

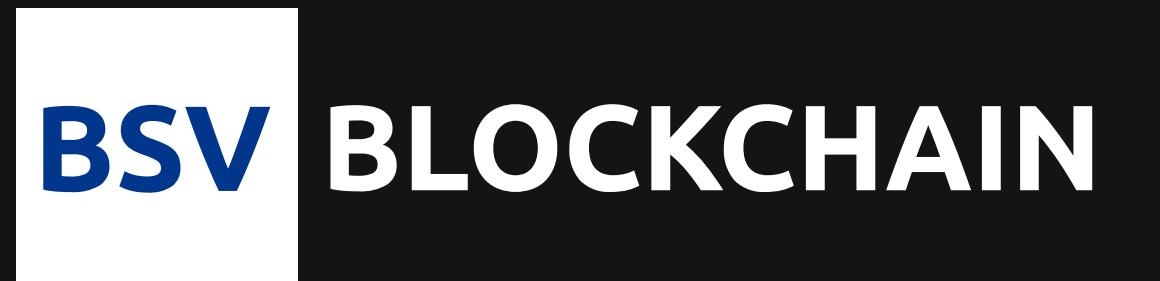


Introduction to JavaScript

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Why Learn JavaScript?

- **About the most popular programming language**
- **Low entry barrier**
- **Language of the web**

JavaScript History

1995

**First version was written by
Brendon Eich in 10 days**



JavaScript Versions

https://www.w3schools.com/js/js_versions.asp

Ver	Official Name	Description
ES1	ECMAScript 1 (1997)	First edition
ES2	ECMAScript 2 (1998)	Editorial changes
ES3	ECMAScript 3 (1999)	Added regular expressions Added try/catch Added switch Added do-while
ES4	ECMAScript 4	Never released
ES5	ECMAScript 5 (2009)	Added "strict mode" Added JSON support Added String.trim() Added Array.isArray() Added Array iteration methods Allows trailing commas for object literals
ES6	ECMAScript 2015	Added let and const Added default parameter values Added Array.find() Added Array.findIndex()
ECMAScript 2016		

ECMAScript 2017	Read More	Added string padding Added Object.entries() Added Object.values() Added async functions Added shared memory Allows trailing commas for function parameters
ECMAScript 2018	Read More	Added rest / spread properties Added asynchronous iteration Added Promise.finally() Additions to RegExp
ECMAScript 2019	Read More	String.trimStart() String.trimEnd() Array.flat() Object.fromEntries Optional catch binding
ECMAScript 2020	Read More	The Nullish Coalescing Operator (??)

