IUPUI Webmasters Hackathon - 2023
Full-Stack Project Documentation

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Project Name: LinkShelf

Introduction:

LinkShelf is a web application designed for users who want to keep track of important links they come across while surfing the internet. With LinkShelf, users can easily store links along with a title and a brief description, making it easy to recall the purpose and relevance of each link. The app simplifies the process of bookmarking and organizing links, providing a simple and efficient way to manage a vast amount of information. Whether you're a student, researcher, or simply someone who wants to keep track of important links, LinkShelf is an excellent tool that can help you efficiently manage your information and streamline your web browsing experience.

Technologies Used:

The front-end of the LinkShelf application is built using **React.js**, a popular JavaScript library for building user interfaces. For the back-end, **Supabase**, an open-source alternative to Firebase, is used to provide the necessary database services for the application.

Front-end Design:

The frontend of LinkShelf has been designed to provide users with a simple and intuitive interface for managing their links. The main component of the application is the LinkCard, which allows users to store links along with a title and a brief description.

The application consists of three main pages: the Home page, the Create page and the Update page. The Home page displays all the LinkCards. The Create page consists of a form which upon submitting allows users to create a new LinkCard. Likewise, the Update page also consists of a form which allows users to make changes to existing LinkCards.

Each LinkCard also includes two buttons, an Edit button, and a Delete button. The Edit button allows users to update the existing LinkCard, while the Delete button allows users to permanently delete the LinkCard they are no longer interested in.

Back-end Functionality:

LinkShelf uses Supabase to provide the necessary backend services for the application. A table called ‘links’ is created in Supabase to store the data of all the links (link title, link URL, and link description).

The Home page fetches each row from the ‘links’ table and presents it in the LinkCard format. The Create page has a form which takes link title, URL, and description as input from the user and when the user submits the form, the data is added to the table. Once the user clicks the submit button, they are directed to the Home page where they can see the newly added linkcard along with the existing ones.

The Edit button present on each LinkCard allows the users to update the existing LinkCard. When the Edit button is clicked, a new page is loaded which contains the ‘update’ form which is similar to the ‘create’ link form. The users can make the required changes and submit the form. Upon submitting, they are redirected back to the Home page and the changes made can be seen in the Home page as well as the ‘links’ table.

The Delete button on each LinkCard allows the users to permanently delete the LinkCard they are no longer interested in. When the Delete button is clicked, that particular LinkCard is deleted from the table and the respective changes are made to the Home page in real time.

Conclusion:

LinkShelf is a convenient and user-friendly web application that simplifies the process of storing and organizing important links. With its simple and intuitive interface, users can quickly add, edit, or delete links, making it an excellent tool for anyone looking to streamline their web browsing.