COESIONE ITALIA 21-27 PIEMONTE

Cofinanziato dall'Unione europea

REGIONE PIEMONTE

Appendice

Materiale trasversale

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Intervento realizzato da ITS TECNOLOGIE DELL'INFORMAZIONE E DELLA COMUNICAZIONE

Debugging & Inspecting

Appendix

Shadi Lahham - Programmazione frontend

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

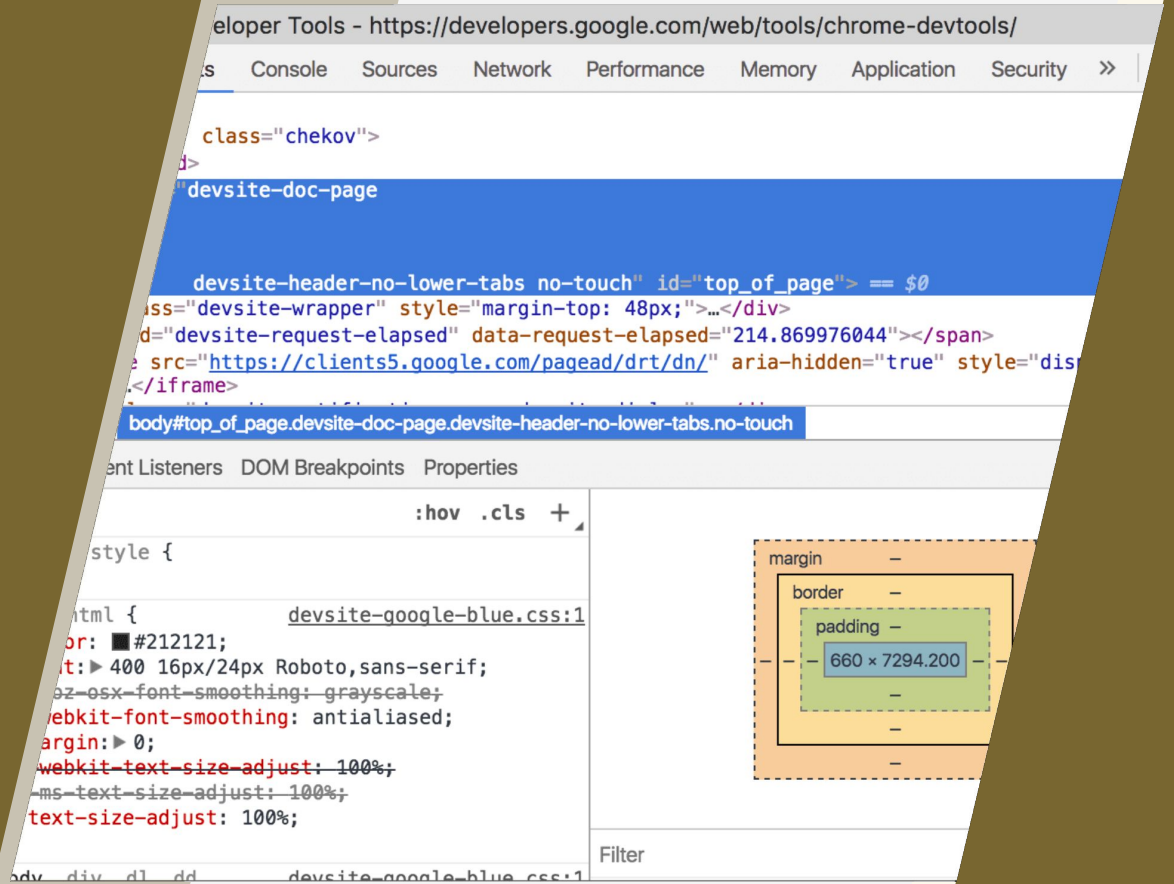
Type:

```
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

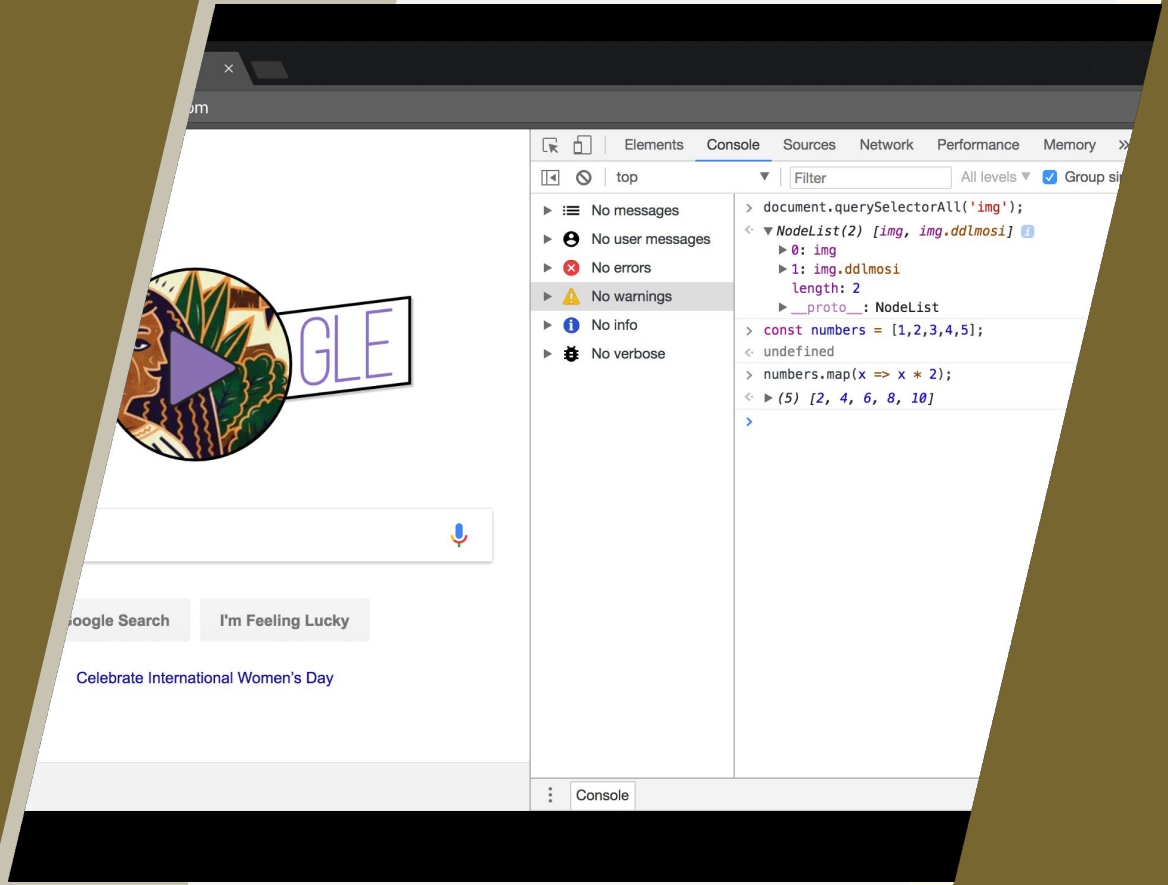
More details



