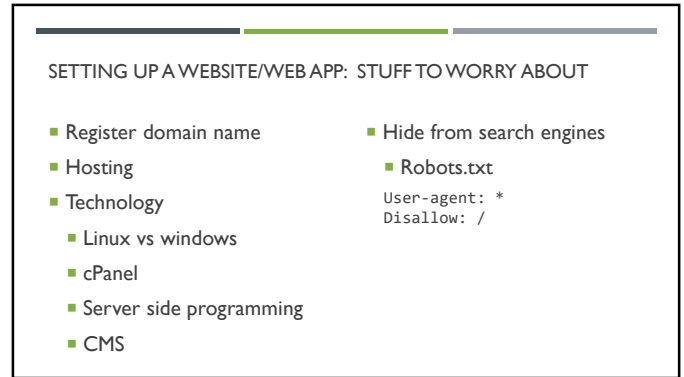
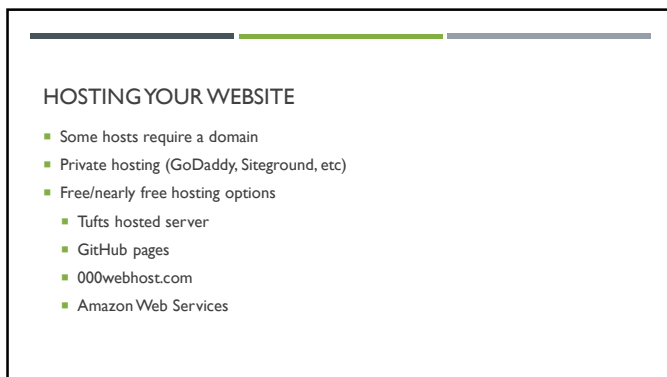




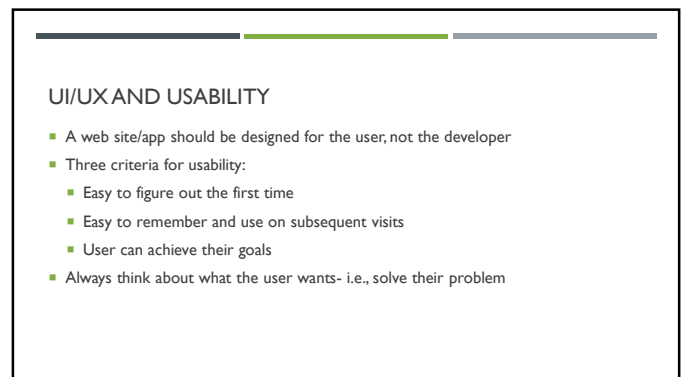
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BEST AND WORST WEBSITES

- <https://www.lingscars.com/>
- <http://www.mikiyakobayashi.com/>

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SEO – SEARCH ENGINE OPTIMIZATION

- If you build it, they will come – NOT
- Your obligation as a web programmer
 - Best practices
 - Mobile friendly
 - Use interesting effects to engage users

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CYBER-SECURITY

- Need to secure a website from cyber-attacks
- This has to be maintained ongoingly
- Sometimes a site is hacked
 - to steal information/users
 - to redirect a user to another site
 - just to be malicious
- No site is exempt from being a target
- CMS sites or sites with open source software are particularly vulnerable

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TYPES OF ATTACKS

- SQL Injections- alters the database
- Cross-site Scripting (XSS) – malicious scripts are injected into the site
- Credential Brute Force Attacks
- Website Malware Infections & Attacks
- DoS/DDoS Attacks (Distributed Denial of Service) – fake traffic bogs down a site

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HTML

- Hypertext Markup Language
- Tags / Container tags
- Attributes
- Values
- Entities

`<h1 style='text-align: center'>This is my page title</h1>`

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ENTITIES

- Describe a character
- Start with & End with ;
- ©
- ®
-

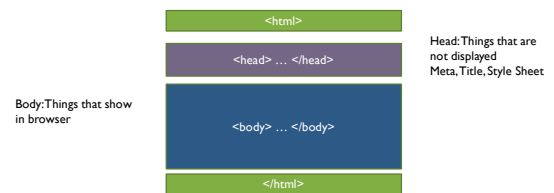
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CONTAINER TAGS

- Best practice for every tag to indicate an end tag
- Some tags are already container tags
 - `<h1> ... </h1>`
- Add a slash to a non-container tag indicate that there is no other end tag
 - `
`

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ANATOMY OF AN HTML WEB PAGE



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HELLO WORLD

```

<html>
<head>
<title>Cool Page Here</title>
</head>
<body>
<h1>Hello World!</h1>
This is my cool hello world page
</body>
</html>

```

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FILE NAME FOR THE WEB PAGE

- Extension is .html
- Name the file index.html or default.html if it is the "home" page
- The home page is selected automatically if no file is specified in the URL
 - www.mysite.com
- Any other name can be used, but will need to be specified in the domain.
 - www.mysite.com/help.html

