

4156 Preliminary Project Proposal

Group WLTT

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1 Abstract

Overall, in our project, we will use MySQL as the database, Python Flask as the backend framework and nw.js as our frontend interaction which allows us to call all modules from node.js directly from DOM. We will also use pdf.js to generate pdf preview while taking note and some other public js code that supports other functionalities such as simultaneously scrolling. Also, after finishing the implementation, we will also use nw.js to wrap up our application and turn it into the cross-platform software support Windows, Linux as well as MacOS.

2 Project Description

The project that our team is going to purpose is a note-taking app with markdown support. Nowadays, as more and more people tend to use technology products to take notes to avoid the loss of notes, the need for a user-friendly note-taking app is high. Markdown is a simple yet efficient way to add formatting to make notes easier to read. Here, our group will provide users with a pc-based software that satisfy users' need. What makes a good note-taking app? First, we want to provide users with a simple way to edit and organize notes. Markdown is a good choice for an efficient yet not too overwhelming text formatting. Therefore, our application will support markdown syntax for users to generate the well-organized note. Further, during the editing, users should be able to preview to notes they taken with parsed markdown. Our application will also provide users an interface to export their notes as PDF files so that they can share and print notes. Second, the notes can be saved and retrieved easily every time the user opens the software. In our project, we plan to use a relational database to store notes created before. Notes can be stored and retrieved locally without interacting with a remote server by using SQLite. To support note retrieval in other devices, notes are also stored in the backend MySQL database and can be located with the associated user.

We will prioritize main functionalities for our application and develop it in an iterative

approach. For the first iteration, we will focus on simple markdown support and local note storage and retrieval.

3 User Stories

3.1

As a note taker, I want to add common markdown formatting to my notes so that I can organize it to be more readable. My conditions of satisfaction are:

- I can set different sizes of characters.
- I can mark characters as bold, or italic.
- I can change the colors of characters.
- I can create numbered and bulleted lists.

3.2

As a note taker, I want to preview the note in real-time so that I can better understand whether the note is correctly taken. My conditions of satisfaction are: I can see two windows, one shows the plain note I typed, the other one shows the note with parsed markdown formatting.

- The text shows in the original format should be synchronized with the parsed version.
- When I scroll the parsed window, the original note will scroll as well.
- When I scroll the original note, the parsed note will change correspondingly.
- When I add new text in the original note, the parsed window will show my edit within a few seconds.
- When I delete characters in the original note, the corresponding characters and/ or formatting will be eliminated in the parsed note with a few seconds.

3.3

As a note taker, I want to save my notes in the application so that I can read it afterward. My conditions of satisfaction are:

- All the contents of my note should be preserved.
- All the formatting in the note should be preserved.

- The metadata of my notes, such as the title, time of creation/editing should be preserved.
- The updates I made in the retrieved note should be saved as well.