Dev tools
Console panel

See error and warning messages
View the console output
Write Javascript directly

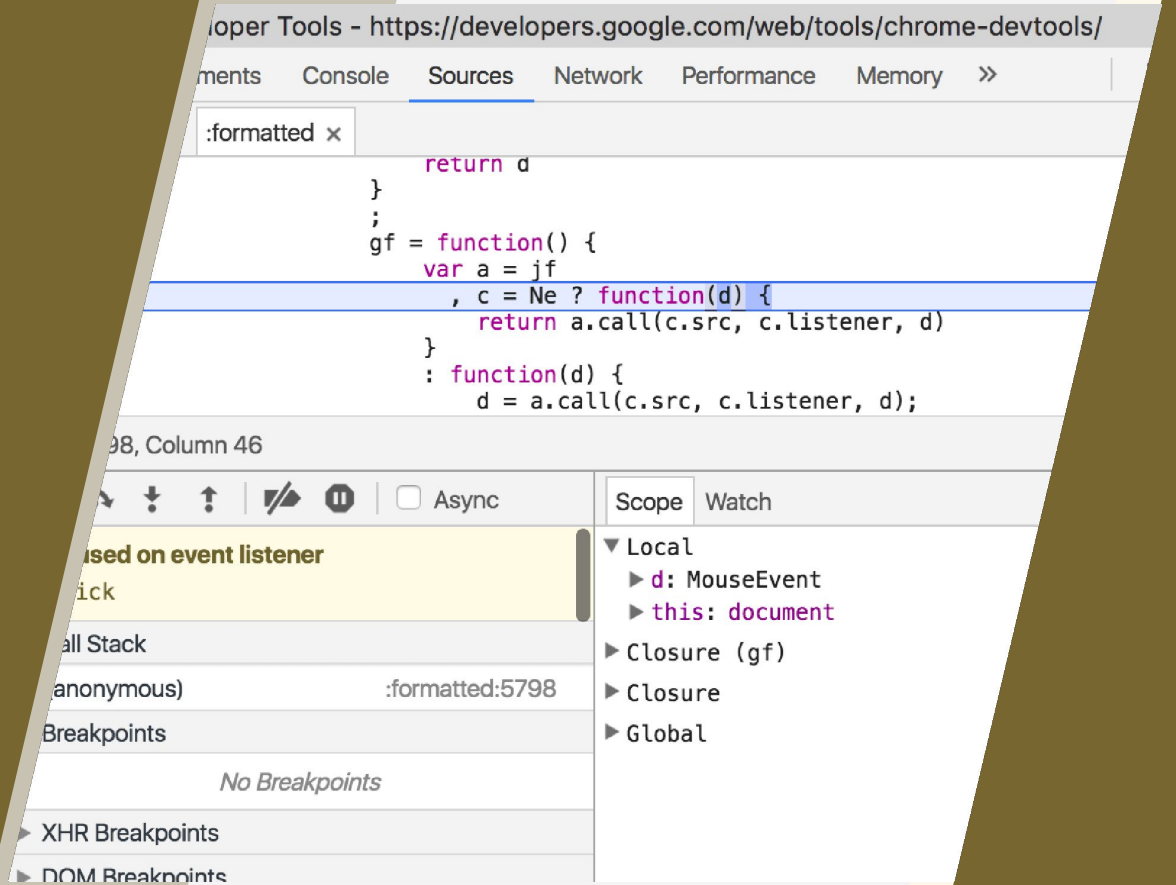
More details



Dev tools
Sources panel

Debug and edit JavaScript
Save and run snippets
Pause execution using breakpoints

