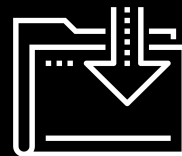
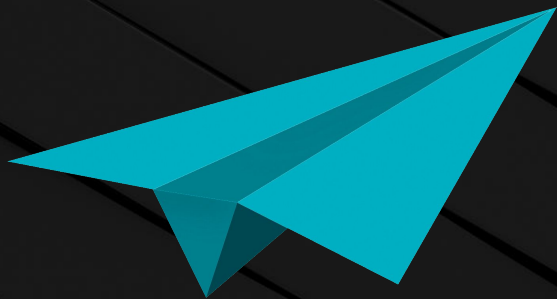


# Intro to JavaScript

Skills Bootcamp in Front-End Web Development

Lesson 4.1





Office Hours

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30 Minutes

The background is a dark charcoal gray with a series of parallel diagonal lines running from the top-left to the bottom-right. Overlaid on this are several teal-colored geometric shapes: a large central triangle pointing right, a smaller triangle to its left, and a square to its right. Scattered around these shapes are various white line-art symbols, including a plus sign, a minus sign, a circle with a dot, a circle with a horizontal line, a circle with a vertical line, a circle with a diagonal line, a circle with a cross, a circle with a dot, a circle with a horizontal line, a circle with a vertical line, a circle with a diagonal line, a circle with a cross, a circle with a dot, a circle with a horizontal line, a circle with a vertical line, a circle with a diagonal line, and a circle with a cross.

**WELCOME**

# Today's Objectives

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By the end of class today, you will:



Identify and declare variables containing primitive data types.



Explain and implement comparison and logical operators.



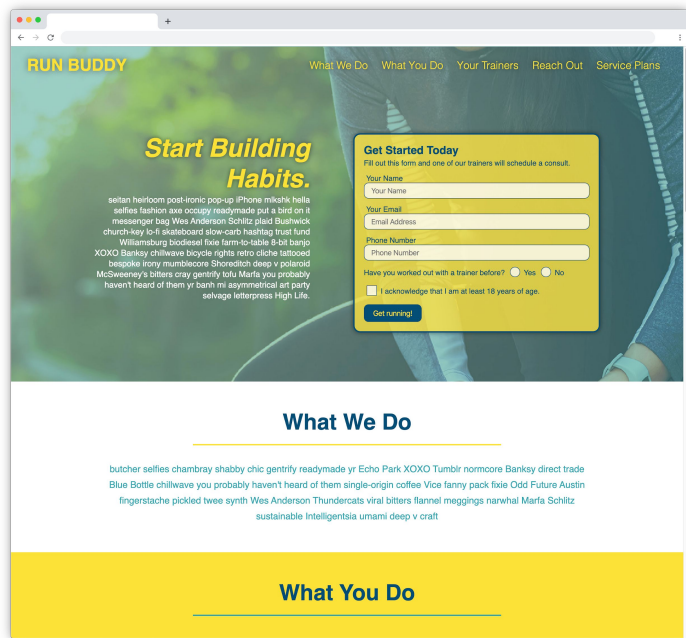
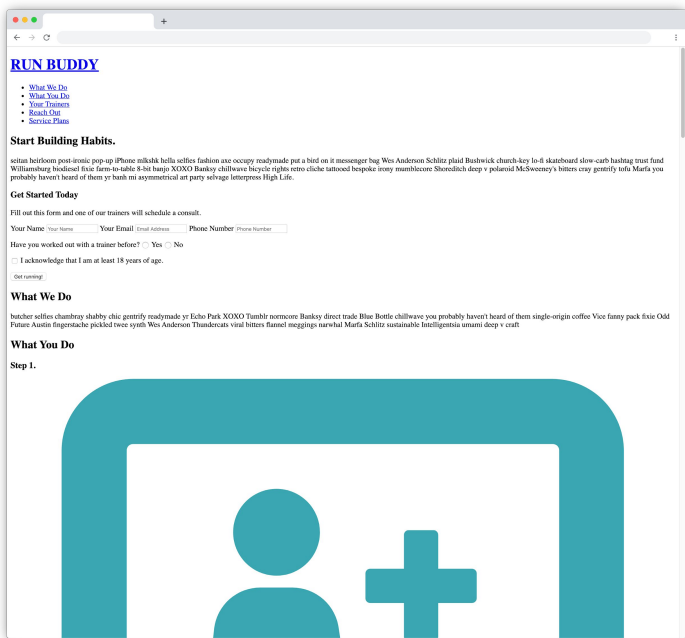
Write conditional statements using **if-else**.



