

Software Development

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# Web APIs

Module 04



What is the web browser?

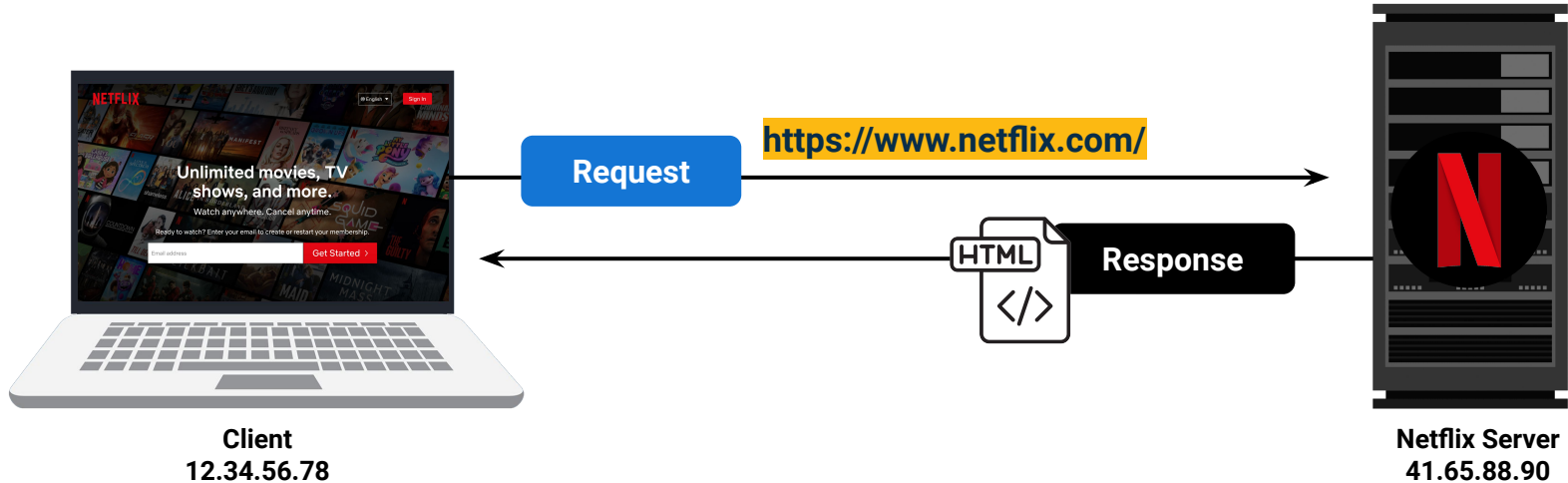


**A web browser, or browser,**  
is a program used to  
access information on  
the World Wide Web.



