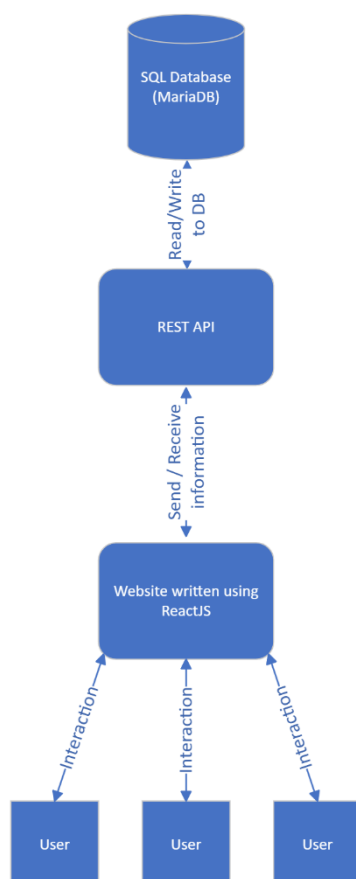# Concept for a Document Management System

Today, we often receive PDF documents in Emails, as downloads in web portals, or we create them ourselves by writing or scanning documents. It is often difficult to keep track of one's documents. People usually store and organize PDF files using folders in a filesystem, as one would in the real world using binders. However, finding documents can be tedious, especially when dealing with slow computers.

I aim to solve this problem by creating an easy-to-use web-based document management system that allows secure uploading and storage of PDF files. Users can add tags for organization and quickly search for files by name or tag.

To make the Website more visually pleasing, the PDF files can be presented in a grid view with little previews of the document as images. Upon clicking on a preview, the document will be shown in full with the option for the user to download it for further use.

Another helpful feature is the ability to share documents with other users. A document will always have an owner (the user who created/uploaded it) but will be viewable under the "shared documents" section of the Website if the owner shares it with the respective user.

Users benefit from a cloud-based solution with easy access to files from anywhere while minimizing the risk of data loss. Sharing PDF files securely over the Website provides a safer way to distribute documents. The system is ideal for office workers and can also be used for private purposes like storing contracts or bank statements.

The system will be built using an SQL Database and a Rest-API on the server side and using ReactJS and CSS for the front end. MariaDB suits this application well. PDF documents and image previews can be stored as BLOBs in the Database. The Rest-API Is used as an additional layer between the Database and the Website. While this project will not go too deep into the security of the system, the API would be a point to implement security checks and validation later on. ReactJS is a popular framework that can be used to build responsive and dynamic websites; in this context, it is chosen out of personal preference.