

## **Introduction:**

Our client operates in the field of personal knowledge management. Their mission is to bring in some paradigm shifts by adopting an approach similar to managing code. With this overarching goal, they sought to create a tool that combined the features of accessibility and ease-of-use in information management, something found in VS Code which is a popular code editor.

We embraced this challenge and executed a seamless implementation of a note-taking VS Code extension. It streamlines information retrieval, effortlessly scaling from a few notes to a vast repository of knowledge. Essentially serving as an Integrated Development Environment (IDE) for user documents, it addresses the perennial challenge of efficiently accessing abundant information when needed.

The core objective of this project was to apply the successful principles of managing complex software projects through IDEs to the realm of general knowledge management. By establishing a consistent document structure across thousands of files, the extension enables users to access information seamlessly; transforming the way knowledge is managed and retrieved. With this ambitious endeavor, our client aspired to bridge the gap between managing code and managing information, empowering users with a powerful tool to enhance their knowledge management capabilities.

## **Client Details:**

Name: Confidential | Industry: Software | Location: USA

## **Technologies:**

Typescript, ReactJS, Redux, Next.js, Node.js.



## **Solution Overview:**

Note-taking tools struggle with retrieving notes as the knowledge base surpasses a threshold (typically around 10,000 notes), hindering their effectiveness. Another major drawback in these tools is unavailability of developer-friendly features like seamless refactoring, moving, and renaming of notes and their references across the workspace.

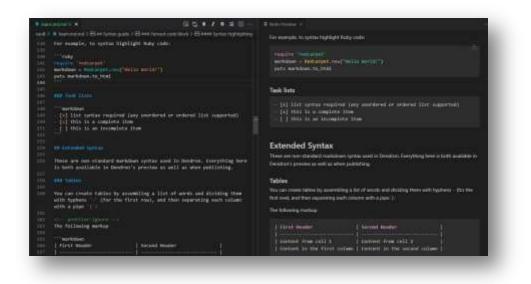
Understanding the specific requirements of the client we undertook the development of a powerful extension, incorporating the following essential features:

- **Navigating a vast knowledge base:** To address this issue, a solution has been devised using VS Code webviews to create a graph view. This new feature facilitates smooth navigation through the extensive knowledge base, enabling users to explore, traverse, and filter the workspace graph efficiently, ensuring targeted data display and enhanced note retrieval.
- Maintaining knowledge base consistency: Our developers have implemented schema writing, which empowers users to define hierarchical structures. This allows for more organized note creation, offering autocomplete hints and supporting the automatic application of common templates.
- Markdown and beyond: The extension offers rich formatting with Markdown, supports mermaid diagrams, allows math writing with KaTeX, and enables embedding notes in multiple locations.
- **Search:** A unified approach to swiftly locate and create notes, enabling rapid navigation and creation of new hierarchies.
- **Refactor:** Restructure your knowledge base seamlessly without breaking links, rename notes individually or perform arbitrary regex-based refactoring, and effortlessly rename and move sections within notes.
- **Publish**: Export knowledge base as a static (Next.js) site, locally search and globally share with generated links, and manage publishing permissions with fine-grained control on a per-vault, per-hierarchy, and per-note basis.

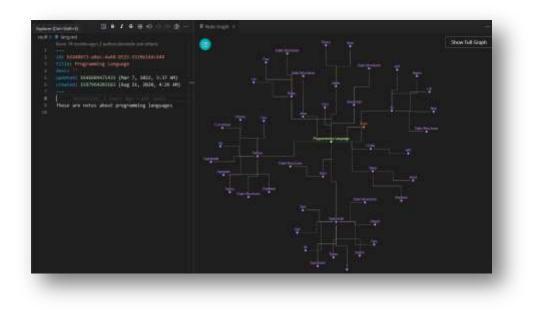


# **Screenshots**

#### Screenshot 1: Note Preview

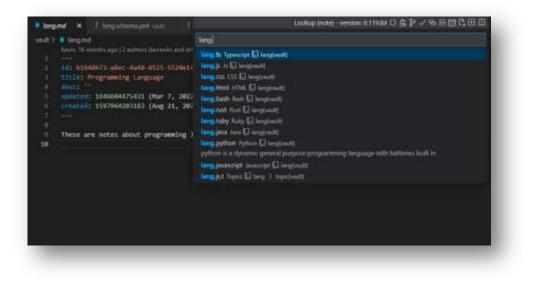


Screenshot 2: Graph View of notes

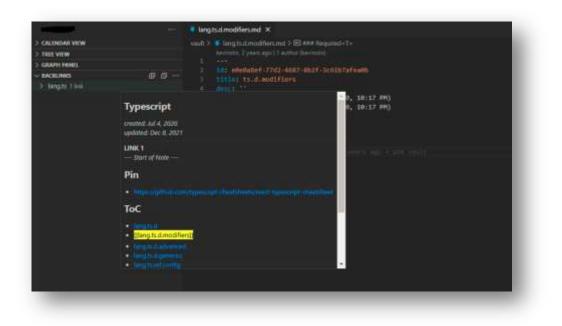




Screenshot 3: Search and autocomplete



Snapshot 4: Note references





## Conclusion

Our successful development of the note-taking VS Code plugin has empowered our client to effectively manage and write documents, enhancing productivity. It seamlessly facilitates note creation, knowledge transfer through publishing, and effortless note sharing.

For potential clients seeking similar VS Code extension development projects, we welcome you to reach out to our team. Let's discuss your requirements and create customized solutions to meet your extension needs. Contact us today to embark on your journey towards efficient VS Code extension development.