Release Plan

Product Name: MoCode

Team Name: MoCoders

Release Name: MoCode V1

Release Date: March 12, 2024

Revision Number: 2

Revision Date: March 12, 2024

High-Level Goal

The high-level goal of this project is to develop a comprehensive web app that utilizes spaced repetition to provide personalized LeetCode question recommendations. By integrating with the LeetCode API, the app aims to offer a dynamic and data-driven approach to coding practice, focusing on improving users' proficiency in targeted areas and overall problem-solving skills. Ultimately, this project seeks to become an essential tool for coders of all levels seeking to enhance their coding abilities efficiently and effectively.

User Stories

Sprint 1:

Overall Goal For This Sprint:

The high-level goal of *Sprint 1* is to create and develop a simple user interface that enables users to see and engage with suggested technical LeetCode questions. This step includes exploring potential tools for the front-end and back-end development of our application, as well as initiating the construction of our platform. This initial Sprint aims to establish a fundamental version of the app, omitting more complex functionalities.

- 1.1: As a first-time user, I want to access an app where I can see a list of recommended LeetCode questions, so I can quickly start practicing without any confusion. [10 pts] (8 hours)
- 1.2: As a returning user, I need the ability to view my previously attempted questions and receive new recommendations, so I can continue my practice seamlessly. [5 pts] (8 hours)

- 1.3: As a job seeker, I want the app to focus on topics and questions that are commonly found in technical interviews, so I can be better prepared for my job interviews. [2 pts] (5 hours)
- 1.4: As a user, I want an app that is easy to access with a user-friendly interface. [10 pts] (3 hours)

Sprint 2:

Overall Goal For This Sprint:

The high-level goal of *Sprint 2* is to build up from the barebones of the previous Sprint. Integrate a suggestion algorithm and work with user statistics. We will build our user interface and build the foundational features of our project. We want to create our data layout and start working with our web scraper to get problems.

- [2.1] As a returning user, I want to have access to questions that are recommended to me based on my progress on past questions. (8 pts) [20 hrs]
- [2.2] As a user who wants to enter contests, I want problems that would help me achieve that goal. (8 pts) [10 hrs]
- [2.3] As a user who struggles with consistency, I want to solve problems of progressive difficulty because I want to build momentum to practice regularly. (10 pts) [10 hrs]

Sprint 3:

Overall Goal For This Sprint:

The high-level goal of *Sprint 3* is to continue work from the previous Sprint. Refine the main features of the app such as the implementation of the suggestion algorithm and the display of user statistics. We want to have an emphasis on working on the algorithm for this Sprint while also trying to work on minor UI/UX details. Improve the app based on reflection, focusing on performance and usability enhancements.

- 3.1: As a user, I want an app that has diverse accessibility features that allow me to swiftly navigate the app. (5 pts) [8 hours]
- 3.2: As a returning user, I want more questions recommended to me that are similar to other questions that I've done because I want to practice the concepts I'm learning. (12 pts) [10 hours]
- 3.3: As a user, I would like to see my progress and statistics to check improvement over time. (8 pts) [8 hours]

Sprint 4:

Overall Goal For This Sprint:

The high-level goal of *Sprint 4* is to continue work from the previous Sprint. Finalize the app with comprehensive testing, bug fixes, and incorporating last-minute features. We want to integrate our calendar since this was a last-minute addition. We also want to find and integrate a new Leetcode API since as of March 6, 2024, the one we have been using stopped working.

- 4.1: As a user, I want an app that has diverse accessibility features that allow me to swiftly navigate the app. (5 pts) [8 hours]
- 4.2: As a user, I would like to see my progress and statistics to check improvement over time. (8 pts) [8 hours]
- 4.3: As a beta tester, I want some sort of documentation so I can explore this new platform. (5 pts) [5 hours]

Definition of Done

The task or feature must be demoed to the team during our regular SCRUM meetings for the user story to be considered Done.

Sanity Check

This plan is within the team's capacity and we strongly believe that the work is doable. Adding up our user stories, we feel that it is doable. We believe that the work distribution between sprints allows space for error in case we underestimate how long it would take to implement our key features. All team members have midterms during either sprint two or sprint three, which can end up being a possible obstacle.

Product Backlog

A. Core Features

- User Authentication System
- LeetCode API Integration
- Spaced Repetition Algorithm
- Progress Tracking

B. User Interface and Experience

- Responsive Web Design
- User Dashboard
- Accessibility Features

C. Performance and Security

- Load Testing
- Protect User Data and Privacy.