Project Description and Goals

Project Description

Project Imacs is a software application that provides users with a non-linear way of taking and organizing notes on their computer. Existing solutions for note management force users to organize their notes hierarchically making it difficult for users to truly organize their notes semantically.

Project Imacs take a different approach to note management: instead of restricting users to use files hierarchies, the user will be presented with a graph-like interface where they will be able to create, edit, move and perform other note management tasks without worrying about the underlying file structure. Removing the notion of file hierarchies allows for a more natural note management experience as it enables users to specify relationships between different notes.

Goals

1. Provide a non-linear means of file traversal along a hierarchical file system.

Current means of file traversal requires users to think linearly which does not allow users to fully organize their notes semantically. The system proposed will allow users the freedom to manage and produce cyclical or hierarchical relationships between files, categorize files, add or delete relationships between files, restructure categories of files and conduct other file management tasks quickly without worrying about the underlying structure of their data. This will enable users to put meaning behind their files in a way that is most natural to them.

2. Provide an intuitive user experience for note management.

Note management applications often provide the user with a myriad of state altering options that make it difficult for users to focus on completing tasks with a large collection of notes. Providing users with an intuitive user experience will empower users to spend more time creating and organizing notes instead of being bogged down by the limitations of the underlying operations.

3. Provide an interface to allow users to modify notes with textual and touch input.

Allowing users to edit notes with textual and touch input will provide users with a friendlier user experience: most computer-based notes are either typed or handwritten on a touch screen. Instead of having to download dedicated tools for note-taking, users can stay within one application. This allows users to save time because they do not need to search for new applications, and the system can also ensure that there are no compatibility issues with their notes if the user takes notes using the system's interface.

4. Allow users to search for files given non-linear search criteria.

Current note management applications only allow users to search linearly through the file hierarchy as they cannot extrapolate relationships between files from the file tree. By allowing users to search for files given non-linear search criteria (e.g. find all files relating to a topic), users can more naturally specify what kinds of files they want instead of being restricted to strict file name matching or text matching.

5. Automatically recommend relationships between files based on file content.

By automatically recommending relationships between files to the user based on file content, users may be able to discover hidden links between different files. This is especially helpful if the user takes a lot of notes and does not necessarily remember what is in every file. Potentially, the ability to infer relationships between files could also improve search results from goal #4.

6. Automatically recognize handwritten notes and convert it to plain text.

Currently, it is difficult for users to search the text in hand-written notes on the computer. By being able to recognize handwritten notes, and converting it to plain text, users will be able to search through all their notes instead of just textual ones. Moreover, by being able to convert handwritten notes to plain text, users with messy handwriting could potentially take messy hand-written notes and share organized plain text notes with others.

Conclusion

In conclusion, Project Imacs is a non-linear note management application that allows users to create and edit notes while building meaningful relationships between them. This application will provide users with the ability to easily build large mind maps that mimic natural human thought processes and organization.