Operating Procedure Generator

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Description

This project is for helping employees at a company create procedures/documentation for different processes. In my experience, lack of documentation is a common problem for companies. This app creates an easy way to employees to create procedures, save them to a database, and easily access them. All in one convenient place!

Features

- Search, list, and view procedures - Users can search through the database to return a list of procedures based on their query, then click on the link to view the procedure.
- Create procedure - Using the text area users can create procedures by entering text and attaching images. Once they are done they can save to the database.
- Login - Users can log in with their account to access the app. If the user is an admin they have access to controls for creating, deleting, or editing other users.

Planning - User Stories

As a user, I want to push a submit button to return the results of my search query - This allows users to query the database so that they can save time by quickly finding procedures they need.

As a user, I want to attach an image to my document. - While text is fine, most people will get more use out of visual aids. Attaching images to a procedure makes it more usable for other people.

As an admin, I want to be able to create new user accounts - Admins can create new users to give employees access to the app.

Planning - Database

In the database there is a table for documents. This table stores the contents of the table as HTML for rendering later, saves the title of the document, and the author.

There is also a table for user accounts that saves their e-mail, name, and password. This table has a relationship with a Roles table that tells us whether the account is a user or admin.

Technology Stack

- Java
- Spring Boot
- Thymeleaf
- MySQL
- Javascript

Demo

What I Learned

- I learned how to implement Spring Security for setting up user and admin accounts. I was also able to restrict access to the app by requiring log on and restricted access to user controls to the admin.
- The app uses the Quill API for a text editor. This API allows the user to enter text and images and save to the database as HTML.
- Users can query the database for search results so I learned how to implement native SQL queries into my application using @Query annotation.

What's Next

- The next features I would like to implement would be allowing users to share procedures by printing them or exporting to PDF so that they have access to procedures locally or can send via email.
- I implemented basic bootstrap but the next step would be theming to improve the visual look of the app.
- I would like to implement time stamps to show when procedures are created or updated. Learning how to do this would require more research either in the documentation or online.