What do we use HTML and CSS for?

# HTML & CSS: Languages of the Web

We use HTML to create and organize content on a page and CSS to apply styles, layout, and even animation to that content.

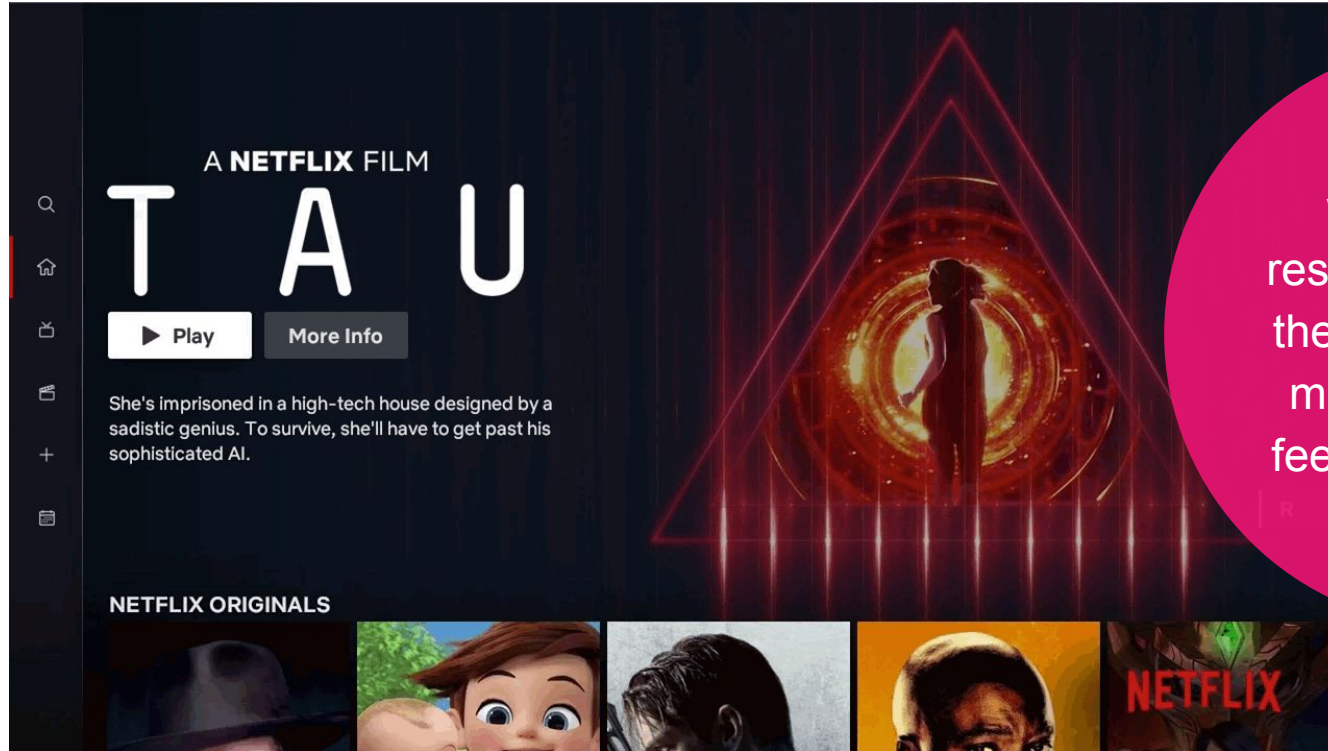




**What are some examples of how  
users interact with a webpage?**

# Interaction on Webpages

We interact with webpages in many ways on a daily basis.