# Browsers Access Information on the Web

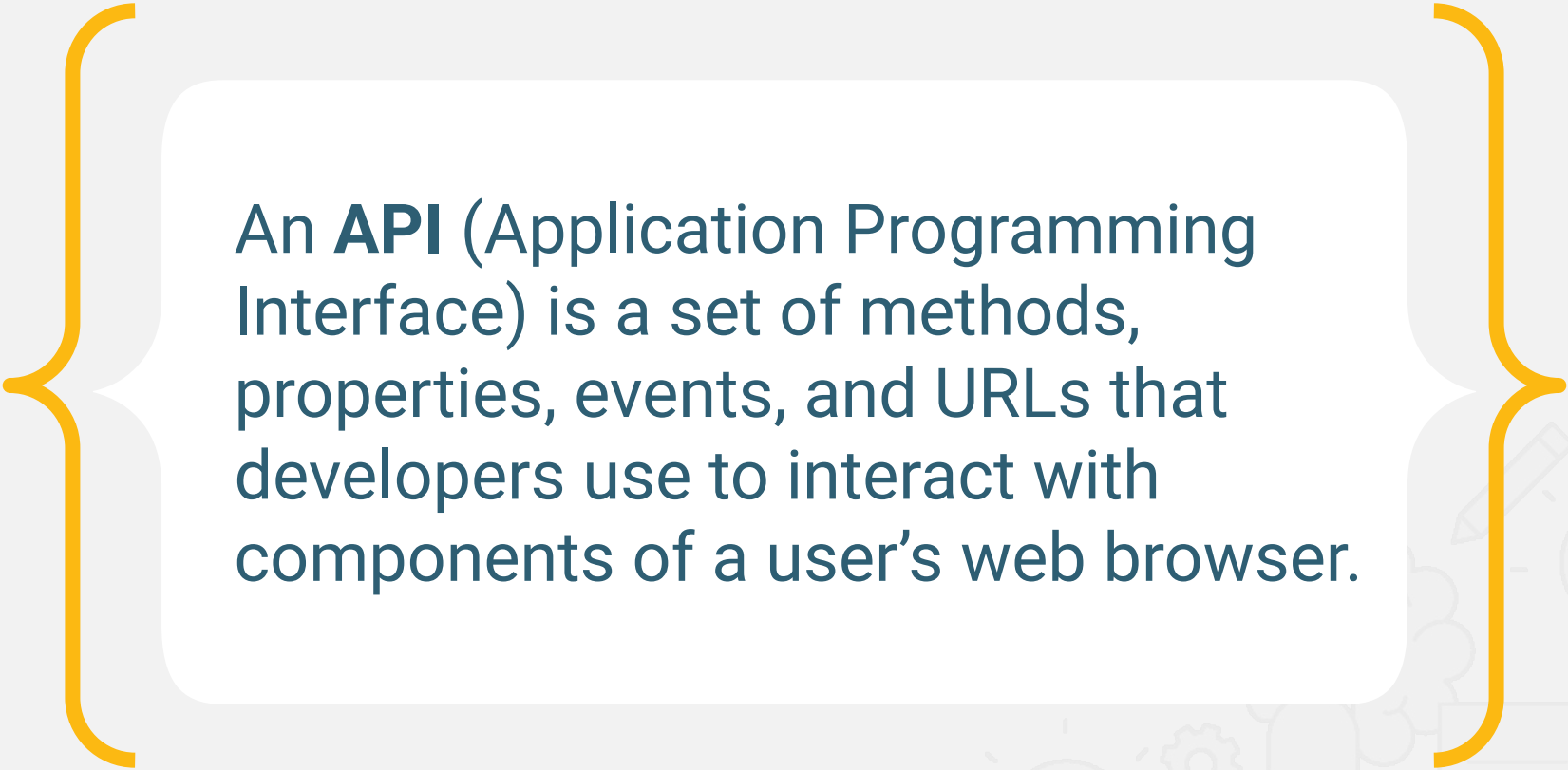
Webpages, images, and videos on the web can be accessed with a specific Uniform Resource Locator (URL). Browsers use the URL to retrieve resources from a web server and display them on a user's device.



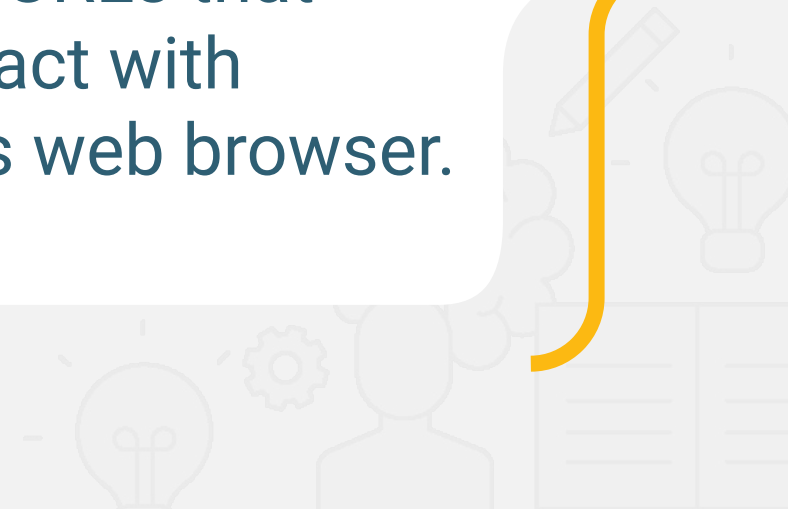


What is an API?



