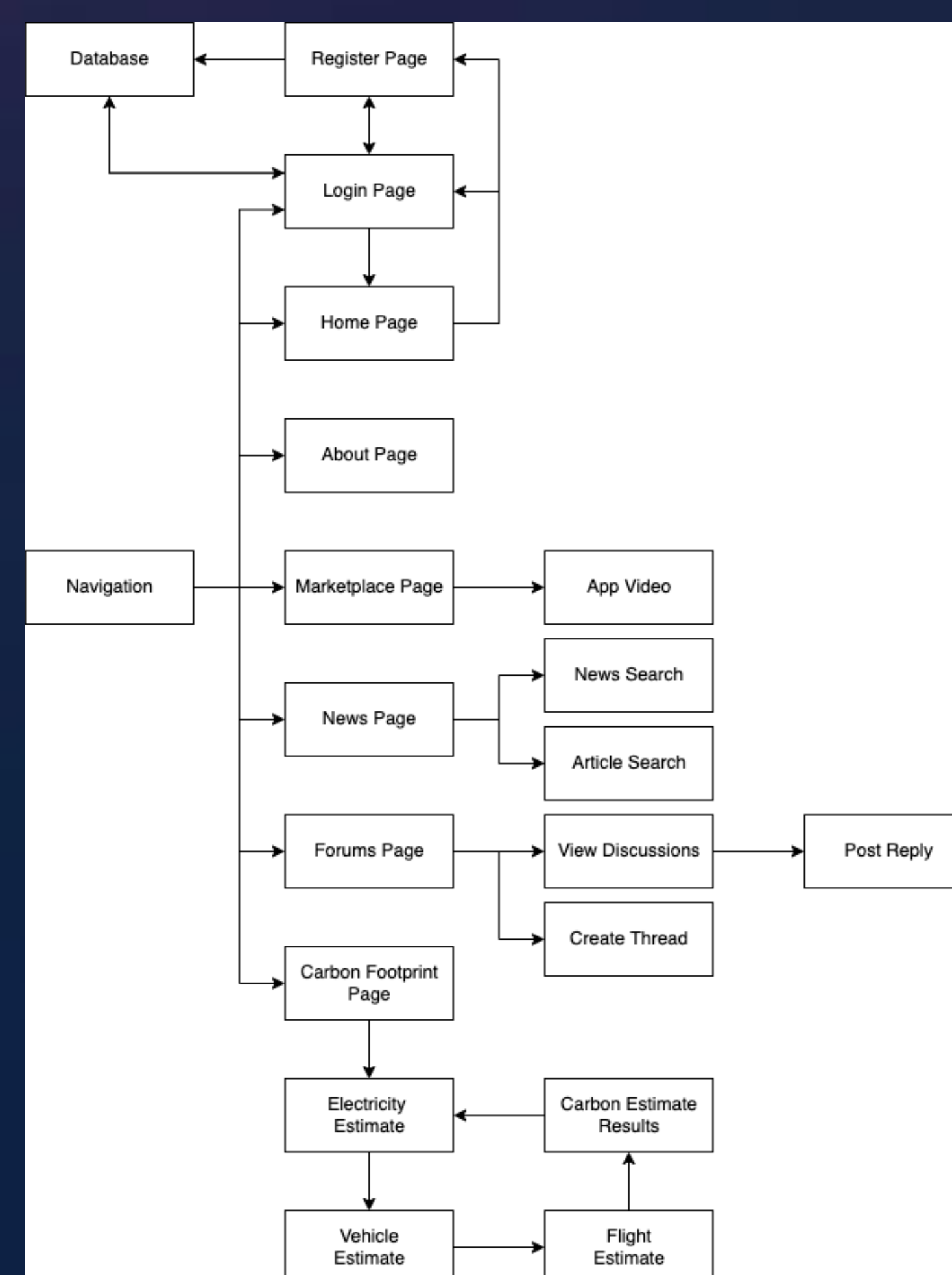


PROBLEM

The previous version of the Community Connect website was enlarged, mostly unresponsive, and incomplete regarding main components like the search and carbon calculator, as well as their respective pages. The goal this semester was to implement the Carbon API used to calculate carbon emissions and make the website look like the original design with 4 pages: Home, Forums, Sustainability, and Marketplace.