Typically the webpage will respond or react to these interactions, making the page feel more dynamic and alive.

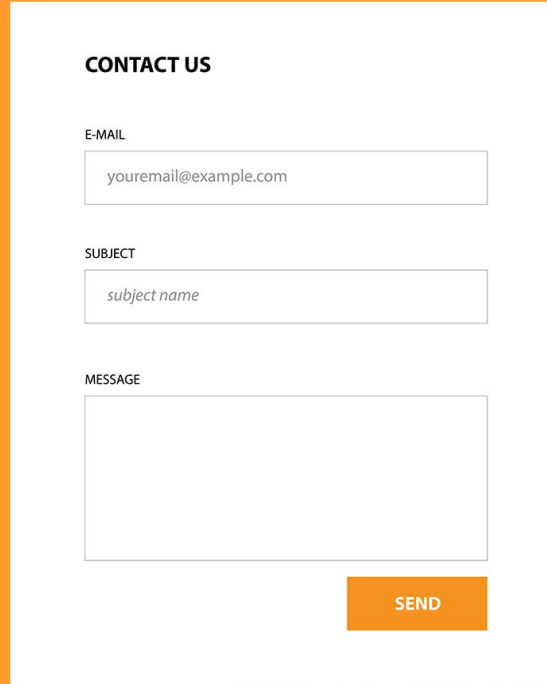


# Interaction Examples

# Interaction Examples

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Submitting an HTML form to comment on an article.



