

# Appendice

## Materiale trasversale

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# Debugging & Inspecting

## Appendix

Shadi Lahham - Web development

Dev tools

# Dev tools

- Web authoring and debugging tools
- Built into the browser
- Provide developers deeper access into web applications

# Dev tools

- Modify the DOM and CSS on the fly
- Understand and debug code
- Monitor network requests
- Simulate a mobile device viewport
- Measure performance
- A lot more ...

We will look at the Chrome Developer Tools

# Try the Chrome devtools

## Open the Javascript console

- Mac: command + option + j
- Windows/Linux: control + shift + j
- Windows alternative: press F12 and select the console tab

[Open Chrome DevTools](#)

[Open Firefox DevTools](#)

Type:

```
console.log('Testing the console');  
console.error('this is an error');
```

# Dev tools

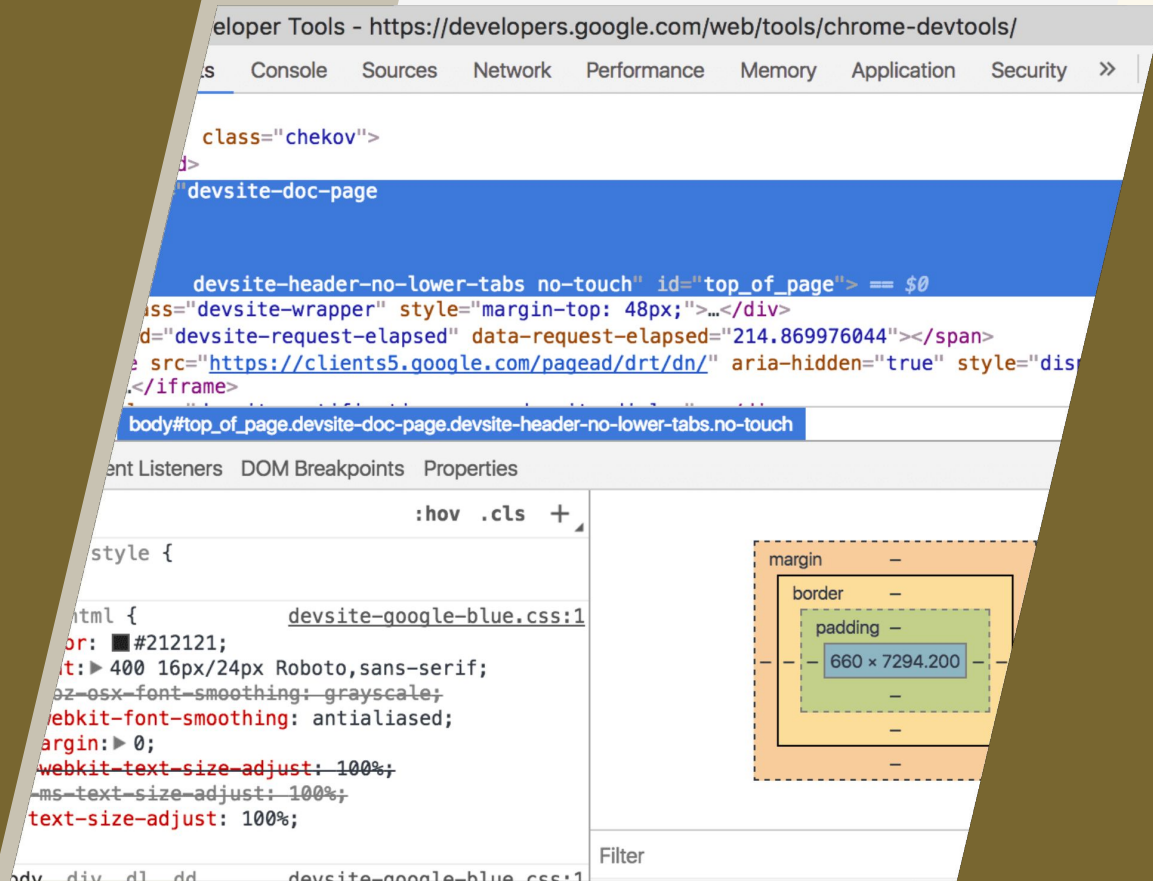
## Elements panel

View and change the DOM and CSS

Edit the HTML

Modify and add CSS properties

[More details](#)



