Recap of HTML/CSS and Javascript

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What makes someone good at programming?

Thoughts on programming

➤ Understand the main concepts, look up the details

  ➤ Searching (google, documentation, even stackoverflow) is an important skill

  ➤ Read the documentation

➤ Problem solving, be persistent!

➤ When debugging, try to break down the problem

Today

➤ HTML recap

➤ CSS

  ➤ Recap

  ➤ New: Flexbox

➤ Javascript

  ➤ Recap

  ➤ Functional

HTML

➤ What's that again?

➤ Anatomy of a webpage

➤ Semantic HTML

Hyper Text Markup Language

Markup

[mass noun] Computing a set of tags assigned to elements of a text to indicate their relation to the rest of the text or dictate how they should be displayed: *[as modifier]* : *markup languages.*

Some dictionary

Hyper Text Markup Language

➤ Outlines structural elements of web pages

➤ Important for SEO and screenreaders

```
<h1>A level one heading</h1>
```

(You know how word messes up your Table of Contents if you don't use the right heading levels? Kinda works the same for screenreaders with HTML tags.)

Semantic tags

➤ html

➤ Head

➤ body

➤ Header

➤ footer

➤ Nav

➤ Section

➤ Block quote, cite

➤ Output

➤ Progress

➤ Aside

➤ Embed

https://developer.mozilla.org/en-US/docs/Web/HTML

Anatomy of a webpage

Bare essentials

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <title>Gerrit Neven</title>
  </head>
  <body>

  </body>
</html>
```

➤ DOCTYPE

   ➤ Specifies that it's HTML and what version (used to be lots of variations, now it's just 'html')

➤ head

   ➤ Specifies information about the page (used by browser, SEO, links in social media)

   ➤ Title will show up in the tab bar

➤ body: contains actual page content

```html
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <title>Gerrit Neven</title>
  </head>
  <body>
    <header>
      <nav>
        <a href="#">About</a>
        <a href="#">Portfolio</a>
        <a href="#">Github</a>
      </nav>
    </header>

    <main>
      […]
    </main>

    <footer>
        […]
    </footer>

  </body>
</html>
```

```html
<body>
  <nav>
    [...]
  </nav>

  <main>
    <h1>Gerrit Neven</h1>
    <section>
      <h1>Work Experience</h1>
      <ul>
        <li>Freelance developer – 2017 to present</li>
        <li>Web developer – Hertzian – 2015 to 2016</li>
      </ul>
    </section>

    <section>
      <h1>Education</h1>
      <ul>
        <li>Digital Art & Technology – Plymouth University</li>
        <li>Communication & Multimedia Design – Hogeschool Avans</li>
        <li>Voortgezet Wetenschappelijk Onderwijs – de Passie</li>
      </ul>
    </section>
  </main>