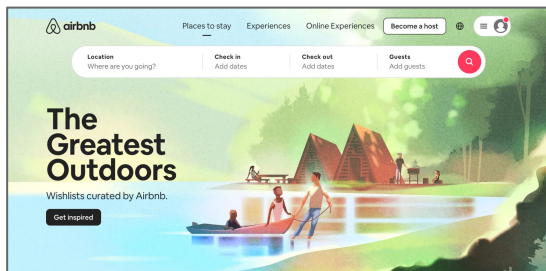


An **API** (Application Programming Interface) is a set of methods, properties, events, and URLs that developers use to interact with components of a user's web browser.

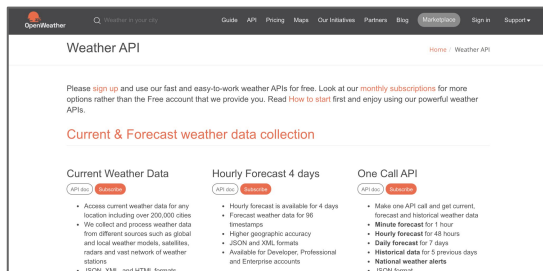


# Application Programming Interface

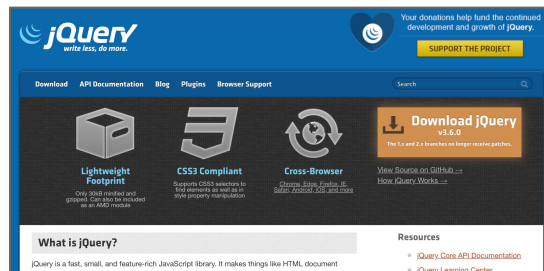
APIs can also interact with data sets, hardware or software on a user's computer, and third-party software and services.



[AirBNB](#) uses  
Google's API for maps



Google Searches for  
weather uses the [Weather  
API](#)