JavaScript Versions

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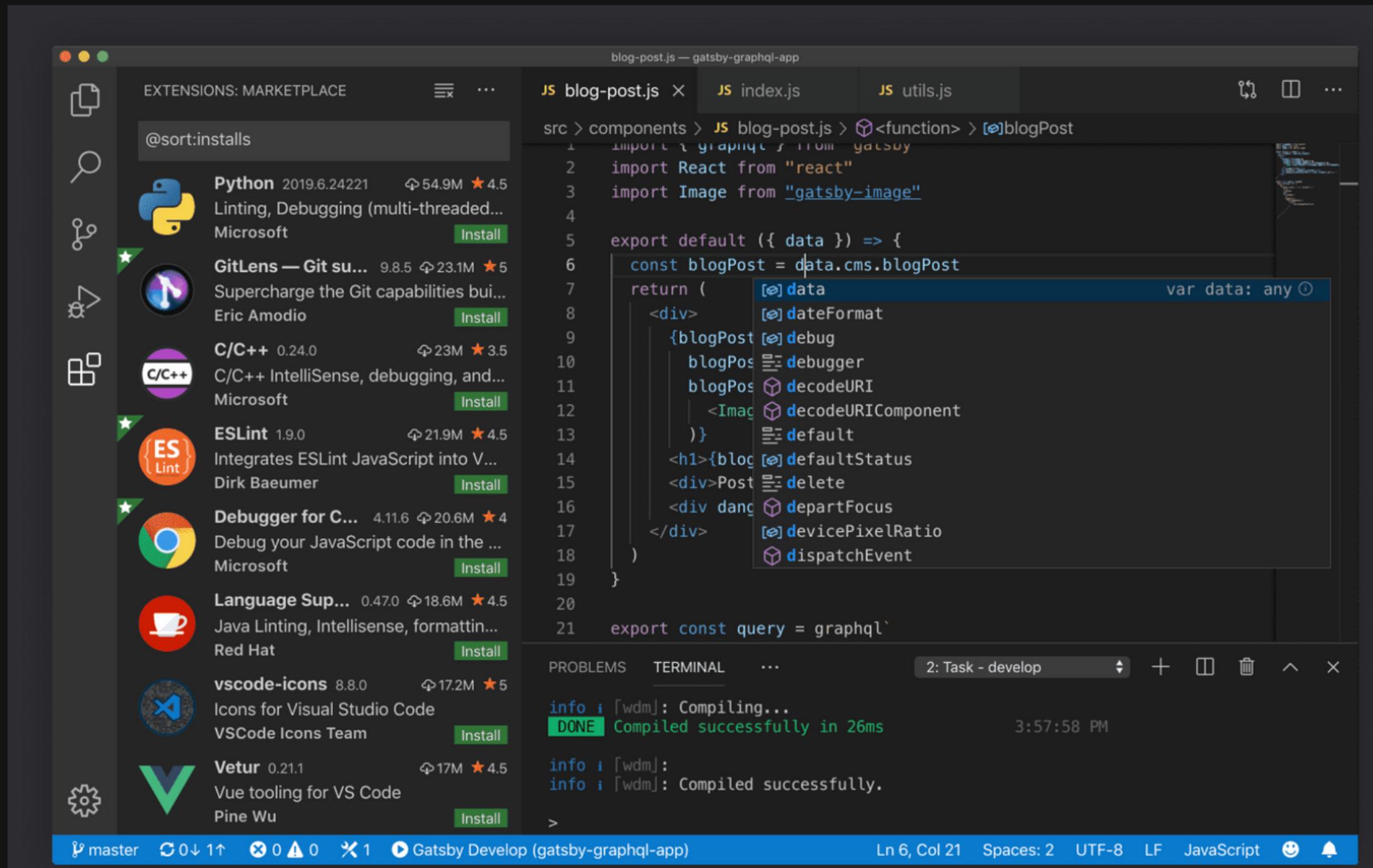
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Tools Needed for this Course