  <footer>
    Thanks for reading! – All rights reserves © 2018
  </footer>

</body>
```
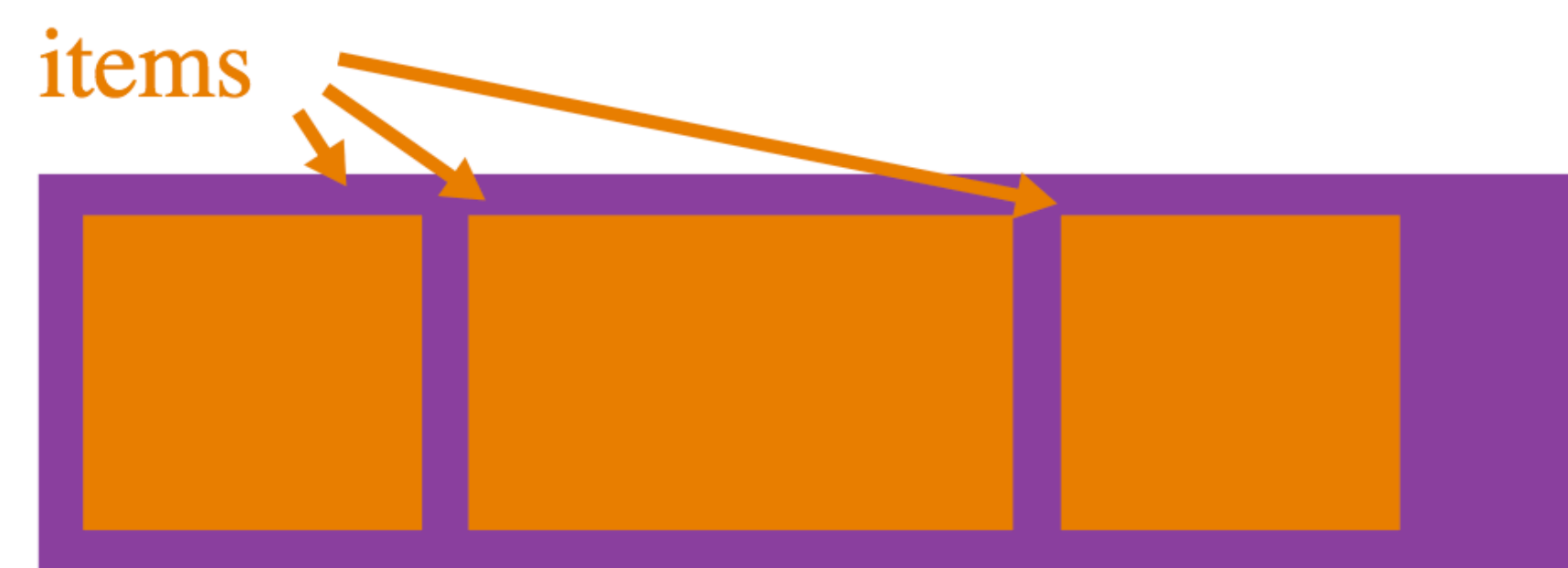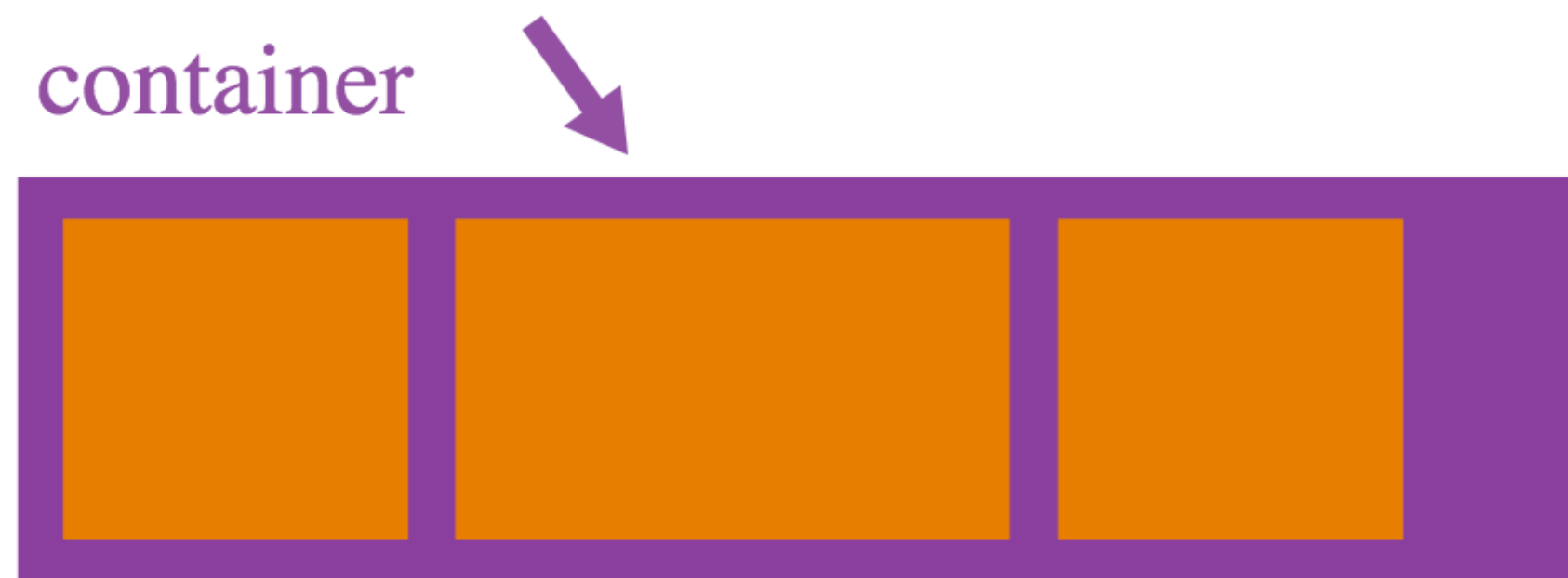
➤ Reading: https://internetingishard.com/html-and-css/semantic-html/

CSS

Cascade Style Sheet

➤ Cascades (surprise)

➤ Selectors

  ➤ elements

  ➤ Classes

  ➤ ID's

  ➤ pseudo-selectors

Flexbox

➤ New alternative to floating for page layouts

➤ Based on elements adjusting ('flexing') to available space

➤ Enable flexbox by settings `display: flex`

```html
<div class="parent">
    <div class="child"></div>
    <div class="child"></div>
</div>
<style media="screen">
    .parent {
        display: flex; /* activate flexbox mode for children elements */
    }
</style>
```

Flexbox

Flex: parent

➤ Flex-direction: set main axis (row for x, column for y)

➤ justify-content: alignment on main axis

➤ align-items: alignment on cross axis

Flex: child

➤ Flex: set relative sizes

➤ align-self: sets individual alignment on secondary axis/go "rogue"

Flexbox reading list

https://css-tricks.com/snippets/css/a-guide-to-flexbox/

https://internetingishard.com/html-and-css/flexbox/

Lets play around with flexbox