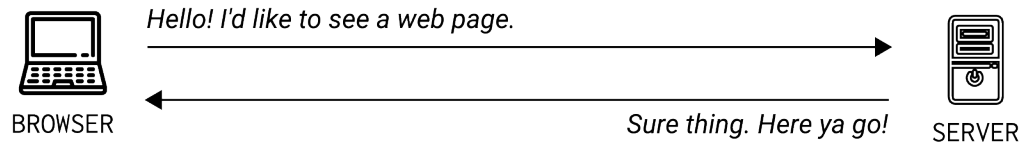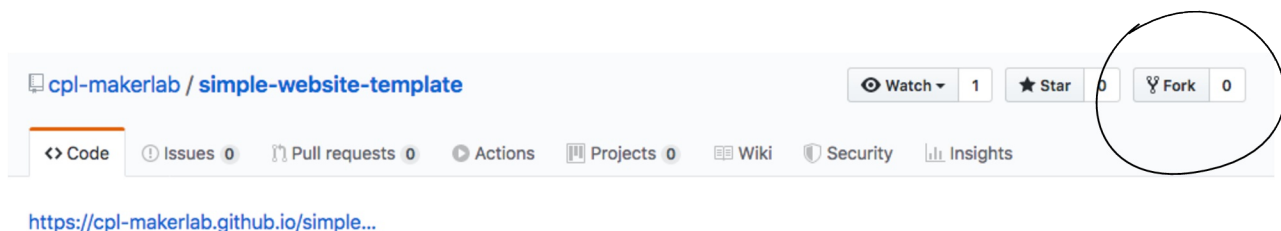Today we will be using Github Pages to create a simple website. But first, how does a website work? When you enter a website address in your computer's browser, the browser makes a request to a remote server computer. If successful, the server returns HTML, CSS, and JS for the page requested which your browser then renders to your screen. In our case, Github Pages will be the remote server.
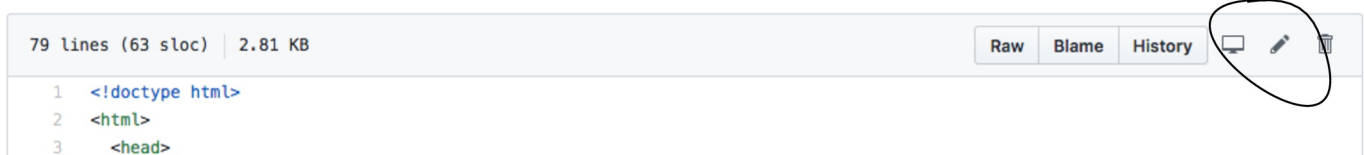
Hello! I'd like to see a web page.

BROWSER

Sure thing. Here ya go!

SERVER

HTML (markup language)	defines different elements on the page (e.g. body, links, images)
CSS (cascading style sheets)	defines styles (e.g. colors, fonts, borders)
JS (javascript)	handle dynamic interactions & browser events (e.g. mouse clicks)
GIT	open source tool for managing, sharing, and versioning code

1. Go to github.com and create a free Github account. Github is a website that allows you to upload and share versioned code with others. It also supports simple website hosting.

2. Login and navigate to this project page: http://github.com/cpl-makerlab/simple-website-template

3. Click the **Fork** button in the upper right of the screen. This will create your own personal copy of the project repository which you can then modify.

4. Once you have forked the project, click the **Edit** button near "Website URL" and update the URL to match your github username: https://**yourusername**.github.io/simple-website-template

cpl-makerlab / **simple-website-template**

👁 Watch ▾ 1   ★ Star 0   ⑂ Fork 0

‹› Code   ⓘ Issues 0   Pull requests 0   Actions   Projects 0   Wiki   Security   Insights
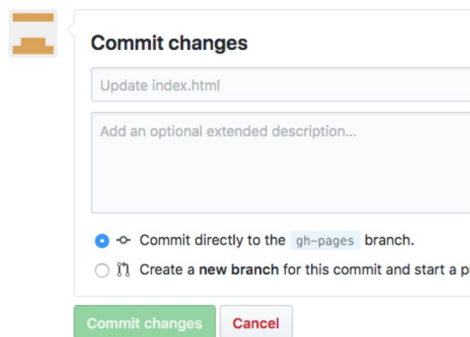
https://cpl-makerlab.github.io/simple...