# Dev tools

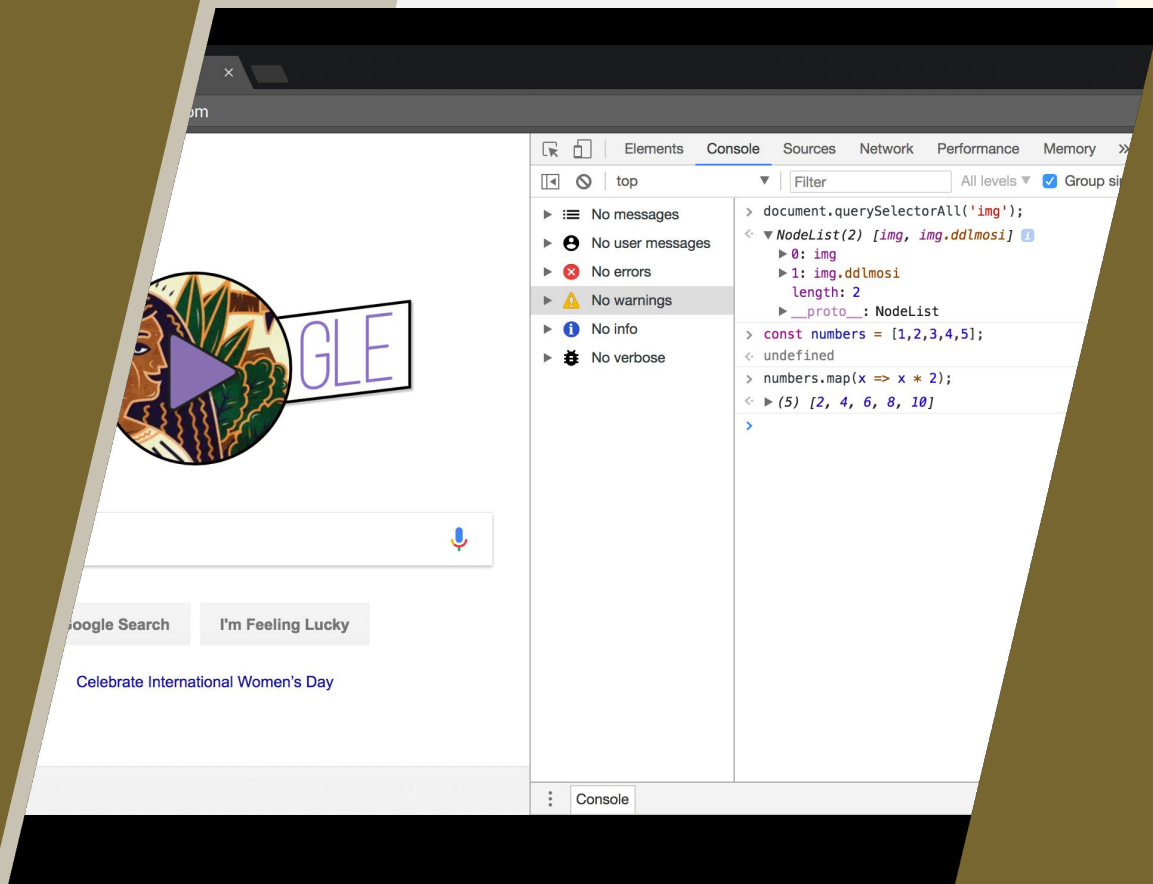
## Console panel

See error and warning messages

View the console output

Write Javascript directly

[More details](#)