**CONTACT US**

E-MAIL

SUBJECT

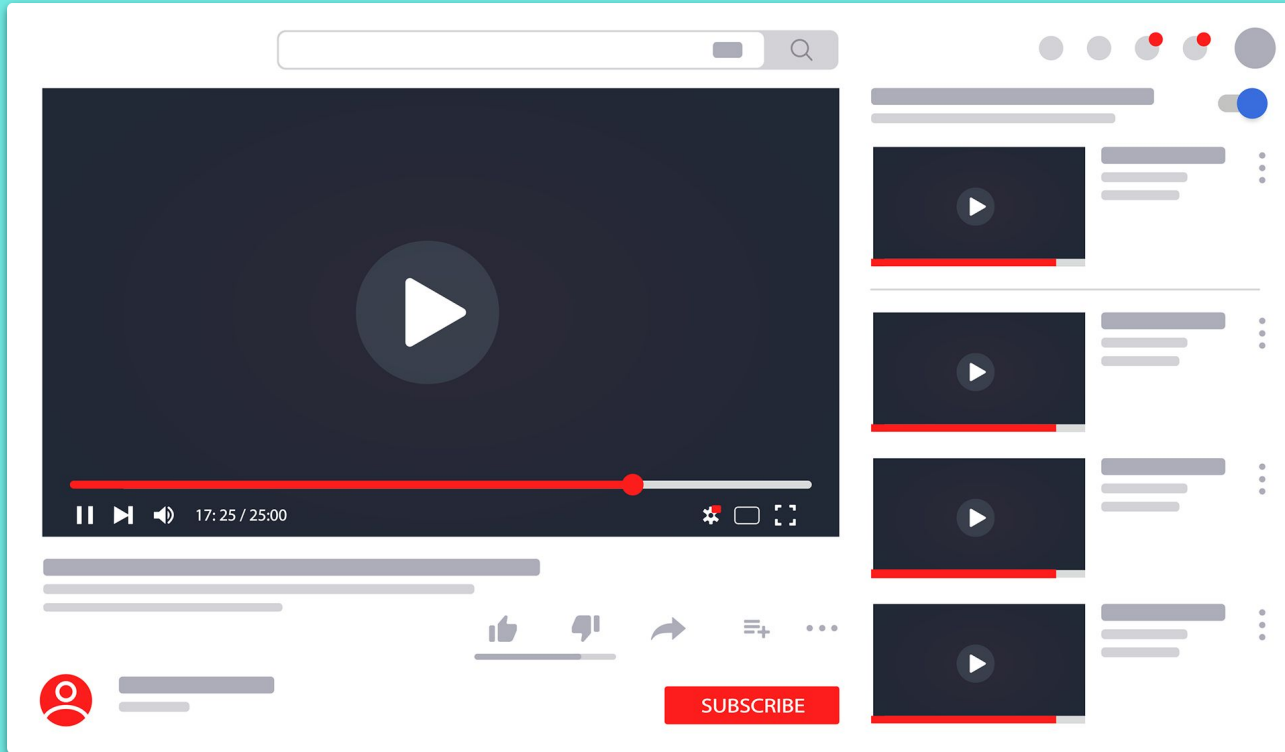
MESSAGE

SEND

# Interaction Examples

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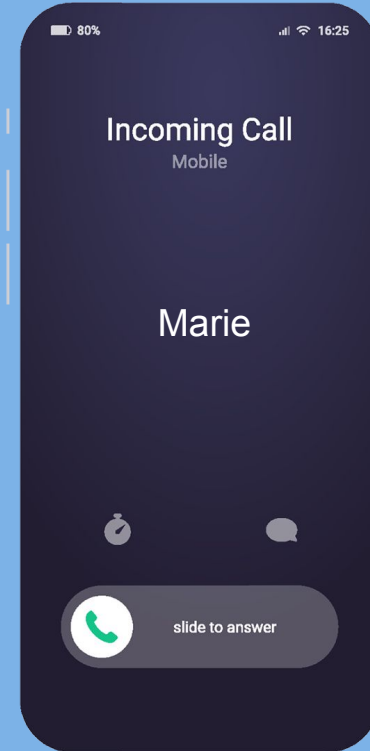
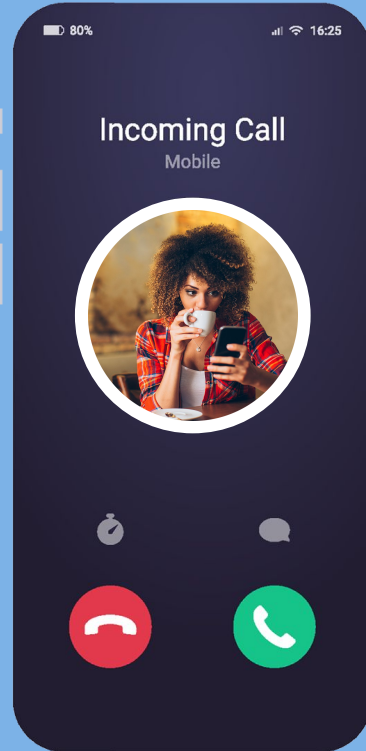
Playing audio or video at the press of a button on the page.



# Interaction Examples

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Using the device's camera or microphone to enable a conversation.





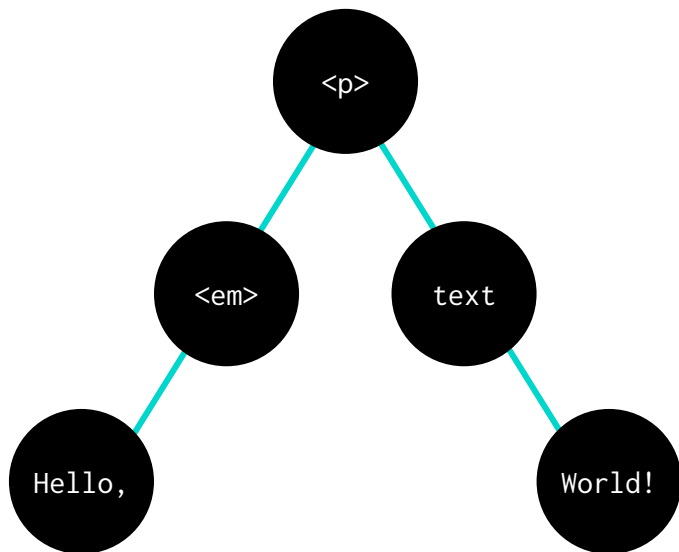
**Can we achieve these types  
of interactions using only  
HTML and CSS?**

# HTML & CSS ≠ Functional

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While HTML and CSS offer some great built-in features that give users a sense of interaction or functionality on a site, they cannot handle the complex tasks that occur in response to these interactions.