Even [jQuery](#) is an API



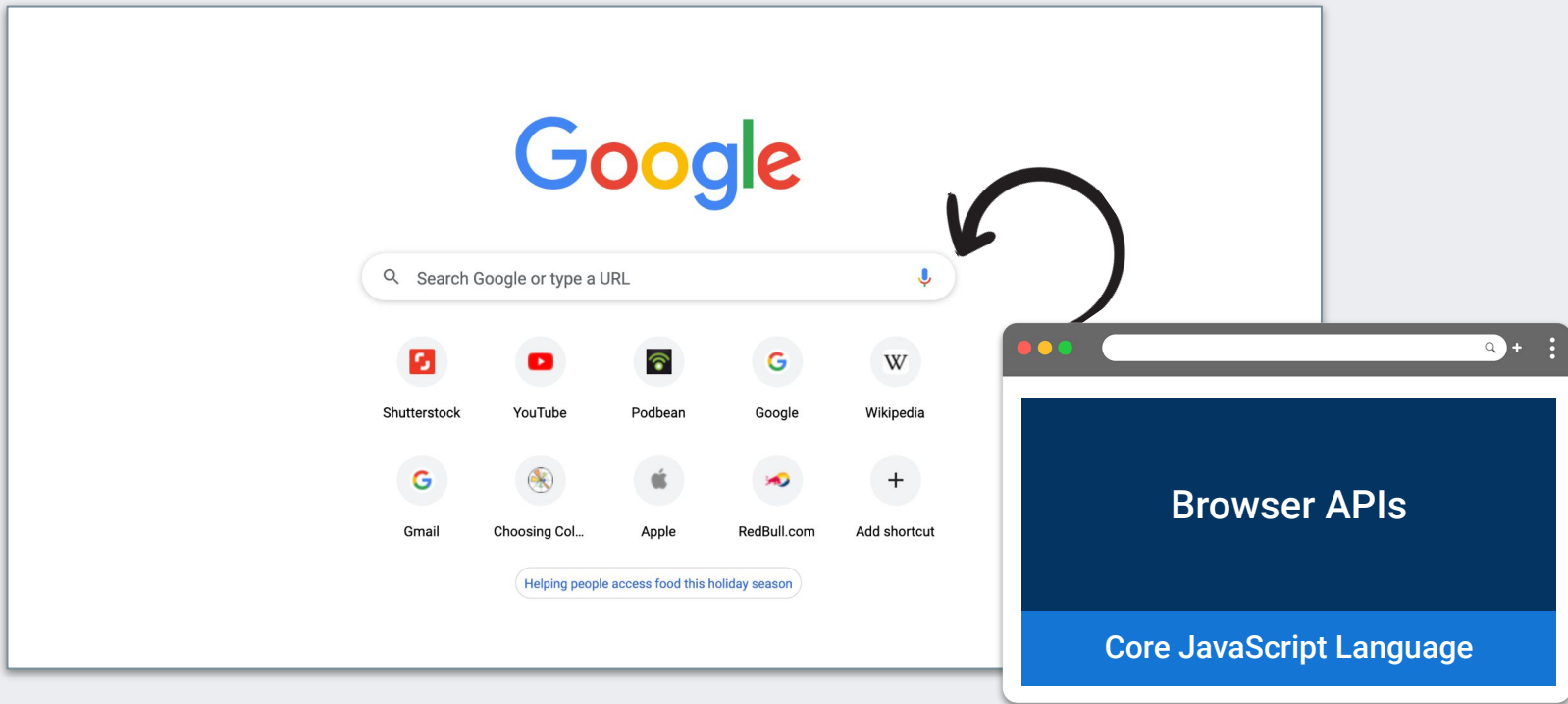
What is a Web API?





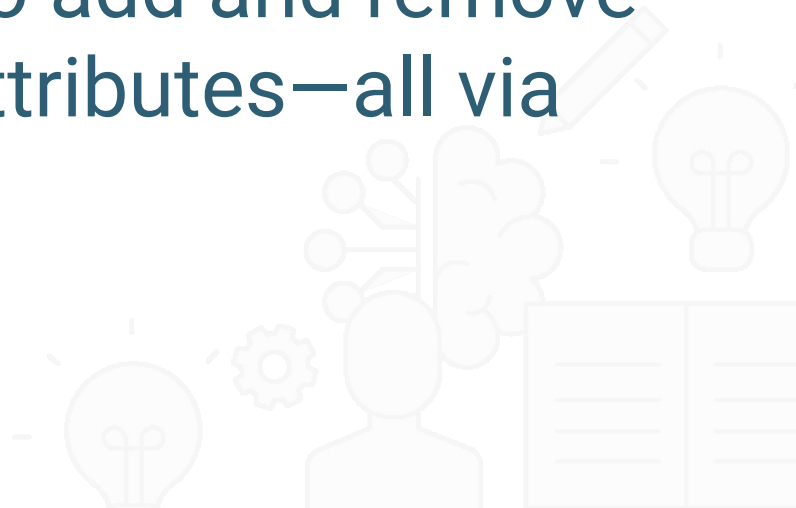
# Web APIs Use JavaScript to Manipulate Webpages

Web APIs are built into the web browser and contain methods that allow us to manipulate a webpage using JavaScript.





We use Web APIs to create elements and add them to the browser or to add and remove styles and attributes—all via JavaScript.



