# Introduction to Web development

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#### Git & Github

#### Overview

- → Installing git and creating a github account
- → What is git
- → How does git work
- → What is github
- Example of using Git and github

## Installing git!

- → Linux (debian):
  - Command: sudo apt-get install git
- → Linux (Fedora):
  - ◆ Command : sudo yum install git
- → Mac:
  - http://git-scm.com/download/mac
- → Windows:
  - http://git-scm.com/download/win

#### What is version control?

- → A system that keeps record of your changes
- → Allow for collaborative development
- Allow you to know who made what changes and when
- → Allow you to revert any changes and go back to a previous state.

#### What is Git?

#### What is version control?

- Distributed version control
- → User keeps entire code and history on their location machine
  - User can make any changes without internet access
  - Except pushing or pulling changes from a remote server

#### What is GitHub?

#### What is GitHub?

- → Largest web-based git repository hosting service
  - Aka hosts remote repositories
- → Allows code collaboration with anyone online
- → Adds extra functionalities on top of git
  - UI, Documentation, bug tracking, pull requests and more.

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## Tools Required!

- → Text Editor
  - Atom (Open Source)
  - Microsoft Visual Studio
- → Browser
  - Chrome

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#### One of Three Core Languages!

- → HTML Controls the structure of your web page
- → CSS Controls the presentation/design
- → JavaScript Add behaviour and interactivity

### HTML

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#### What does HTML stands for?

**Hyper Text Markup Language** 

#### What We'll Learn!

- → What is HTML
- → Structure of a HTML Document
- → Different types of HTML elements (HTML tags)
- → Adding CSS to a webpage
- → Adding JavaScript to a webpage

## HTML Tags!

- → Paragraph text
- → <a> Link to another page </a>
- → <h1> Heading </h1>
- → <blockquote> Quotes </blockquote>
- → <img>

## CSS

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#### What does CSS stands for?

**Cascading Style Sheet** 

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## **Box Model**

Border  Padding  Content		
	Border	
Content	Padding	
Ĺi	Content	

## JavaScript

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#### What Should You Know!

- → HTML
- → CSS

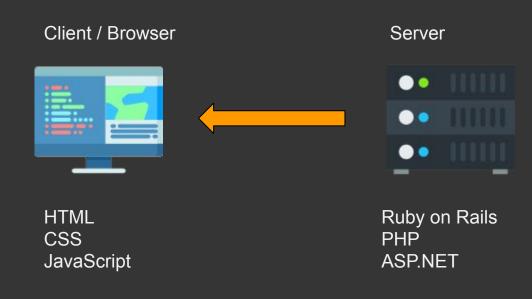
#### What We'll Learn!

- → What JavaScript is & when we use it
- → Basic JavaScript syntax
- Working with data types (integers, string etc)
- → Control flow (loop and conditional statements)
- → The Document Object Model (DOM)

#### JavaScript is a Scripting Language!

- → Intentionally limited
- → Doesn't have the same features as other programming languages (C++, Java)
- → Cannot communicate directly with a database, or file system on a computer
- → However it is great at manipulating web pages

#### JavaScript is a Client Side Language!



#### And Finally...

- → JavaScript is NOT, and has nothing to do with JAVA
- → JavaScript is just a name that was given to it while JAVA was really popular
- → The official name for Javascript is ECMAScript

#### Connect

- https://gitter.im/SNU-ACM/community
- https://github.com/prakamya-mishra