## HTML (Structure)



## CSS (Presentation)

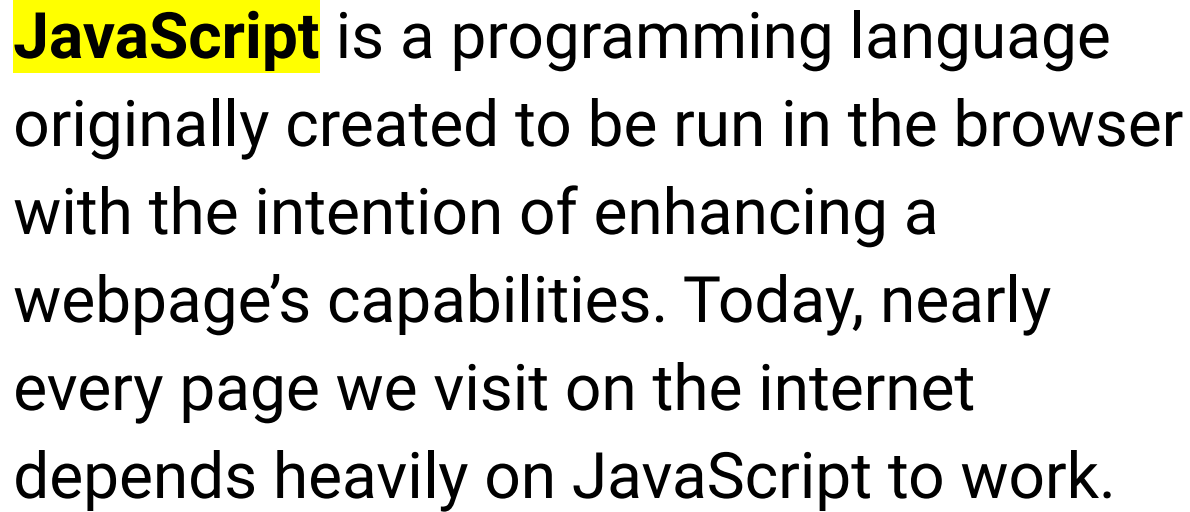
*Hello, World!*

*Hello, World!*

*Hello, World!*



For that reason, web developers  
utilize another programming  
language specifically designed  
for these tasks.



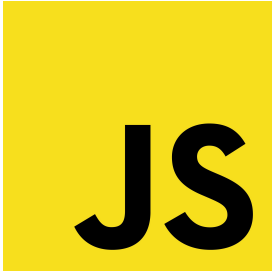


**JavaScript** is a programming language originally created to be run in the browser with the intention of enhancing a webpage's capabilities. Today, nearly every page we visit on the internet depends heavily on JavaScript to work.

# JavaScript

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While HTML and CSS handle content and design, JavaScript handles the overall functionality of the application to make it feel more alive and dynamic.

HTML	CSS	JavaScript
Used to write content.	Used to format content.	Used to create dynamic web applications that take in user inputs, change what's displayed to users, animate elements, and much more.
<b>HTML</b> 	<b>CSS</b> 	



**In what ways do we use JavaScript?**



**Front-end developers use JavaScript primarily to dynamically affect a webpage to enhance the user's experience. No other programming language can run in the browser, so JavaScript is a must-have skill for web developers.**