<https://code.visualstudio.com/>

1
Code Editor:
VS Code

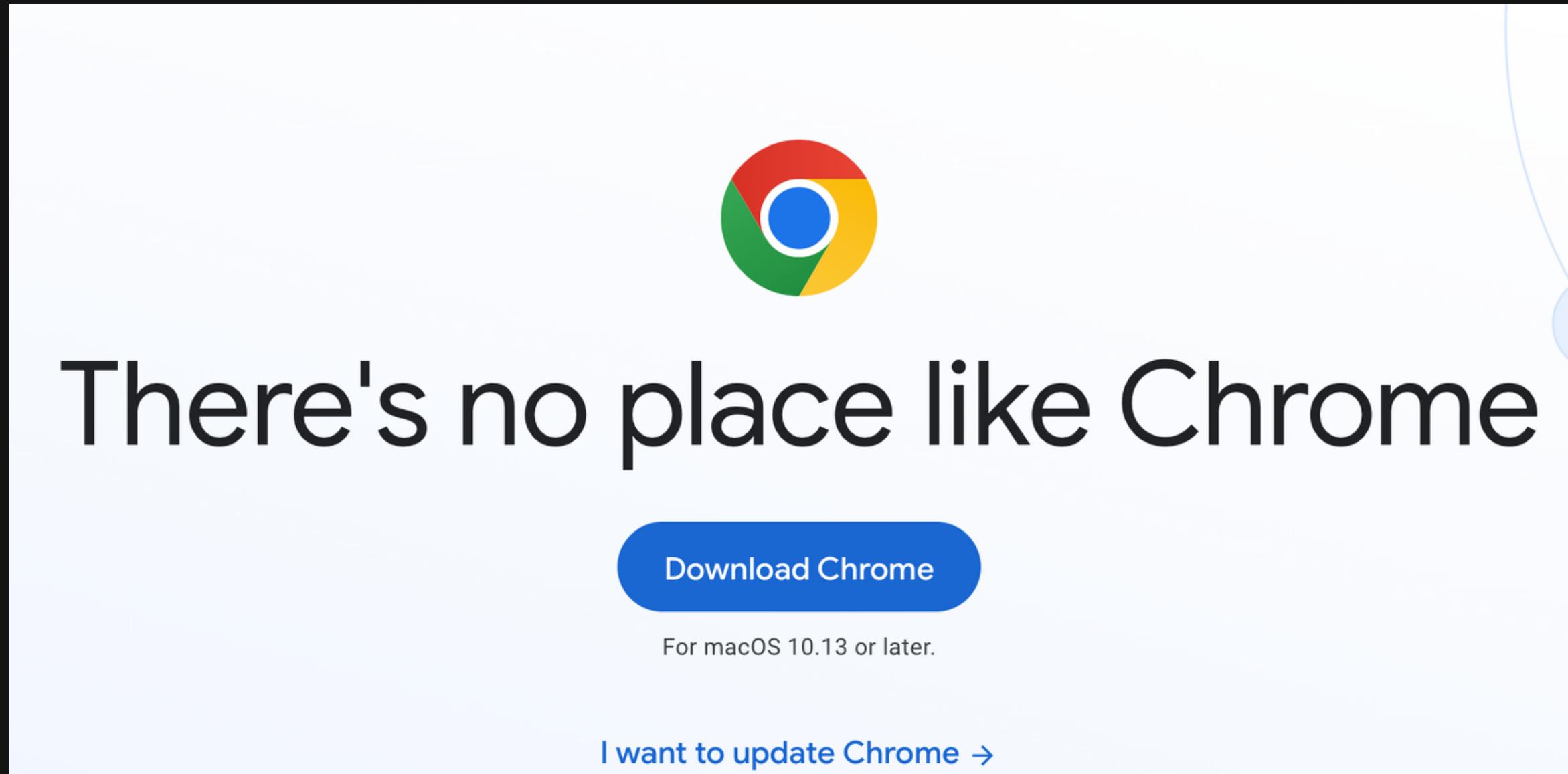


Free for Windows, Mac and Linux

Tools Needed for this Course

<https://www.google.com/chrome>

2
Web Browser
chrome



The image shows a screenshot of the Google Chrome download page. At the top center is the Google Chrome logo, which consists of three overlapping circles in red, yellow, and green. Below the logo, the slogan "There's no place like Chrome" is displayed in a large, bold, black font. Underneath the slogan is a blue button with the text "Download Chrome" in white. Below the button, a smaller line of text reads "For macOS 10.13 or later." At the bottom of the screenshot, there is a blue link that says "I want to update Chrome →".

