

RESPONSIVE CSS TECHNIQUES

// TODO

Hathon prizes

Everything is a Grid

Relative Units

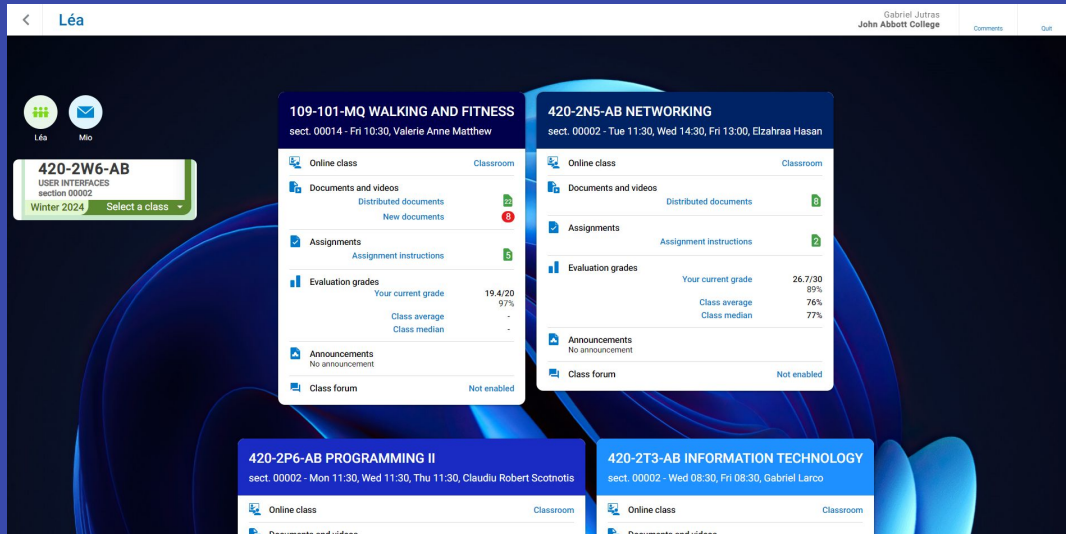
Media Queries

Mobile first TM

Lab time

HACKATHON PRIZES.





Better Windows

Alessandro, Gabriel, Nik, and Avery

"Relaxing Windows blue themed page that also got rid of all unnecessary elements that a student wouldn't normally use on a day-to-day basis, we wanted the most minimal interface possible."

DISCO REVIVAL

Marie and Vithusa

"Take a website that is usually so boring and mundane and make it fun and NEON."

The screenshot displays a user interface for a website named 'Léa', designed with a vibrant, neon-themed aesthetic. The background is a dark, textured surface adorned with a dense pattern of colorful geometric shapes (triangles, squares, circles) and confetti. The interface is organized into several key sections:

- Top Navigation:** Includes a user profile section for 'Marie Kiriloukhine' and 'John Abbott College', along with icons for 'Comments' and 'Out'.
- Left Sidebar:** Features a 'My classes' section with a green header and a list of navigation options: 'Assignments', 'Calendar', 'Class Forum', 'Course documents', 'Grades', 'List of my absences', 'Online classes', 'Recommended Websites', and 'Teachers info'. The 'My classes' section is currently expanded, showing details for '420-2P6-AB PROGRAMMING II section 00002' for 'Winter 2024'.
- Main Content Area:** Titled 'Activity in my classes', it features a red header for '109-101-MQ WALKING AND FITNESS' (sect. 00014 - Fri 10:30, Valerie Anne Matthew). Below this, there are several informational cards: 'Online class' (Classroom), 'Documents and videos' (Distributed documents, New documents), 'Assignments' (Assignment instructions), 'Evaluation grades' (Your current grade: 18.2/20, 91%; Class average, Class median), 'Announcements' (No announcement), and 'Class forum' (Not enabled).
- Right Sidebar:** Contains a 'Calendar' section for 'March 2024' with a grid view showing dates 1 through 31. Below the calendar is a 'Summary' section with a 'Legend'.
- Bottom Bar:** Features a 'Mio' button with an orange arrow icon.

