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# Description

Have you ever needed access to notes and reminders from anywhere, but worried about your ISP or phone company or some behemoth internet company from snooping on your private info?

Secret Note provides secure, cloud-based notekeeping. The app is small, lightweight, easy-to-use, and seamlessly uses state-of-the-art encryption to maintain your privacy.



#### **Features**

- Access your notes and information from anywhere
- High-end AES encryption to keep your info from prying eyes and the out of reach from Big Tech
- Responsive layouts make the app usable on desktop, mobile, and any other device
- Easy-to-use interface is straightforward and hides the complexities that users don't need to see



# Planning - User Stories

- Users can create and store notes
- Users can name their notes for ease of re-visiting
- Users are able to create an account with a valid email
- Users can change and reset their password
- Users are able to edit and delete stored notes



# Planning - Database

Model classes with repositories

- SecretNote
- User

These tables were joined in a One-To-Many and Many-To-One relationship to ensure all notes were related to the proper user.

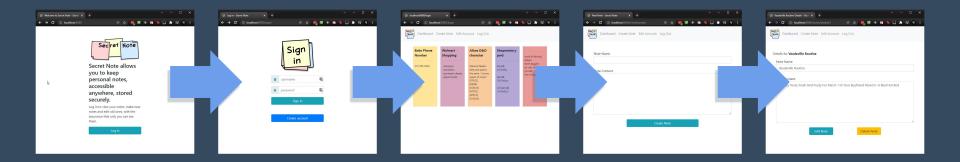


# **Technology Stack**

- Java
- Spring
- Thymeleaf
- MySQL
- JavaScript
- AES Encryption
- Bootstrap

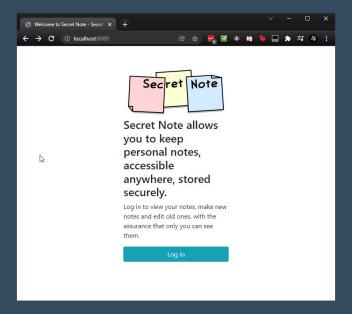


#### **Secret Note Demo**





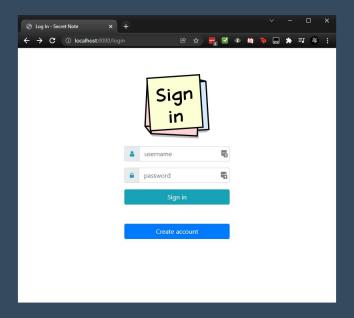
## Landing Page



Users' first introduction to Secret Note



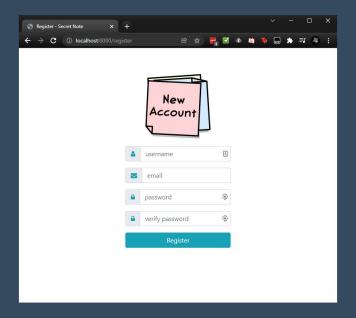
## Signing In



Options for existing users to sign in, and new users to sign up



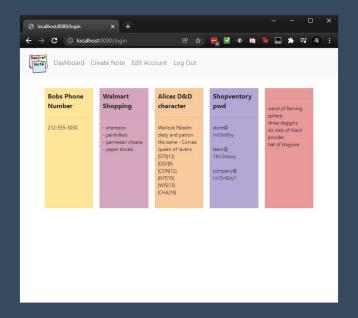
# Signing Up



New users can create their account here



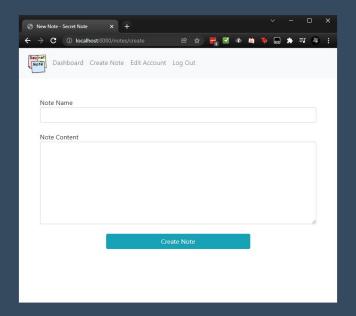
#### Dashboard



The central hub of the app. Shows users their notes, and provides options to edit, delete, and organize them.



### **Creating a New Note**



Notes are, by definition, simple, on the same scale as a tweet.

Notes are encrypted on the client side, in the user's browser.



# **End-to-end Encryption**

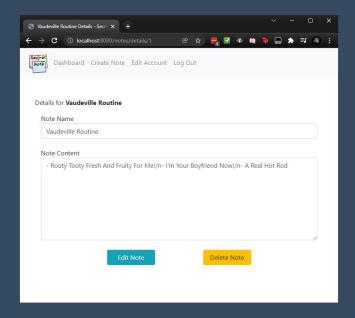
This is what makes Secret Note stand out from similar productivity apps, and grants it its name.

Open source AES encryption will be implemented in JavaScript, on the client end. This allows the app to encrypt the users' notes at every single step, not just in the database, but also in transit.

This prevents "middle-man" companies like ISPs and telcos, or Google or Apple, from invading user privacy.



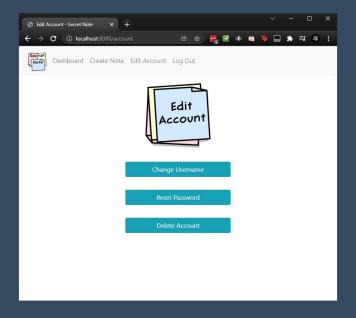
### **Editing a New Note**



Clicking on a note from the dashboard shows users this view. Users can change the contents of their note, or delete them.



### **Editing an Account**



This page, accessible from the navbar, gives basic account maintenance tools to users. Users can also delete their accounts, as a security option.



#### What I Learned

- Brad learned responsive design in Bootstrap, the ins-and-outs of DOM manipulation, and about using encryption in JavaScript.
- Caleb learned the database design process and how to decide what tables are needed and WHY rather than following a step-by-step guide
- Rania learned how to connect user interface with database, and create a nice and responsive design with the help of Bootstrap.
- Zach learned how difficulty design decisions can be, the differences between RequestParam and PathVariable, and making repository updates.



#### What's Next

- Adding ability to encrypt/decrypt notes for safe storage
- Dark mode button that saves your preference in the Database
- Markdown formatting for note contents
- Movable note tiles on the dashboard page for easy organization
- Folders for even **more** organization potential