# Dev tools

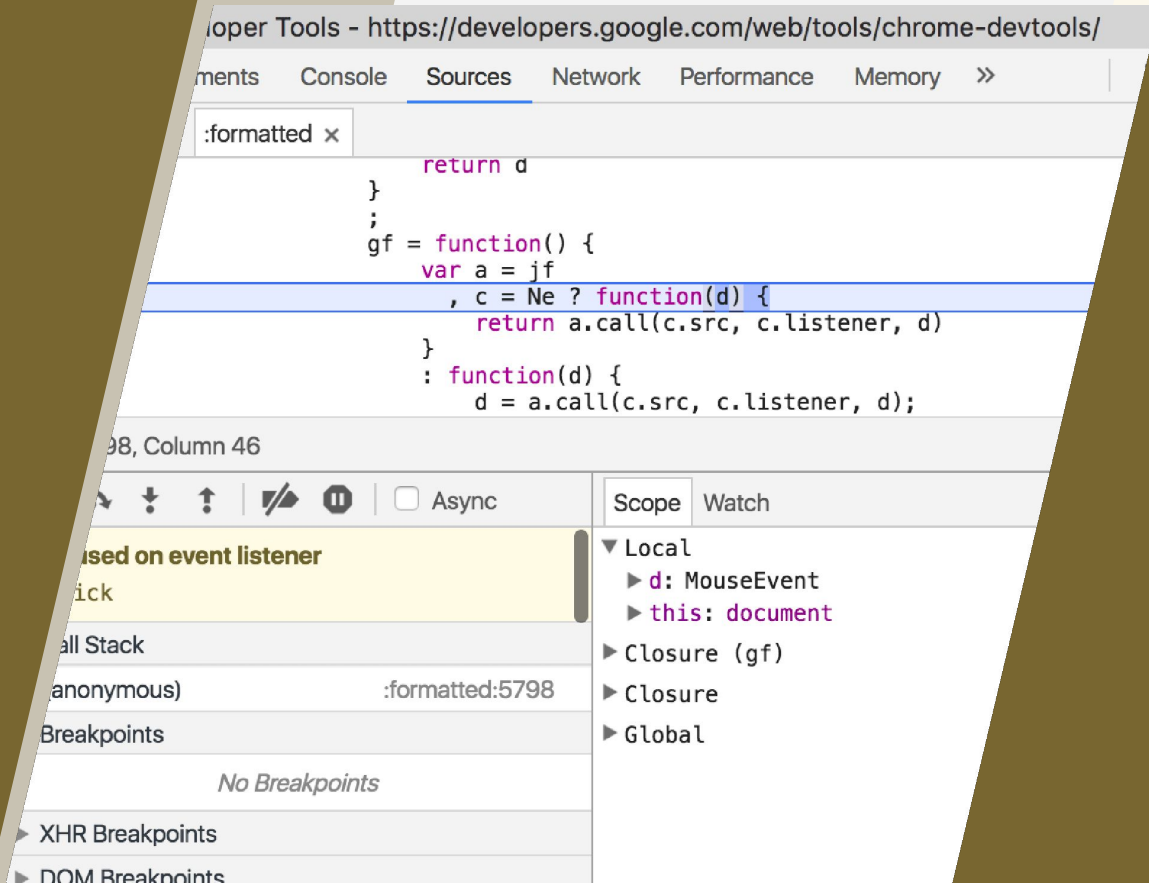
## Sources panel

Debug and edit JavaScript

Save and run snippets

Pause execution using breakpoints

[More details](#)