The background of the slide is a dark blue gradient with various gambling-related icons in lighter shades of blue. These include a roulette wheel at the top center, a die at the bottom right, and playing cards (Ace of Spades and Ace of Hearts) at the bottom left. The text 'Stake.com' is prominently displayed in the center-left.

Stake .com

Unstake

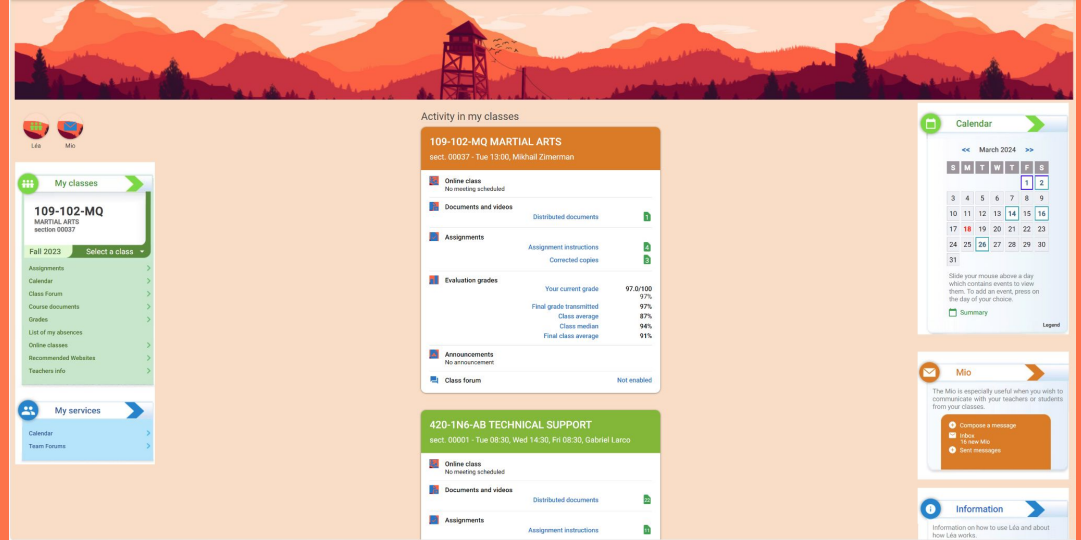
Massimo, Zack, Nas

"Stake Gambling looking omnivox."

FireWatch

Jake, Malik, Cody, Omar

"Fighting Fires with very minimalistic design philosophies. The colour scheme is simply better than all of our competitors and our overall design is also superior in every way and we deserve to get 1st place and it's not close."





BETTERVOX

Labiba, Christel, Mariya

"Create a lea page that calms students and doesn't bring stress to them. It also should be appealing to the eye instead of having a boring old design that hasn't been updated in 15 years."




UNATCO

Vlad

"Create an omnivox page similar to the computer terminal interface from deus ex."



Omnivox


Vladyslav Ponomarchuk


John Abbott College


Search

Comments


Quit





Lea

Mio


My Services


My Home Page


Personnel Directory


Mia - Casgrain Sport Centre


My Omnivox Services


Academic Advisor Appointment


Attendance Validation


Cancelled Classes


Carpooling


Course Registration

Course Schedule

Document Request


Employment Centre - Jobs and Volunteer

Information intended for you

Internships

Latest News

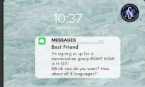
Display all




Welcome to John Abbott College

JOIN A CLUB


CLUB MEETINGS WEEK OF MARCH 11TH - MARCH 15TH - JOIN A CLUB!!!
March 11, 2024



Learn a new language or revisit an old one! View the full schedule here
March 15, 2024



ENGINEERING TECH. STUDENT PROJECT EXPO
March 15, 2024



Antidote workshops:
March 1

What's new?