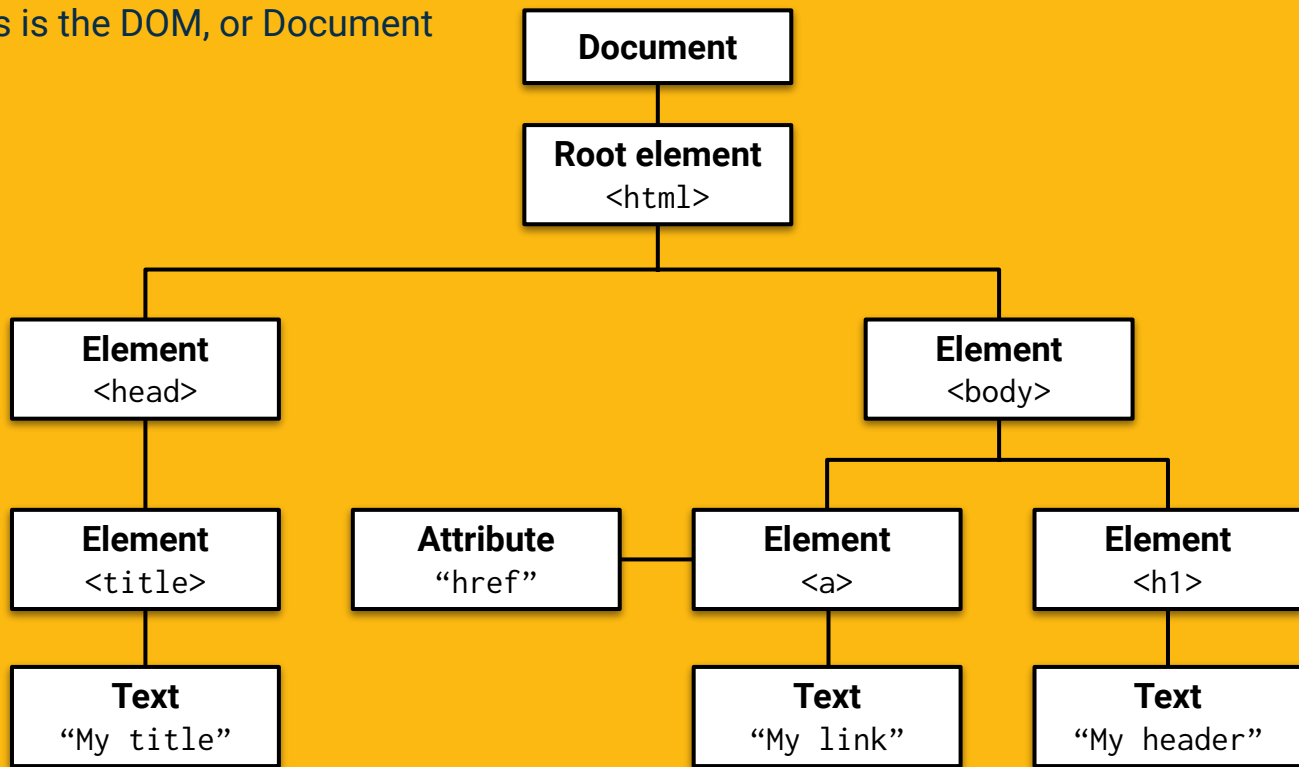


What is the DOM?



# The Document Object Model

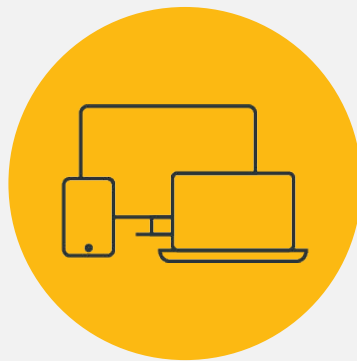
When we open a webpage, the browser creates a tree of objects that represent the opened page. That tree of objects is the DOM, or Document Object Model.





Using JavaScript, we can manipulate the DOM, rather than writing everything in HTML.





# Instructor **Demonstration**

Mini Project



**The End**