# Dev tools

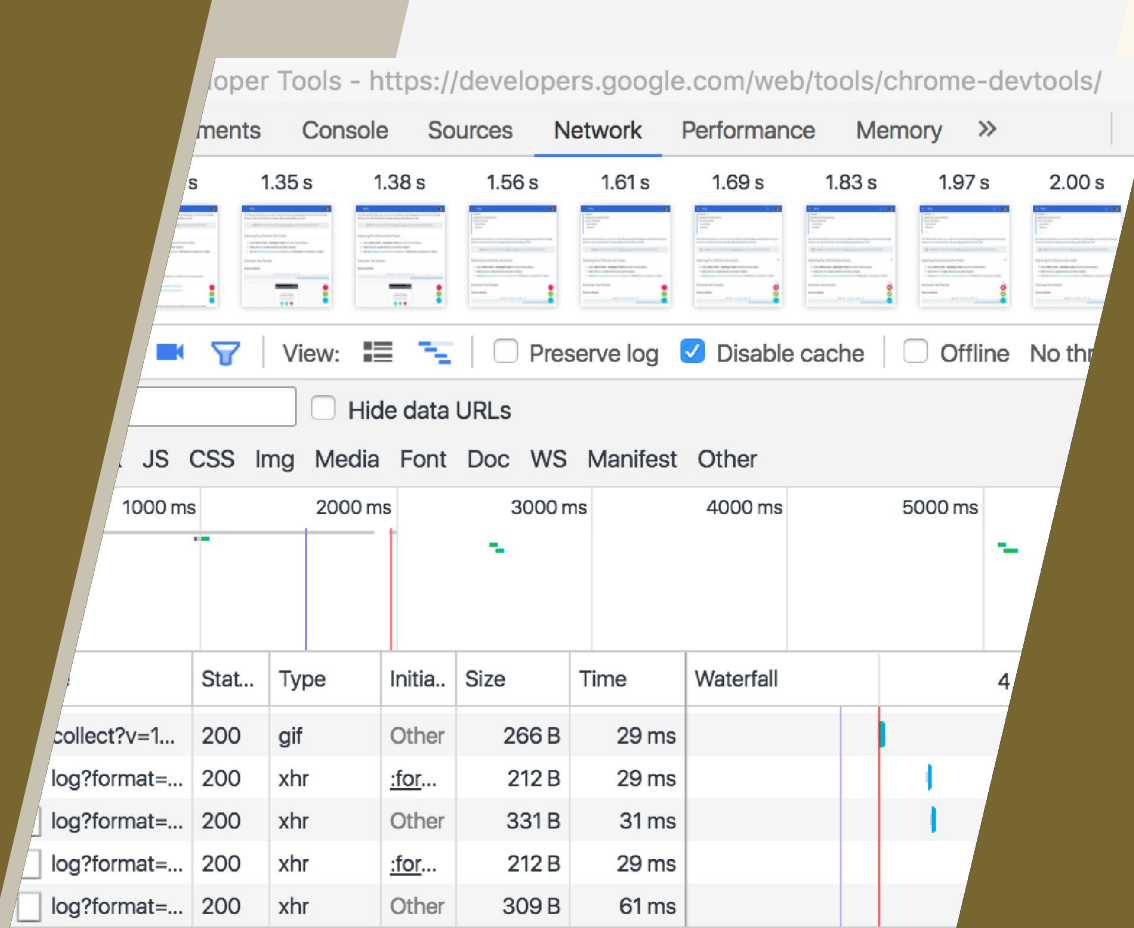
## Network panel

Monitor downloaded resources

Monitor HTTP requests

Inspect request headers, content, etc

[More details](#)

