Disability Access Navigation Guide
R1 Prototype

Crowd Sourcing Team

Team Information:

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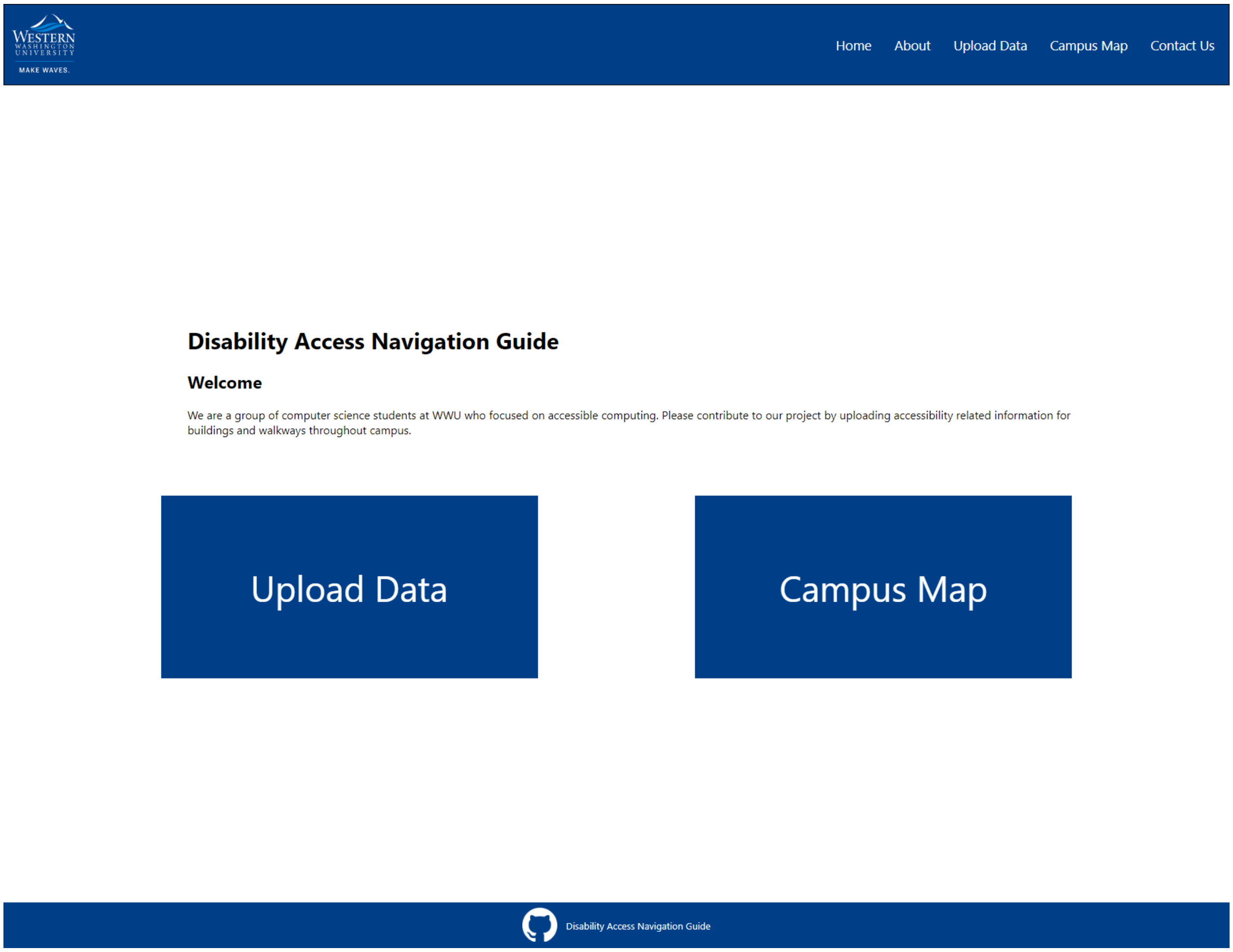
System Overview:

This project is a combination of two separate teams: crowdsourcing and data visualization. This project was built using HTML and CSS to develop the template of our pages, with JavaScript to provide dynamic functionality planning to be added at a later date. The back-end was developed using Python, specifically the Flask framework. The motivation behind choosing to use Flask is that Flask is generally easy to use with an easy learning curve for individuals with little to no back-end development experience. Additionally, Flask allows the use of Jinja for easy templating. This allows us to reduce the amount of repetitive code written to generate each individual page.

The pages with respect to our (crowdsourcing) team and their descriptions are listed below.

