
- As a forgetful person, I want reminders and notifications about my upcoming tasks so I do not miss any deadlines (2)
- As a lazy person, I want a way to treat completing my tasks like a game, so that I stay motivated and also have fun (5)
- As a lazy person, I want to get motivation to complete my daily chores and habits so that I can be more productive (2)
- As a social person, I want to be to collaborate with and play games with my friends so that I can stay in touch with them (8)
- As a Google Calendar user, I want to be able to integrate my tasks from/to GCal so that i am up to date on all my task tracking platforms (2)
- As a forgetful but statistically driven person, I want to know how often I actually achieve my daily/weekly/monthly tasks (3)

- As a user, I want my todos and tasks all organized and integrated between sites. (5)
- As a social person, I want to be able to search for and add friends so I can work with them to be productive. (5)
- As a user, I want to be able to securely login without cybersecurity concerns or leaked information. (5)
- As a creative person, I want to be able to personalize my profile/avatar so that the platform is more visually appealing to me (8)
- As a statistically driven person, I want to track my task history and productivity trends so that I have more insight into my workflow and know what I need to work on. (10)

Tentative Sprint Plan:

Sprint 1: basic functionality

Goals: schema design, barebones to-do list for a single user, user account creation/logins

Technical Setup:

- Set up frameworks and environments
- Design and implement database schema for single user tasks and user account creating
- Front end for single user to-do list task creation
- Backend for task creation
- User registration and login functionality
- Sync between frontend and backend

Spikes:

- Learn Javascript + Node.js, Svelte, Golang
- Learn how to organize and deploy a web application

User Stories:

- As a busy college student, I want a way to track and organize my tasks so that I stay on top of my course schedule
- As a lazy person, I want to get motivation to complete my daily chores and habits so that I can be a functioning person

Sprint 2: gamification

Goals: introducing gamification mechanisms **Spikes**:

- Continue exploring learned frameworks

User Stories:

- As a lazy person, I want a way to treat completing my tasks like a game, so that I stay motivated and also have fun
- As a lazy person, I want to get motivation to complete my daily chores and habits so that I can be more productive
- As a social person, I want to be to collaborate with and play games with my friends so that I can stay in touch with them

Sprint 3: social features

Goals: introducing collaboration with other users **Spikes**:

Look into options for persistent hosting of site

User Stories:

- As a team member, I want to easily collaborate with my team on our project so that we can easily divide responsibilities and stay on track for deadlines.
- As a social person, I want to be to collaborate with and play games with my friends so that I can stay in touch with them

Sprint 4: Feature expansion like statistics, notifications, etc

Goals: add integrations, notifications, and other additional features **Spikes**:

- N/A

User Stories:

- As a user, I want further insight and information on my levels of productivity and how I can improve it.
- As a user, I want my todos and tasks all organized and integrated between sites.
- As a forgetful person, I want reminders and notifications so that I remember to do my upcoming tasks and don't miss any deadlines.

Tech Stack:

Backend

- o Go
- o SQLite
- Frontend
 - o SveleteKit
 - o Javascript + Node.js
- Deployment
 - o Server: AWS or Heroku
 - o App: Vercel