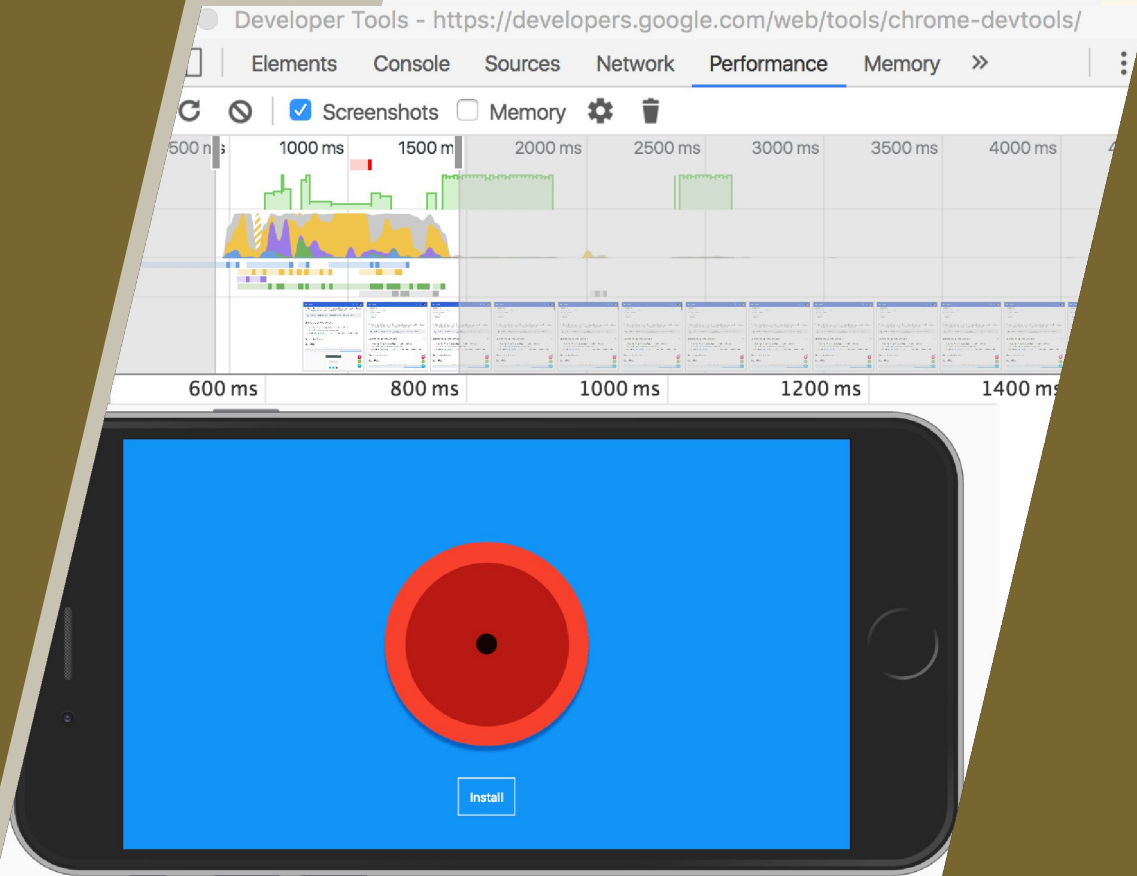


# Dev tools

## Other panels

Many tools are available  
Learn how to use them  
They are very useful

[More details](#)



# Further reading

The DOM in Chrome DevTools

[Get Started With Viewing And Changing The DOM](#)

CSS in Chrome DevTools

[Get Started With Viewing And Changing CSS](#)

# Further reading

Javascript Debugging in Chrome DevTools

[Get Started with Debugging JavaScript in Chrome DevTools](#)

[Console Overview | Tools for Web Developers](#)

[JavaScript Debugging](#)

# Further reading

## Videos

[Chrome Developer Tools \(Devtools\) Tutorial Introduction for Beginners](#)  
[Debugging JavaScript - Chrome DevTools 101](#)

Your turn

# 1. Inspect the www

- Choose one or more websites that you know
  - Choose websites that have a complex HTML structure and many Included Javascript files (in the head and body)
- Use the devtools to
  - inspect and modify the page (HTML, CSS, Javascript)
  - Check the responsiveness of the page for various mobile devices (breakpoints)
  - Console output (errors, warnings, etc)
  - Examine the Javascript code, try to stop it at different points and examine the variables
  - Check network requests and resources that are downloading
    - If the site has the possibility to upload files, also check uploading of resources

Continues on next page >>>



# 1. Inspect the www

- Document your findings in a markdown .md file
- The file should be well formatted, divided into sections, and contain all links and relevant references
- The file should at least contain the names of participants, your approach and findings.

## 2. Inspect your code

- Create an HTML page with an included Javascript file
  - The HTML page should include some content describing what you are doing
  - The Javascript file should do something useful and contain at least 3 functions and many of the language features that you have learned so far
  - The project should also include a readme.md file
- Inspect your page
  - Inspect your page with devtools
  - In particular try to use the Javascript debug tools in the 'source' panel
  - Document any findings in the readme.md file