Home Page:



Disability Access Navigation Guide

Welcome

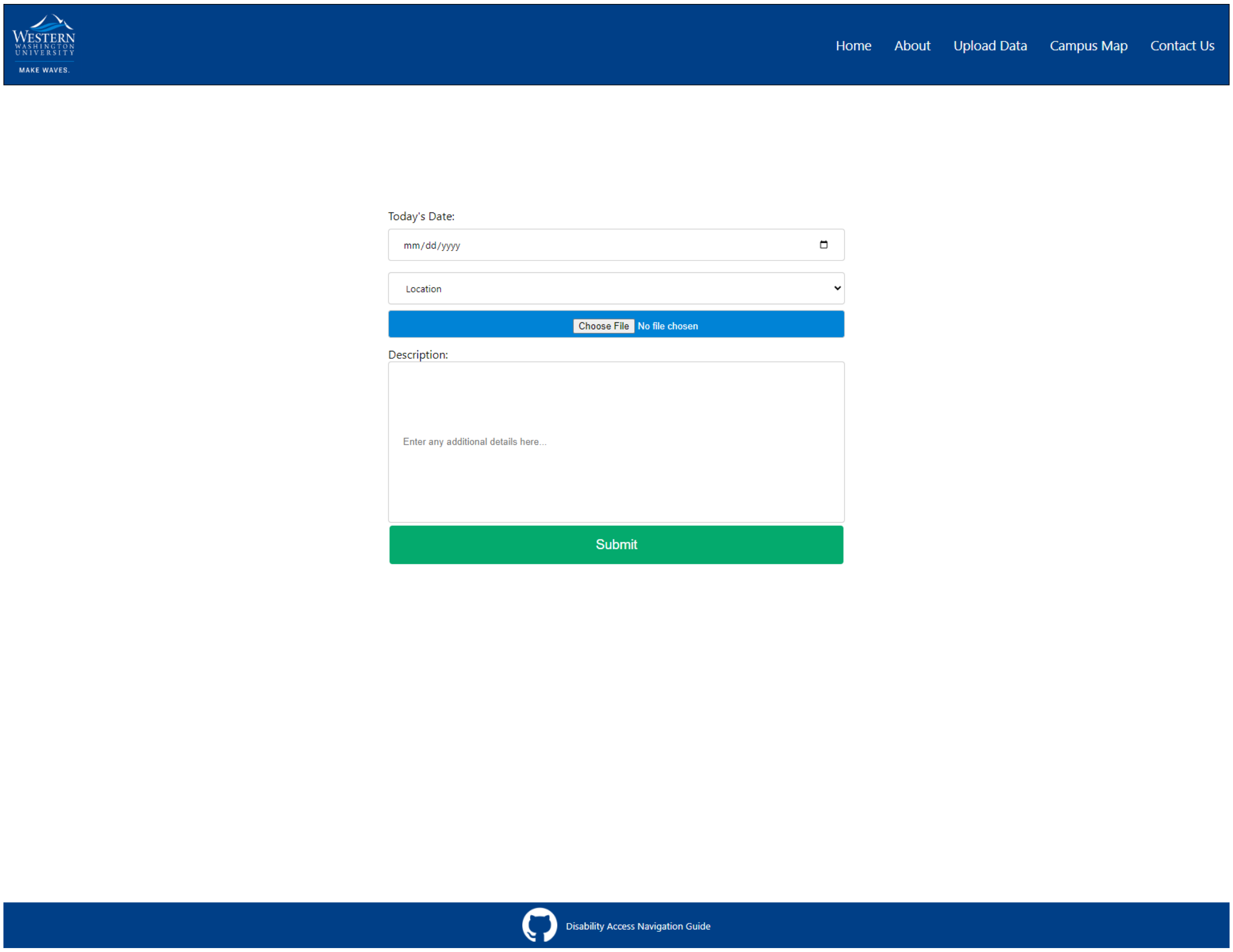
We are a group of computer science students at WWU who focused on accessible computing. Please contribute to our project by uploading accessibility related information for buildings and walkways throughout campus.

Description:

Our home page is the first page that a user will see when they visit our website. It has a minimalistic layout by design. The user has a header element with links that assist in navigation to other pages within our system. For the content area, the user is presented with the title of our project, a brief welcome message and project overview, then two large buttons that direct the user to the two main components of our system: crowdsourcing and data visualization. Finally, we have a simple footer section at the bottom of the page with the project title, and a GitHub logo that provides an external link to the group's GitHub repository.

The design for this project is centered around ease-of-use and accessible for assistive technologies. With this in mind, we limited the content to fit on a single page, disabling the need for vertical and horizontal scrolling. Our website has clear sections that can be navigated easily using screen readers. For the two images on our website, we made sure to provide a brief, yet descriptive alternate text describing the logos and where the links navigate to.