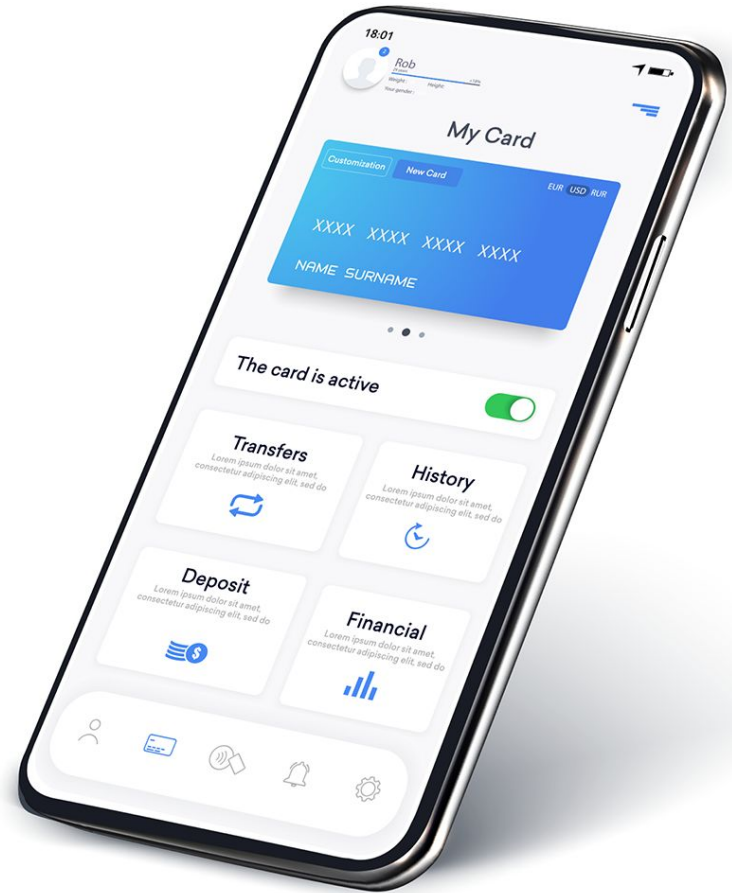


# JavaScript Examples

# JavaScript Examples

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Showing a user personal data only after they log into the application.



# JavaScript Examples

Fetching weather data to display and update on the page.

The screenshot displays the Weather Underground website interface. At the top, there is a navigation bar with links for Sensor Network, Maps & Radar, Severe Weather, News & Blogs, Mobile Apps, and More. A search bar for locations is also present. Below the navigation bar, a row of popular cities is shown with their current weather conditions and temperatures: San Francisco, CA (59°F), Manhattan, NY (55°F), Schiller Park, IL (71°F), Boston, MA (56°F), Houston, TX (77°F), and St James's, England, United Kingdom (62°F). A blue banner below this row states: "Webcam hosting service will be discontinued on October 21, 2021. Read more about our decision here."

The main content area features the weather for Upper Darby Township, PA. It includes a large weather icon (cloud with rain), the current temperature (55°F), and the feeling temperature (Feels like 53°F). To the right, there is a forecast for the next 12 hours, showing temperatures ranging from 47°F to 60°F. A button labeled "Full Forecast" is located below the main weather information.

On the right side of the page, there is an "Ads by Google" section with a button to "Stop seeing this ad" and a link to "Why this ad?".

# JavaScript Examples

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Informing users that they are missing information on a form.

**Password strength:** Too Short



Use at least 8 characters. Don't use a password from another site, or something too obvious like your pet's name. [Why?](#)

Choose your username

@gmail.com

[I prefer to use my current email address](#)

