Devtalks Blog with News API Integration

Devtalks is a blog dedicated to the latest technology news and insights. In this assignment, we have enhanced the project by adding a new page called *News*. This page fetches the latest headlines using an external API (https://newsapi.org/v2/top-headlines?category=technology&apiKey=d013c6f8742141b580cfbe36a2a20c3c) and dynamically displays technology news articles. The content updates automatically, and users can navigate through the articles using state management features with "Next" and "Previous" buttons.

Additionally, for the blogs page, we continue to use Strapi, a headless CMS, to fetch and display blog posts, as implemented in Assignment 2.

1. **Serverless Function**

* We use a serverless function to fetch the latest technology headlines from an external API (newsapi.org). This function is written in JavaScript and makes an asynchronous request to the API.
* The fetched data is processed and passed to the news page template, where it is dynamically displayed in a carousel format.

1. **Asynchronous Programming**

* The axios library is used to make the API request to fetch the latest news articles.
* The function uses async/await syntax to handle asynchronous requests and ensures that the page does not block while waiting for the API response.

1. **Dynamic Content Handling**

* The articles fetched from the API are dynamically inserted into the page using Nunjucks templating ({% for article in news.articles %}).
* Each article includes a title, description, author, source, image (if available), and a link to the full article.
* The content updates automatically each time the page is loaded, fetching the most recent headlines.

1. **State Management (Navigation)**

* The page includes two buttons ("Next" and "Previous") to navigate through the carousel of articles.
* JavaScript handles the state of the carousel and updates the visible article when the user clicks on the navigation buttons.
* The state of the current slide is tracked by currentSlide, and the navigation buttons adjust the value accordingly to display the appropriate article.

1. **Integration with Strapi (Headless CMS)**

* The blogs page fetches data from Strapi (as implemented in Assignment 2), allowing the project to manage and display blog content dynamically from a headless CMS.

1. **Future Maintenance**

* **API Updates**: Ensure that the newsapi.org API key is up-to-date. If the API key expires, request a new key from the provider.
* **Carousel Improvements**: The carousel could be improved by adding smooth animations and responsiveness for better mobile user experience.
* **Error Handling**: Improve error handling by displaying a user-friendly message if the news API or Strapi is down.

This enhancement introduces dynamic content on the News page, demonstrating the use of serverless functions, asynchronous data fetching, state management for UI components, and the integration of a headless CMS for blog management. The project follows modern web development practices, providing a seamless experience for users to stay updated with the latest technology news.