WAYFINDER

Group 303: Tristan Phan, Ignatius Mudoh, Aidan Kenneway, Lauren Koelsch

CS4530 Final Project

Features & Description

Wayfinder is a website that guides new coders through the vast ocean of software development.

User Story 1: Accessibility

We want our users to have an easy and accessible experience finding their way through our website. We implemented features such as text-to-speech, visual settings, and keyboard navigation. Furthermore, we improved the UI of the starter code substantially, ensuring all text and interactive elements pass AAA Web Content Accessibility Guidelines contrast tests and included icons for buttons.
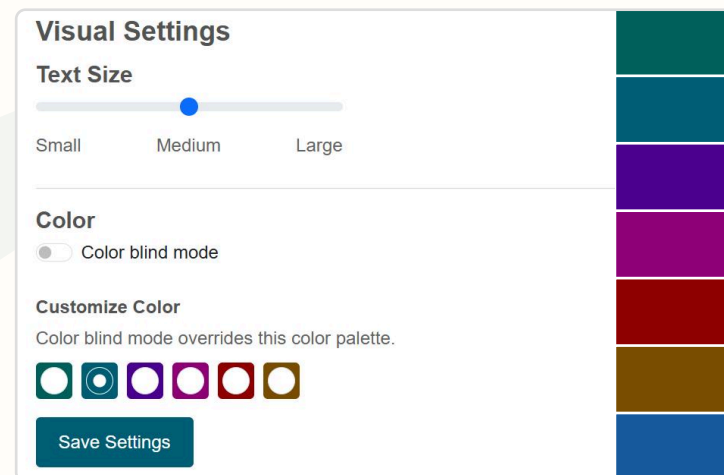
User Story 2: Communities

We wanted our users to be able to join specific communities related to the questions they have, allowing them to curate a more tailored experience. We implemented features such as community-specific questions, chats, and games. Furthermore, we implemented social features, including moderation and follower/following relationships between users.

User Story 3: AI Chat Bot

We wanted our users to be able to have a fall back if their questions aren't being answered in a timely manner by other community members. We implemented an AI Chat Bot called CompassBot that accepts all types of text user prompts and maintains context. The bot also accepts image inputs and it will compress image files larger than 1 Mb.
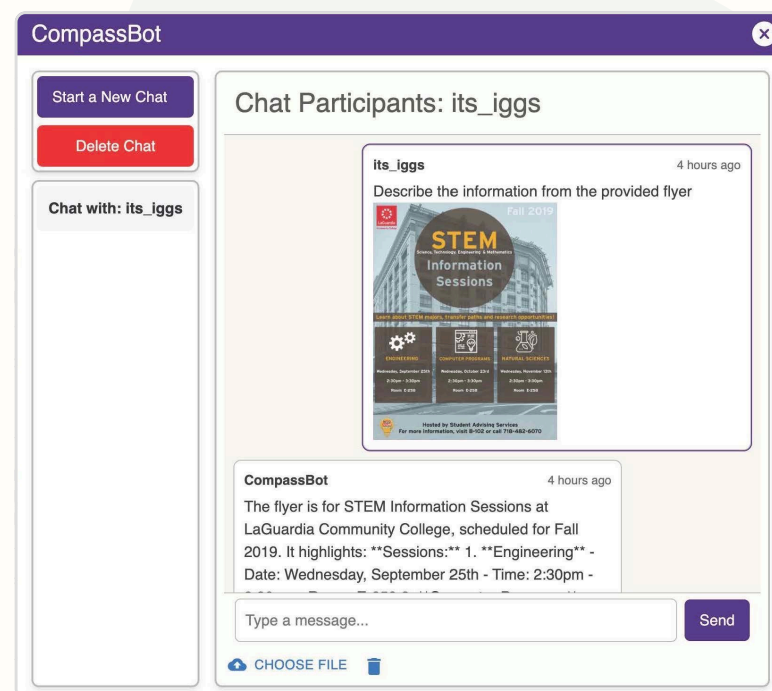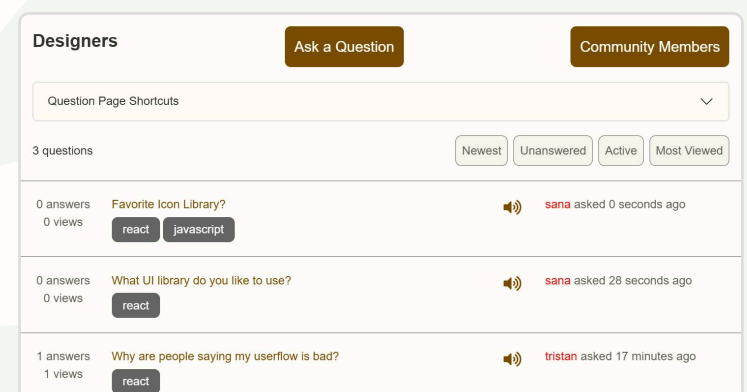
Future Work

In the future, we would like to implement a full text-to-speech mode that acts as a screen reader for visually impaired users, multiple file uploads and PDF support for the AI Chat Bot, and adding leaderboards/a point system for users within communities.

Visual settings include changing text sizes, toggling colorblind mode, and changing color themes that all pass WCAG color contrast guidelines.

A specific community page that only displays questions relevant to that topic. Users can ask questions in a community, and their question will not appear in other communities.

A view of CompassBot and its file upload functionality

Technology Stack & Design

We implemented our features on the existing FSO starter code. The UI was improved using css styling and React Bootstrap components. Our community and chatbot features expanded upon logic used in the base code, such as the questionPage and messages. Our CI/CD pipeline runs an automated test suite to check for eslint style formatting and to ensure our backend tests all pass. The live deployment of both the frontend and backend is hosted by Render.

Demo & Source

Our demo site is available at https://spring25-project-group-303.onrender.com/ and our code is available at https://github.com/neu-cs4530/spring25-project-group-303