Create password

Confirm your password

Birthday

Month

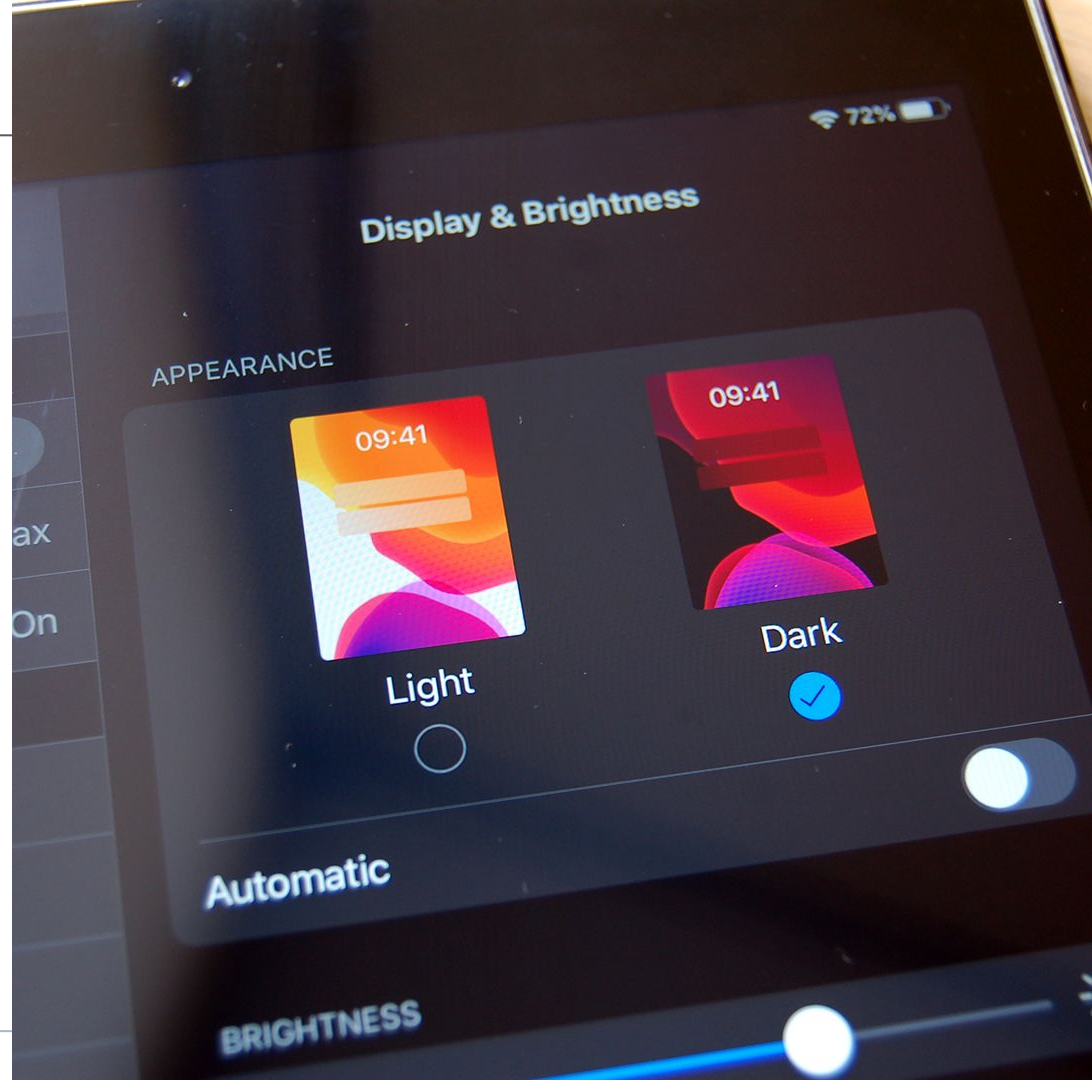


Day

Year

# JavaScript Examples

Remembering a user's preference between light and dark mode themes.





**How can we learn to use JavaScript?**

# JavaScript

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Unlike some other programming languages, JavaScript doesn't force developers to write code in a specific way. As a result, JavaScript might seem a bit complicated at first, but it can make development work feel incredibly fun and creative as you get to use it more and more.

Var keyword	Variable name	Assignment	Value	Termination
<code>var</code>	character	<code>=</code>	<code>"Snow White"</code>	<code>;</code>

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# How to Learn JavaScript

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Try some of the following techniques to learn JavaScript:



Read the docs and practice with the provided examples.



Reverse-engineer finished code to see how it was created.



Build something from scratch.

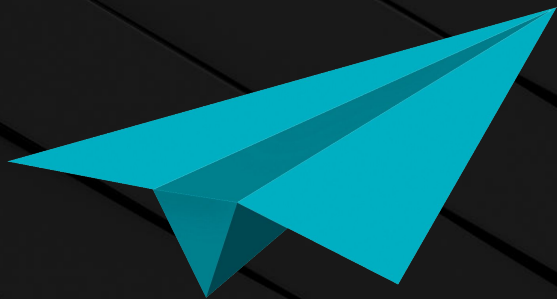


Debug a broken app using Chrome DevTools.



And most importantly, ask questions!

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Office Hours

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30 Minutes