

CIS 92 Glitch and Docker Website Lab

Lab Objectives

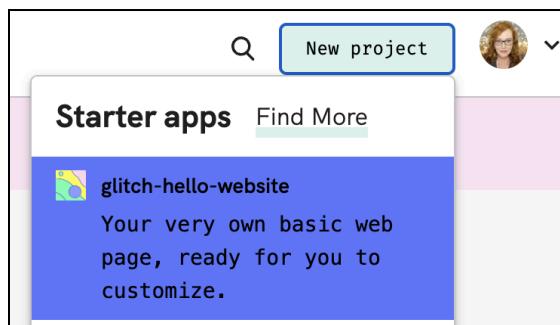
- Create a personalized homepage using Glitch
- Customize the website
- Add a second page to enhance your website
- Containerize the website using Docker

Part 1: Create and Customize Your Homepage

1. Start a New Project

- Navigate to <https://glitch.com>.

Click “New Project” and select “glitch-hello-website”.



2. Edit index.html

- Locate and open the index.html file
- Replace the existing code with the following:

```
<!DOCTYPE html>
<html>
<head>
    <title>Your Name's Homepage</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>
    <h1>Hello! I'm Your Name</h1>
    <p>Welcome to my personal homepage.</p>
    
    <h2>About Me</h2>
    <p>I'm a student building a website in CIS 92!</p>
```

```

<h2>My Interests</h2>
<ul>
    <li>Technology</li>
    <li>Music</li>
    <li>Travel</li>
</ul>
<p><a href="about.html">Learn more about me</a></p>
</body>
</html>

```

3. Edit style.css

- Open the style.css file
- Replace its contents with:

```

body {
    font-family: sans-serif;
    background-color: #f5f5f5;
    color: #333;
    text-align: center;
    padding: 20px;
}

img {
    border-radius: 10px;
    margin-top: 10px;
}

h1 {
    color: #336699;
}

ul {
    list-style-type: none;
    padding: 0;
}

li {
    margin: 5px 0;
}

```

4. Preview Your Site

- Click “**Preview**” and select “**Preview in a New Window**” to view your homepage

Part 2: Add a Second Page

1. Create about.html
 - In the file list, click “**New File**” and name it about.html.
2. Add Content to about.html
 - Paste the following code into about.html:

```
<!DOCTYPE html>
<html>
<head>
    <title>About Me</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>
    <h1>About Me</h1>
    <p>This is the second page of my website.</p>
    <a href="index.html">← Back to Home</a>
</body>
</html>
```

3. Test Navigation
 - In your homepage (index.html), ensure the link to about.html is present:

```
<p><a href="about.html">Learn more about me</a></p>
```

- Click the link to navigate to the About Me page
- On about.html, click the “Back to Home” link to return

Part 3: Enhance Navigation

To create a consistent navigation menu:

1. Add Navigation to Both Pages
 - At the top of the <body> section in both index.html and about.html, add:

```
<nav>
    <a href="index.html">Home</a> |
    <a href="about.html">About</a>
</nav>
```

2. Style the Navigation
 - In style.css, add:

```

nav {
    margin-bottom: 20px;
}

nav a {
    margin: 0 10px;
    text-decoration: none;
    color: #336699;
}

nav a:hover {
    text-decoration: underline;
}

```

3. Enhance your About page

- Add the following to your about.html page and customize it:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>About Me</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            background-color: #f2f2f2;
            color: #333;
            text-align: center;
            padding: 50px;
        }
        a {
            color: #336699;
            text-decoration: none;
        }
        a:hover {
            text-decoration: underline;
        }
    </style>
</head>
<body>
    <h1>About Me</h1>
    <p>Hi! I'm a student learning web development. I enjoy working with code, building creative projects, and exploring technology.</p>
    <p>One of my favorite websites is <a href="https://www.freecodecamp.org/">

```

```
target="_blank">freeCodeCamp</a>, where I practice coding and learn  
new skills.</p>  
<p><a href="index.html">← Back to Homepage</a></p>  
</body>  
</html>
```

4. Customize your website

- Add images
- Explore different background colors and fonts
- Customize the content of index.html and about.html with your own interests (add a link to a website)
- Add another page with customize content
 - Make sure you add the page to the navigation

5. Download Your Glitch Project

- Go to your Glitch project
- Click the project name (top left)
- Choose **Advanced Options → Download Project**
- This gives you a .zip file — unzip it on your computer

Now you should have a folder with:

- index.html
- style.css
- about.html
- Other files and folders needed for the website

Part 5: Dockerize the Glitch Site

⌚ Goal:

Take the files you built on Glitch (like index.html, style.css, about.html) and run them in a local Docker container using the NGINX web server.

Step 1: Open a Terminal and Navigate to the Project Folder

- In a command line or the terminal, navigate to your unzipped project folder:

```
cd path/to/your-project-folder
```

Step 2: Create a Dockerfile

- Create a file called Dockerfile (no extension) in the same folder.

In the command line or terminal:

- touch Dockerfile
- Open in a text editor and paste:

```
# Start from the official NGINX image
FROM nginx:alpine
# Remove the default NGINX web files
RUN rm -rf /usr/share/nginx/html/*
# Copy your site files into NGINX's web directory
COPY . /usr/share/nginx/html
# Open port 80 for the web server
EXPOSE 80
```

Step 3: Build the Docker Image

- Make sure you have Docker Desktop running
- In your terminal, run this command from the project folder:

```
docker build -t glitch-site .
```

- glitch-site is the name you're giving your Docker image
- The . means "build using the Dockerfile in this folder"

Step 4: Run the Container

- Start the container and map it to your local port 8080:

```
docker run -d -p 8080:80 glitch-site
```

- -d runs it in the background
- -p 8080:80 maps local port 8080 to container port 80

Step 5: View Your Site

- Open your browser and go to:

<http://localhost:8080>

Take screenshots of your website pages and add to this assignment in Canvas