Upload Page:

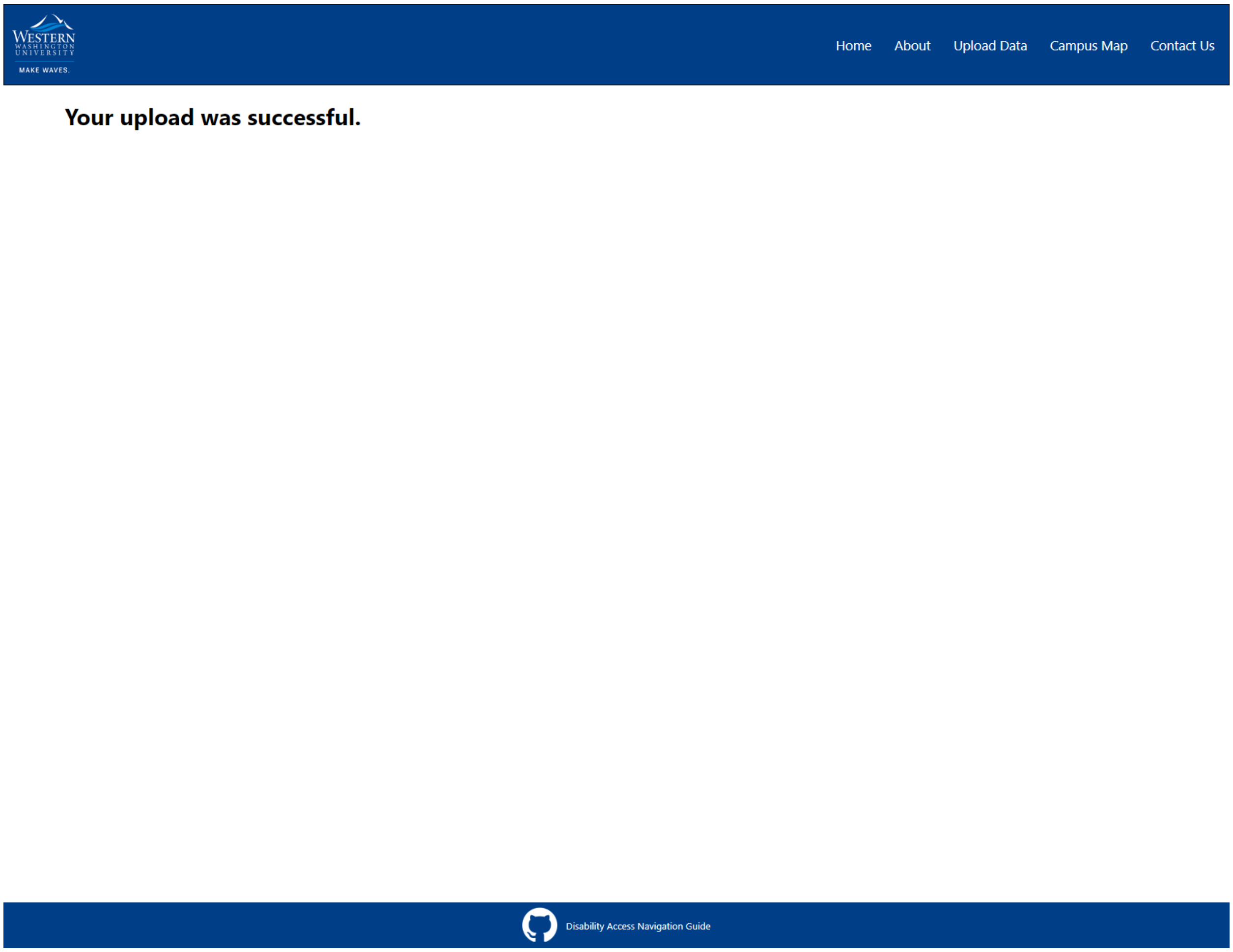


Description:

Our data upload page can be navigated to from the home page by using either the “Upload Data” link in the header element, or by clicking on the large “Upload Data” button in the main section on the home page. For this page, we maintained our goal of a minimalist design by creating a simple form component in the main section, eliminating the need for vertical and horizontal scrolling. The form component contains fields for an entry data, a location dropdown menu that is pre-populated with various buildings around campus, a file upload button, and a description text area field. Each of these fields are required to submit an entry to the database. Finally we have a large submit button that, when clicked, forwards the inputted data to the server and the user will be redirected to a page displaying whether their upload was successful or not. This will ultimately be changed once we have linked the server to a database to actually store submitted data.

With a minimalist approach and accessibility in mind, we wanted to create a simple option for submitting data. To make this form accessible, we added clear labels and placeholder text for each field. We also used elements including a date-picker, drop down, file upload, and text area to collect this information and reduce ambiguity about the type of data required for each field. We made the text larger and easier to read. Additionally, we made the buttons for file upload and submitting data, large in size with contrasting background colors to make them easily identifiable. We also made each field required, which allows the template to report any errors that a user may cause by not populating any given field, and allow for easy correction.

