Short entity descriptions

User

The User entity contains the user's username, email, display name, and password. Essentially, the entity encapsulates user's information that is created on account creation. The User could encapsulate Settings, however we decided to simply have a reference to a settings entity, due to the duplicate relationship that documents have with settings.

Settings

The Settings entity contains display settings applied to the application. Users and Documents have relationships to settings. For Users, the Setting referenced is the default setting, and for Documents the Setting referenced is the document-specific setting that overrides the user's settings. So far settings consist only of theme and font-size, though this may change in the future.

Collection

The Collection entity contains 0 or more documents, and simply has a name attribute under which these documents are grouped. This may be renamed, since it has a special meaning in MongoDB.

Document

The Document entity contains the actual text and metadata the user creates and edits. This consists of the inner WYSIWYG text (html), the document title, and a timestamp for document creation. Documents can be owned directly by a user, or be owned by a collection owned by a user. This allows documents to be part of groups, or to exist standalone. This may be renamed, since it has a special meaning in MongoDB.

Short description of how each page/widget of your application uses the entities in the database

Workspace

Entities used: Document

Document

The WYSIWYG text will be loaded from the database and passed into the Quill text editor so that the user can view and edit it. The title of the document will be fetched from the database and displayed above the text editor. In the future we may incorporate as textview above the editor displaying the timestamp.

Settings page

Entities used: User, Settings

User

The Settings page also displays the User's specific data (email, display name, etc.) and is the page that allows them to potentially change those values. Currently, display name, email, and password can all be updated through the Settings page, which are all data pieces belonging to the User entity. The username data belonging to the User entity is currently not editable, and we are currently not looking to implement that functionality based on our design decisions.

Settings

The Settings page displays the default Settings entity values to the user. When the User changes a value belonging to the Settings entity on this page, it will be updated in the database and all future new documents will automatically be opened using those saved default configuration Settings.

Saved Docs page

Entities used: Collection, Document

Collection

The Saved Docs page displays a User's Collections, which thus contain the User's Documents. The name of each Collection is fetched from the database and displayed over each Collection. The User can click on a specific Collection in order to display its Documents.

Document

The Saved Docs page displays a User's Documents alongside a User's Collections. The Documents can be displayed alone or within a Collection. The current plan is to have the Document's name displayed over a miniature image of the Document itself. The miniature image of the Document itself will be generated using the Document's text, which is fetched from the database, just like the name of the Document.

Navbar

Entities used: User

User

The Navbar displays the User's display name, which is fetched from the database, on the right side of the bar. The Navbar is used on each of the 3 pages listed above.