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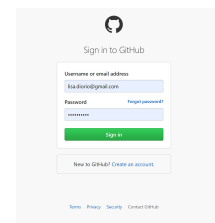
VIEWING THE PAGE IN A BROWSER

- Option 1: View the page locally in a browser
 - Create the file. Save with .html extension
 - Open a browser and put the full url to the file in the url bar (it will start with [file://](#) - or easier,
 - Drag/drop the file from file explorer into the browser
 - This is for LOCALVIEWING ONLY
- Option 2: View the page on the web from anywhere
 - Upload the file to a server on the web – note the web address
 - Open a browser and enter the web address
 - Include the file name in the url if needed

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DEMO: SETTING UP A SITE USING GITHUB PAGES

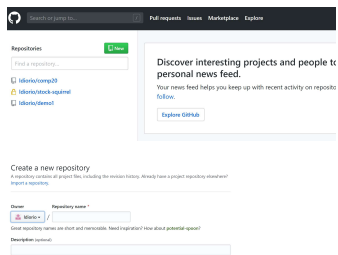
- github.com
- Register for an account or sign in



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DEMO: SETTING UP A SITE USING GITHUB PAGES

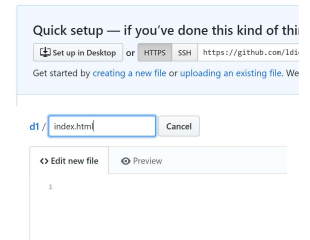
- Create a repository (click "New")



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DEMO: SETTING UP A SITE USING GITHUB PAGES

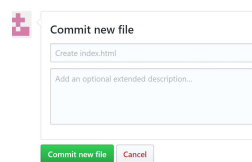
- Create a file
- Call it index.html



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DEMO: SETTING UP A SITE USING GITHUB PAGES

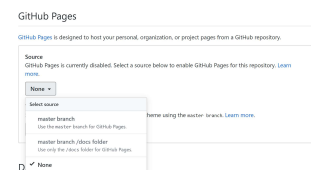
- Add some code
- Commit



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DEMO: SETTING UP A SITE USING GITHUB PAGES

- IMPORTANT!
Enable GitHub pages:
- Go to settings
- Go down to GitHub pages section
- Set to Master Branch



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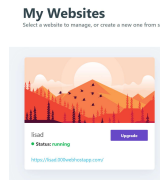
DEMO: SETTING UP A SITE USING GITHUB PAGES

- See your Page!
- In a new tab in the URL type in the address of the page
 - `<user-name>.github.io/<repo-name>`

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DEMO – CREATE A SITE USING 000WEBHOST

- Sign up / log in to www.000webhost.com
- Hover over your website and click on "Manage Website"
- Option 1: Click on "Tools" then "File Manager" to be able to upload files
 - Most hosts offer a file manager
 - Not efficient for several files. Better to use an FTP (File Transfer Protocol) app.



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DEMO – CREATE A SITE USING 000WEBHOST

- Click on "Website Settings" then "General" to see the FTP Settings for your site
- Choose an FTP app
 - I like FileZilla and WS-FTP
- Go to your FTP app and set up the site
- Connect to the host
- Go to public_html (not universal, but common)
- Upload your files.
- Note the URL for your site and enter it into the browser to display the page



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BASIC TAGS

- HTML ignores whitespace. You have to insert it explicitly.
 - Paragraph `<p>` (double line break)
 - Line Break `
` (not a container tag)
 - `<div>` (single line break – a container tag)
 - ` ` (a space)
 - Headings `<h1> ... <h6>`
 - Horizontal rule `<hr>` (not a container tag)

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TEXT FORMATTING

- `` or `` bold
- `` italic
- `<SUP>`, `<SUB>` superscript, subscript
- Tags can be nested
 - `text1`
text1 is bold
 - `text1text2`
text3text4
 - text1 will be bold
 - text2 will be bold and italic
 - text3 will be bold
 - text 4 will be normal

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HYPERLINKS

- Text link
 - ``
- Link within a file
 - ``
 - ``
- ``
 - opens linked item in new window

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EMAIL AND FILE LINKS

- Email link
 - ``
- Link to a file – set href to the file name
 - can be used for downloads
 - file must be uploaded to the server
- Where to find files:
 - If a file in same folder as web page: file.xxx
 - If file is in child folder of web page: folder_name/file.xxx



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IMAGES

- ``
- img is not a container tag
- Can auto size – may deter performance
- Attributes
 - alt, title
 - height, width
 - align
- Formats: jpg vs png vs WebP
- Finding images
 - unsplash.com
 - Stock photos
 - Creative commons
 - Attribution



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LISTS

- Unordered (bulleted)
 - Ordered (numbered)
 - List item
- You can create an indent level by creating another list inside of an

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META TAGS

- Metadata is "data about the data"
- <meta ... />
 - Name
 - Description Keywords
 - Author Viewport
 - Content
- Redirect
<meta http-equiv="refresh" content="5;URL=https://www.newsite.com/" />

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