Upload Status: Success


WESTERN WASHINGTON UNIVERSITY
MAKE WAVES.
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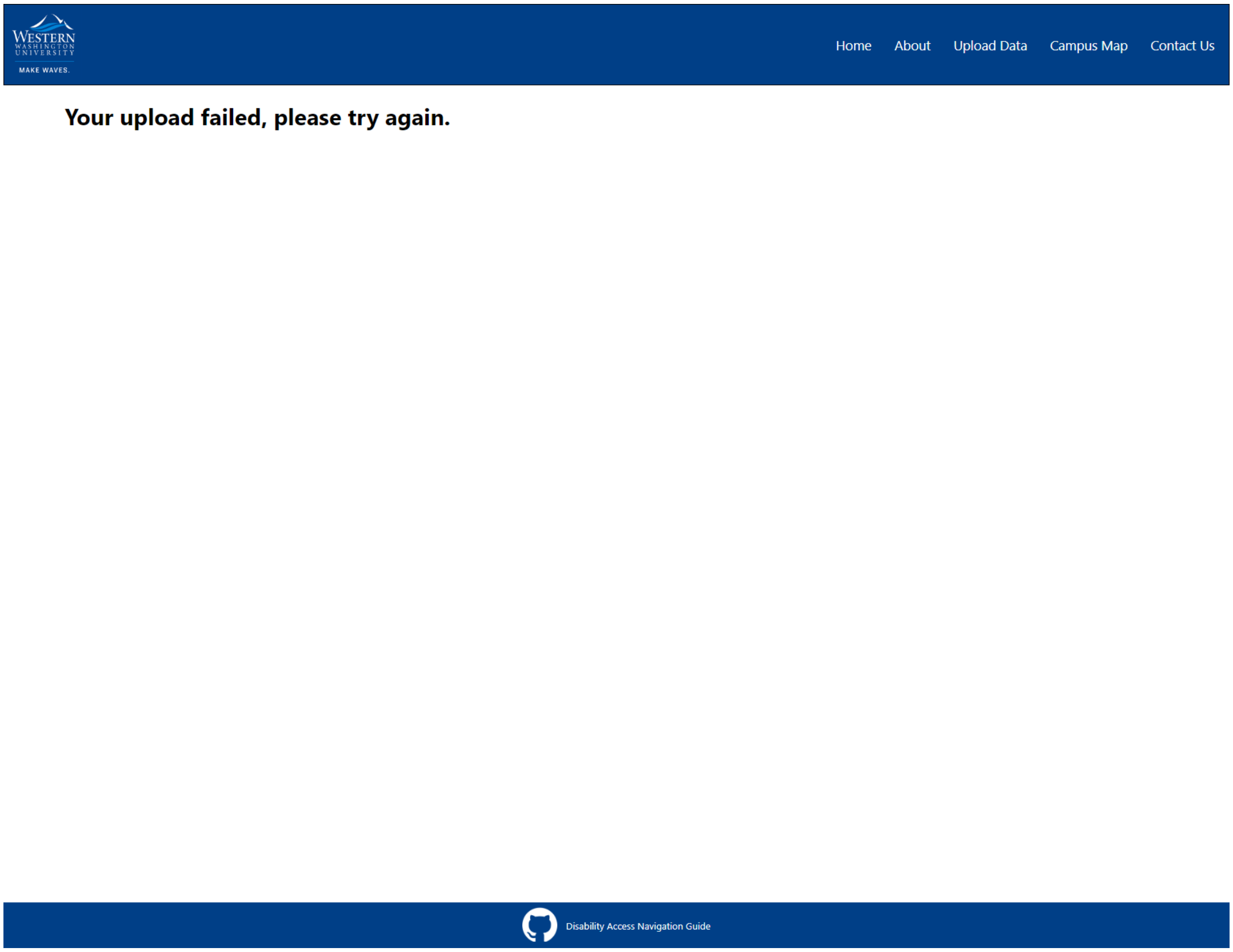
Your upload was successful.

Description:

This page is currently serving as a placeholder, and will be redesigned once the server is connected to a database and can store data entries submitted by users. As mentioned above, each field in the data upload form requires data to be populated before a user can submit an entry. This is by design to make sure that the front-end can quickly and easily report any missing data back to the user. This also allows us to make sure that the database isn't being populated by empty entries.

Upload Status: Failure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Your upload failed, please try again.

Description:

Much like the success page documented above, this page is also currently serving as a placeholder that will be redesigned once the server is connected to a database. As stated above, each field in the data upload form is required to be populated with an entry. However, if a user with front-end development knowledge uses the developer tools to remove the required attributes for these fields and submits an empty field anyways, the server has built-in functionality to check and make sure that none of the fields are empty. If it detects an empty field in a user submission, it will redirect the user to this landing page that tells the user that their upload failed, and will *not* forward that entry to the database.