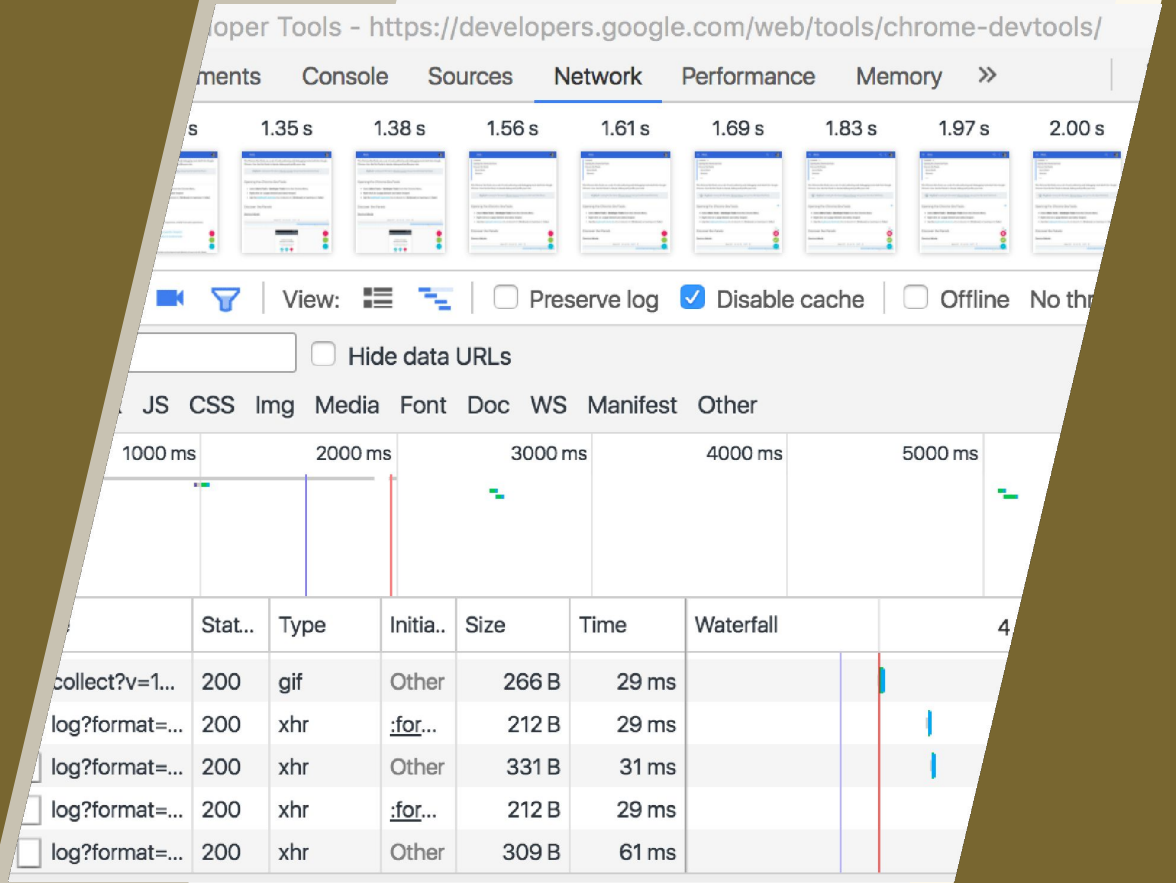
More details



Dev tools
Network panel

Monitor downloaded resources
Monitor HTTP requests
Inspect request headers, content, etc

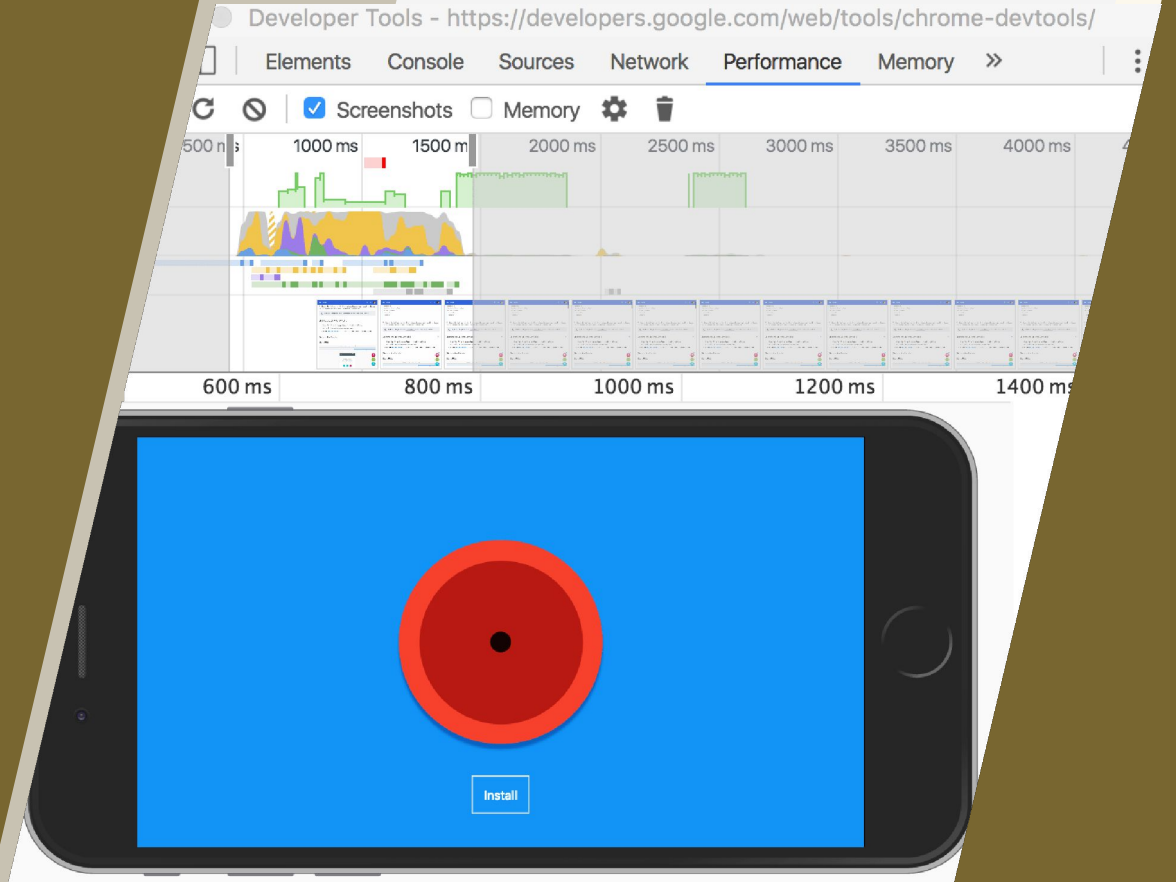
More details



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