52 new documents from your teachers

Events

Month view

Friday 15 March 14:28 to 16:00 22:58 COURSE - LECTURE & LAB - User Interfaces 420-296-AB sect. 00002 P-325	Saturday 16 March 22:58 ASSIGNMENT TO SUBMIT Programming II 420-296-AB sect. 00002 Assignment 2	Sunday 17 March Day Division - Academic progress. Deadline @ 11:59 pm	Monday 18 March 8:30 to 10:30 COURSE - LECTURE Pillars of the American Musical 683-102 HQ sect. 00004 HO-002	Monday 18 March 11:28 to 12:00 COURSE - LECTURE & LAB - Programming II 420-296-AB sect. 00002 P-327	Monday 18 March 12:08 to 14:38 COURSE - LECTURE & LAB - User Interfaces 420-296-AB sect. 00002 P-325	Tuesday 19 March ASSIGNMENT TO SUBMIT Literature et univers 683-102 HQ sect. 00004 Montes Rlo Zola - Contexte historique - Analyse littéraire -	8:30 P-326
---	---	---	---	---	--	--	---------------



109-102- MO VOLLEYBALL	420-2N5- AB NETWORKING	420-2P6- AB PROGRAMMING II	420-2T3- AB INFORMATION TECHNOLOGY	420-2W6-AB USER INTERFACES
sect. 00005 - Fri 10:30, Mikhail Zimerman	sect. 00002 - Tue 11:30, Wed 14:30, Fri 13:00, Elzahraa Hasan	sect. 00002 - Mon 11:30, Wed 11:30, Thu 11:30, Claudiu Robert Scotnott	sect. 00002 - Wed 08:30, Fri 08:30, Gabriel Larco	sect. 00002 - Mon 13:00, Tu 08:30, Fri 14:30, Larry Fagen
Online class Classroom	Online class Classroom	Online class Classroom	Online class Classroom	Online class Class
Documents and videos Distributed documents	Documents and videos Distributed documents	Documents and videos Distributed documents	Documents and videos Distributed documents	Documents and videos Distributed documents
Assignments Assignment instructions Corrected copies	Assignments Assignment instructions New assignments	Assignments Assignment instructions New documents	Assignments Assignment instructions	Assignments Assignment instructions Corrected copies
Evaluation grades Your current grade 10.0/10 Class average 100% Class median 100%	Evaluation grades Your current grade 27.0/30 Class average 77% Class median 79%	Evaluation grades Your current grade 18.2/23 Class average 79% Class median 75%	Evaluation grades Your current grade 22.7/25 Class average 90% Class median 91%	Evaluation grades Your current grade 13 Class average Class median
Announcements No announcement	Announcements No announcement	Announcements No announcement	Absences and late arrivals 15 h	Announcements Mar 18 Exercises Mar 18 Exercises 2
	Class forum Not enabled			

Splace

Luca, Jason, Lana

"Space themed lea."

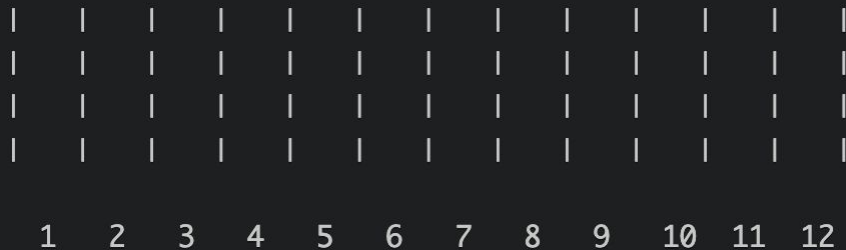


Lecture time : ^)

EVERYTHING IS A GRID.

What is a Grid-View?

Many desktop web pages are based on a grid-view, which means that the page is divided into columns (usually 12) and has a total width of 100%



What is a Grid-View?

