

Program Components

There are three primary functions that our Wiki app must do: create new pages, edit existing pages, and serve created pages to users. In the future, admin functionality like the removal of pages, edit history, and Wiki accounts could be added but are not central to the concept of a Wiki.

Page Creation

This will be done with a form that allows users to choose a title (as long as it is not currently in use) and write a Wiki page in markdown. A markdown previewer may be included later, but is not necessary at this stage. We will use a module from online to convert user-inputted markdown to HTML (and ensure that it prevents XSS) and generate a page key based on the provided title (spaces will be replaced with underscores, etc.). This page key will be the ID that can be used to access and edit pages.

Page Editing and Viewing

As discussed above, the page ID will be used to access and edit pages. When a user goes to a page route, like “/page/dolphins”, the app will query the database for pages titled “dolphins,” returning the page if it exists and a 404 error if it does not. The same will occur for page editing, except a form similar to the page creation form will be returned if the page exists.

Database Organization

The database will consist of a single table, “pages”, which will contain all of the relevant information for each Wiki page. The table will have a column for the page ID, page title, and page body text. Future expansions could include an “edits” table, which would consist of a list of edits along with user IDs, page IDs, a brief description, and a timestamp (this would also necessitate a “users” table with user IDs, email addresses, and encrypted passwords).

Sitemap

- [/index](#): home page – includes every existing Wiki page
- [/new_page](#): new page creation form
- [/page/<id>](#): generic page path – a new route will be automatically accessible when a new page is created
- [/edit_page/<id>](#): generic page editing path – each existing page has a route that will edit that page

A link to the home page will be on each page. On the home page, links to the new page creation form as well as each existing Wiki page will be listed. On each Wiki page, a link to edit the page

will be accessible, as well as any links to other pages that page writers may have included. Future additions could include paths for user registration, account management, etc.

Task Breakdown

Minimum Viable Product

- Basic Routing Setup
- HTML Template Creation
- SQLite Database Setup

Future Additions

- Searchbar
- Logins
- Logging Edits