5. If you try to navigate to that URL right now, you will get a 404 Error: Not Found. We have to push some changes first to the gh-pages branch before Github will build our website.

6. Click index.html and then click the pencil icon to edit the file in the browser editor.

79 lines (63 sloc)   2.81 KB   Raw   Blame   History   🖵 ✏ 🗑

```
1   <!doctype html>
2   <html>
3     <head>
```

7. In the HTML editor look for the title tag: **<title>Your title here</title>** Change the text inside the title tags, without modifying the tags themselves. Similarly, find the h1 heading tag and change the text inside: **<h1>Simple Website</h1>**

```
1    <!doctype html>
2    <html>
3      <head>
4        <!-- Page setup -->
5        <meta charset="utf-8">
6        <title>Your title here</title>
7        <meta name="description" content="A br
8        <meta name="author" content="Informati
```

```
27
28    <body>
29
30      <header id="header">
31        <img src="logo.jpg">
32        <h1>Simple Website</h1>
33
34        <!-- Menu link fragment #id shou
35        <ul class="main-menu">
36          <li><a href="#home">home</a></
37          <li><a href="#about">about</a>
```
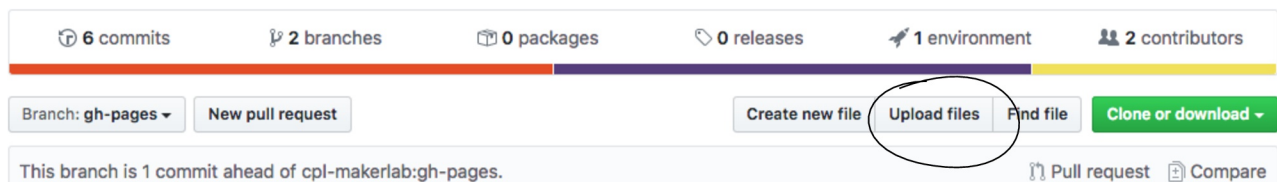
8. Scroll down and click **Commit changes**. This will save and push the changes you made to the gh-pages branch. Git uses branches and commits to manage different versions of your files.

Commit changes

Update index.html

Add an optional extended description...

🔘 ⟲ Commit directly to the gh-pages branch.

○ ⎇ Create a **new branch** for this commit and start a pu

[Commit changes] Cancel

9. After a commit it will take about 3-4 minutes to deploy your site. You can monitor the status of your build by clicking the "Environment" tab. After a few minutes, visit your website URL to see your new site.

10. Now let's upload a new background image. Search for a large image (~1024 pixels wide), download it to your computer, and rename it background.jpg. If your image is a .png, use GIMP to convert it to .jpg.

11. In Github, click **Upload files** to upload your new background.jpg. Your image must be named background.jpg before uploading in order to overwrite the original image. Don't forget to scroll down and click "Commit changes" to push your changes to the gh-pages branch. Again, it usually takes about 3-4 minutes for Github to deploy your changes.

⦿ 6 commits   ⑂ 2 branches   📦 0 packages   ◇ 0 releases   ✈ 1 environment   👥 2 contributors

Branch: gh-pages ▾   New pull request   Create new file   Upload files   Find file   Clone or download ▾

This branch is 1 commit ahead of cpl-makerlab:gh-pages.   ⎇ Pull request ☷ Compare

12. Keep going! Here are some more things to try:
- *Upload a new logo.jpg (best to keep this small, under 100 pixels tall)*
    - *Change the link color in style.css*   `a {color:green;}`
    - *Update the text inside the footer region*
    - *Update the text inside the Home, About, and Contact regions*