Using a grid-view is very helpful when designing web pages. It makes it easier to place elements on the page because you can dedicate a certain element's total width relative to other elements.



But how do we determine the width of
each element?

HEIGHT / WIDTH VS
PADDING.

Making content “wider”.

Avoid setting width directly as much as possible.

```
/* DO */  
main {  
    padding-right: 40px;  
    padding-left: 40px;  
}
```

```
/* DON'T */  
main {  
    width: 50%;  
}
```

Making content “taller”.

Avoid setting height directly as much as possible.

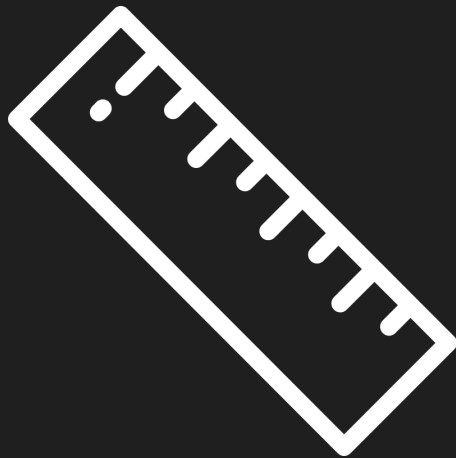
```
/* DO */  
main {  
    padding-top: 40px;  
    padding-bottom: 40px;  
}
```

```
/* DON'T */  
main {  
    height: 50%;  
}
```

PIXELS VS PERCENTAGE / RELATIVE UNITS

Pro Tip.

Use dynamic sizing whenever possible.



%.

Use percentages (%) to divide containers into portions.

```
/* DO */  
.col {  
  width: 33.33%;  
}
```

```
/* DON'T */  
.col {  
  width: 200px;  
}
```

Em.

Use em for element sizes, where the size adjusts relative to the parent.

If i have the following HTML code, what should the CSS look like?

```
<div class="container">  
  <button class="button small">Small Button</button>  
  <button class="button large">Large Button</button>  
</div>
```

```
.container {  
  font-size: 1rem; /* Base font size for the container */  
}  
/* Button font size relative to the container font size */  
.button {  
  font-size: 1em;  
}  
/* Smaller font size relative to the container font size */  
.small {  
  font-size: 0.8em;  
}  
/* Larger font size relative to the container font size */  
.large {  
  font-size: 1.2em;  
}
```

```
/* Everything has a fixed size */  
.container {  
  font-size: 16px;  
}  
.button {  
  font-size: 12px;  
}  
.small {  
  font-size: 8px;  
}  
.large {  
  font-size: 14px;  
}
```


Rem.

Use of the rem unit for text sizes, where the sizes adjust relative to the root font size set by the user's preference.

If i have the below HTML code, what should the CSS be?

```
<html lang="en">
  <!-- other stuff -->
  <body>
    <div>
      <!-- more divs -->
      <div>
        <p>I am a deeply nested paragraph</p>
      </div>
      <!-- more closing divs -->
    </div>
  </body>
</html>
```

```
/* Default root font size */
:root {
  font-size: 16px;
}
/* Base font size - which translates to 16px
body {
  font-size: 1rem;
}
/* Text size relative to the root font size -
p {
  font-size: 0.8rem;
}
```

```
/* Everything has a fixed size */
:root {
  font-size: 16px;
}
body {
  font-size: 12px;
}
p {
  font-size: 20px;
}
```

MAX AND MIN
HEIGHT / WIDTH

Pro Tip.

Set limits on how much an element's size can grow/shrink, use min- and max- properties instead.

