Intro to Javascript and the DOM

INFO 6150 Fernando Augusto López Plascencia

In this lesson:

- Exploring Javascript in the browser
- Practicing DOM manipulation

Exploring Javascript

- Run it in the browser!
- Interacts with the web page through the DOM (Document Object Model)
 - A model created when the page loads
 - HTML elements are represented by nodes



Javascript and the DOM

Open the web page you've been working on. Ensure it has an <h1> tag.

• Edit your script.js file, adding:

```
const header = document.querySelector("h1");
header.textContent = "Dynamic content!";
```

- Save the file.
- Reload the web page in your browser.

What happened?

- document is a global object; represents the page
- querySelector grabs the node we want
- textContent represents the, er, text content of the node (the element); we can modify
 it

Time for some live practice!

- window.alert and window.prompt
- Constants and variables
- Data types
- Some operators and comparators
- The "if" control statement



Challenge time!

Put the above in practice:

- Create a page for a product of your choice.
- The page must ask for a user's age. If the user is underage, the page should display a message telling them to not enter the page.
 - Research how to use Number.parseInt() to convert a string to a number.
- Make sure to describe the product and add images.
 - Research how to use the tag.
- Add colors to the text and background.

GitHub

- Git is a versioning system
 - Allows control over versions of a project
 - Improves team collaboration
 - Never again save a "project-final-final-REAL-05.doc"
- GitHub is a provider for Git
 - The most popular
 - Free accounts
 - Owned by Microsoft (so, you know, stable)

Git concepts

- Repository (or repo): used to store a project
- Branches: separate, coexisting "copies" of a project
 - Main branch: the project "original"
 - Create branches to work on a feature
- Commits: make changes to branches
 - Use them to "save" your work
 - Never commit directly to your main branch
- Pull requests: requests to update the main branch with the contents of another branch
 - Review process



Follow the tutorial:

- Create your own free GitHub account here: https://github.com/
- Follow this tutorial to create a repository, a branch, a commit, and a pull request: https://docs.github.com/en/get-started/quickstart/hello-world



Homework for today

- All of today's work, in a repository that you own.
 - No other person must have collaborated in this repository.
 - Send the link with your repository.