Free for Windows, Mac and Linux

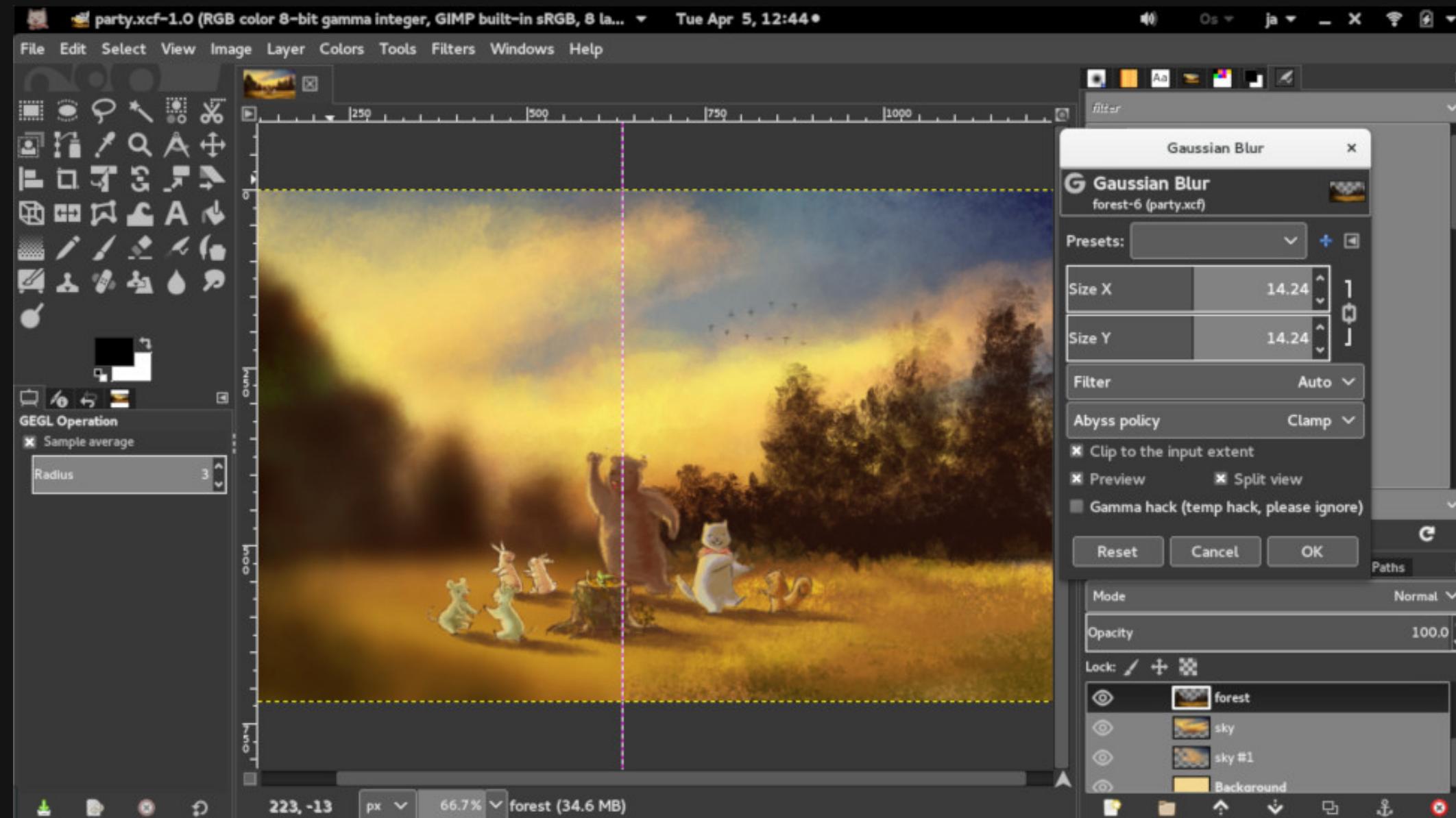
Tools Needed for this Course

<https://www.gimp.org/>

3 Image Editor:

- Gimp
- Photoshop

Optional



Gimp is Free

Tools Needed for this Course

4

Computer:

- Laptop
- Desktop



Skills Required

1

File Management

Be able to save files and know where they are



Skills Required

2

Persistence

Programming can
be frustrating at
times



Skills Required

3
Logic (not math)

Logical thinking can
be practiced



Skills Required



4

HTML & CSS

JavaScript creates interaction by manipulating HTML and CSS on web pages



Good Place to Learn HTML & CSS

Internet is hard

<https://www.internetingishard.com/html-and-css/>

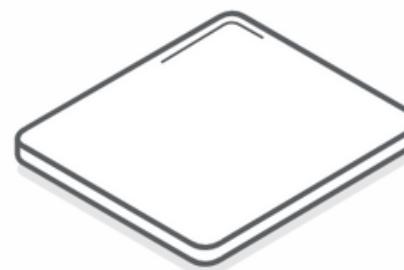
HTML & CSS IS HARD

(BUT IT DOESN'T HAVE TO BE)

A friendly web development tutorial for complete beginners

INTRODUCTION

The purpose of HTML, CSS, and JavaScript, the difference between frameworks and languages, and finding your way around a basic website project with Atom. [Read more ▶](#)



Variables

**Variables are containers for
storing data (data values)**

```
var x = 5;  
var y = 2;  
var z = x + y;
```

```
var age = 18;  
var fruit = "orange";  
var a = "";
```

Variables

Variables are case-sensitive

```
var Fruit = "Orange";  
var fruit = "Pear";  
var FRUIT = "Watermelon";
```

**These are different variables
with 3 different values.**

Variables

4 Ways to Declare a JavaScript Variable:

- Using **var**
- Using **let**
- Using **const**
- Using **nothing**

- The **var keyword** is used in all JavaScript code from 1995 to 2015.
- The **let** and **const** keywords were added to JavaScript in 2015.
- If you want your code to run in older browsers, you must use **var**.

Variables

Rules for Naming Variables

- Names can contain letters, digits, underscores, and dollar signs.
- Names must begin with a letter.
- Names can also begin with \$ and _ (but we will not use it in this class).
- Names are case sensitive (y and Y are different variables).
- Reserved words (like JavaScript keywords) cannot be used as names.

Variables

JavaScript Reserved Words

https://www.w3schools.com/js/js_reserved.asp

JavaScript Reserved Words

◀ Previous

In JavaScript you cannot use these reserved words as variables, labels, or function names:

abstract	arguments	await*	boolean
break	byte	case	catch
char	class*	const	continue
debugger	default	delete	do
double	else	enum*	eval
export*	extends*	false	final
finally	float	for	function