SYSTEM DESIGN

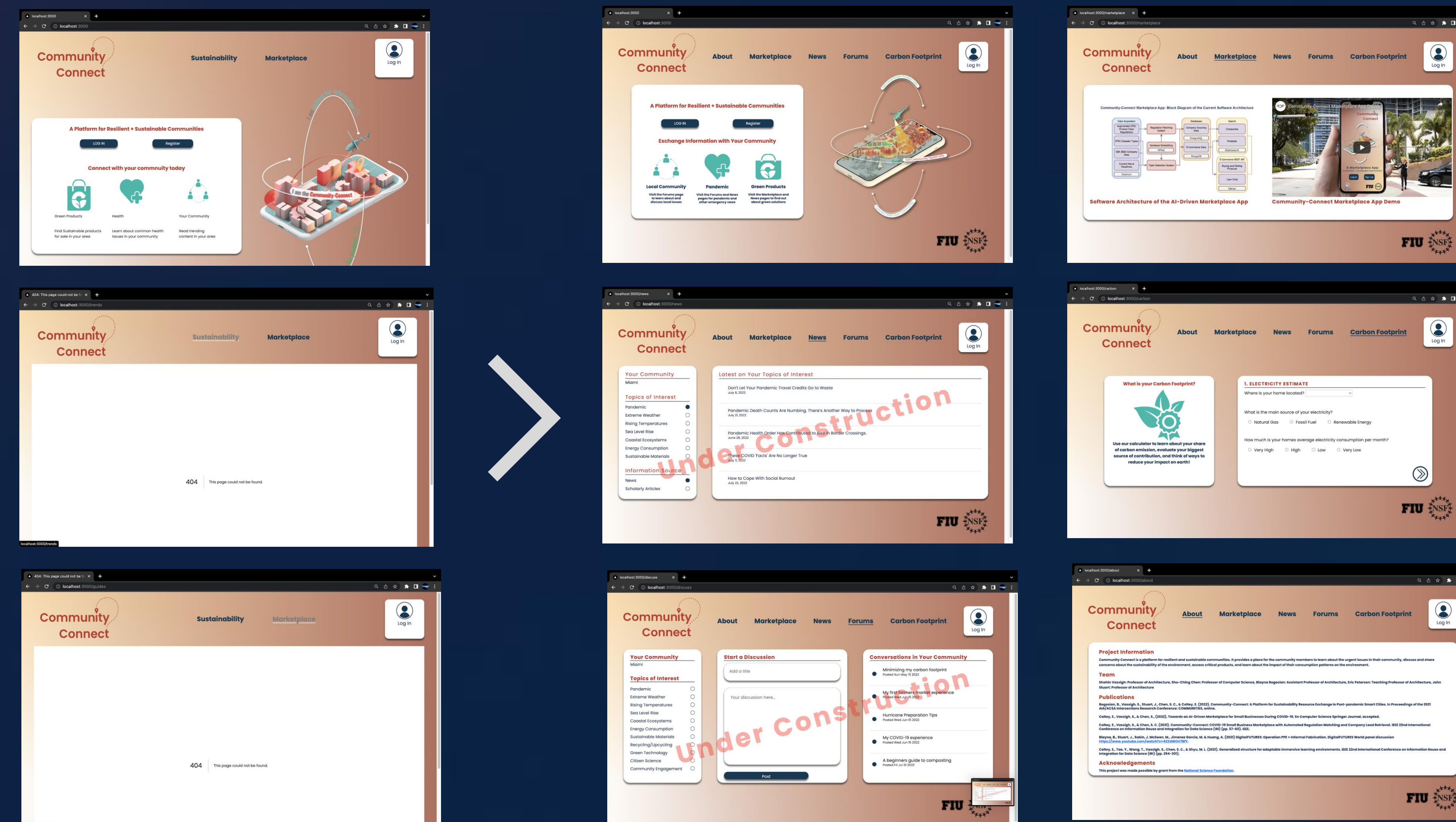


VERIFICATION

Website was able to be successfully tested locally on Google Chrome, Firefox, and Microsoft Edge using MacOS, Windows, and Linux, all with screens of different sizes.

CURRENT SYSTEM

The application's back-end source code, dependencies, and database are packaged into a container by the existing system using Docker, an open source containerization technology. The system also makes use of APIs to get the most recent news based on relevant subjects and places. The UI home page was revamped. There are now pages for guides, news, and trends. Depending on the location, these pages display relevant content.



Old Version

New Version

SUMMARY

Over the semester, our team of student developers modified the Community Connect website as was requested by the Product Owner. The design specifications were given to us via an AdobeXD file and we modified the design accordingly. Three new pages were In addition to the design, we implemented the Carbon API to be used on the Carbon Footprint page and we replaced the old generic search method with NewsAPI and Google Scholar as requested by the owner. In deployment, however, the NewsAPI has not been deployed due to the subscription requirement for non-development purposes.

OBJECT DESIGN

REQUIREMENTS

Web-based, Option to sign up with email.

TEAM CONTRIBUTIONS

- CarbonAPI to calculate the carbon emissions on the new Carbon Footprint page.
- NewsAPI/Google Scholar to display news sources on the new News page.
- Modified Home page as requested.
- Modified Marketplace page as requested.

INDIVIDUAL CONTRIBUTIONS

- Created About page according to design specifications.
- Altered Forums page several times as design specifications changed.
- Created method to fetch user data from backend and display on front end when logged in (not implemented currently as website functionality specifications were changed by Product Owner)

TECHNOLOGIES USED

- Docker (Deployment Only)
- Django
- PostgreSQL 13
- Python3
- NodeJS
- Axios
- ReactJS
- NextJS
- Git
- VS Code

ACKNOWLEDGEMENT

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