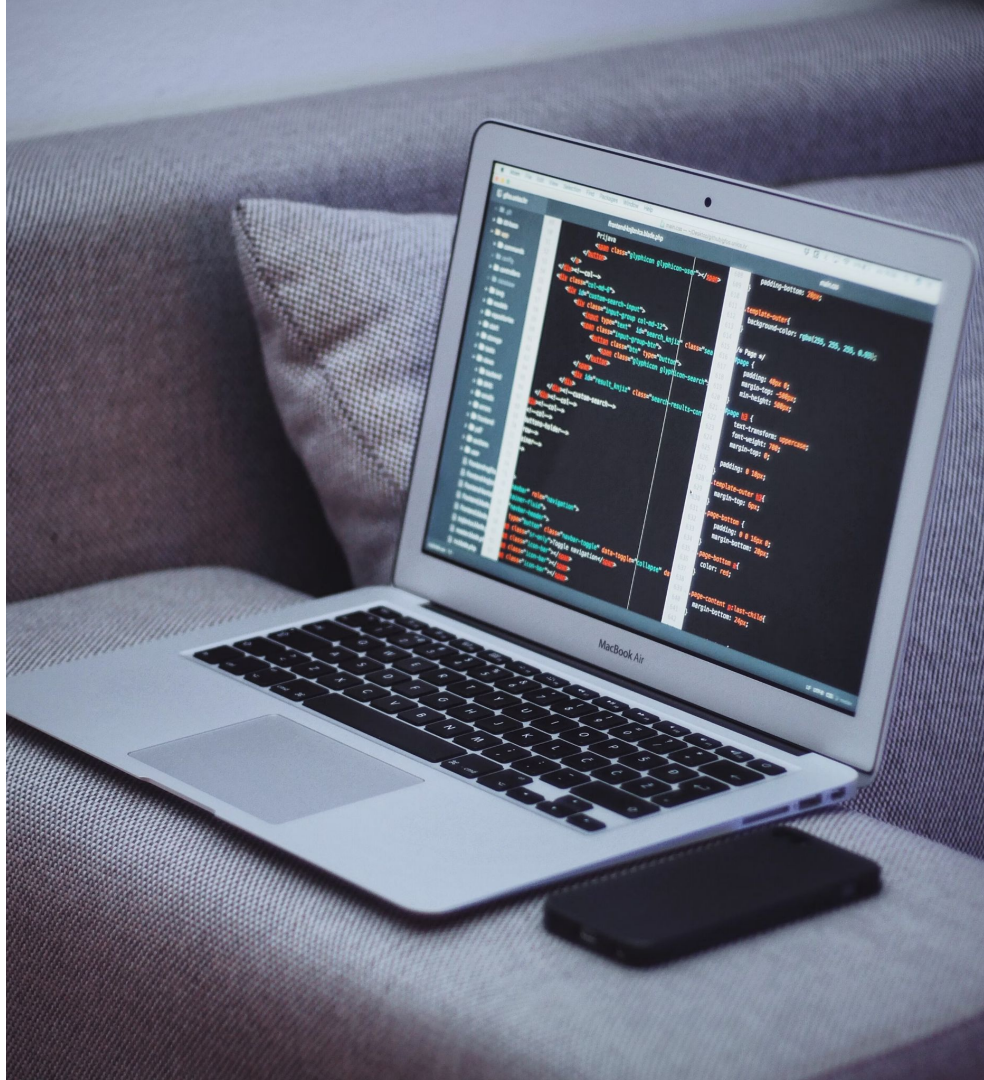
```
.element {  
  max-width: 400px;  
  min-width: 200px;  
  max-height: 400px;  
  min-height: 200px;  
}
```

MEDIA QUERIES.

What are they?

Media queries are a key component of responsive design that allow you to apply CSS styles depending properties of client-side device characteristics.

CSS Media queries are a way to identify important browser characteristics, features, and user preferences, then apply styles adapting to those things.



Font Size.

Increasing font size for devices with large screens using min-width:

```
/* Some default style: */
```

```
html {
```

```
  /* Browser default is 16px, this will keep it at 16px */
```

```
  font-size: 100%;
```

```
}
```

```
/* @media query override: */
```

```
/* Example using "min-width":
```

```
* When the browser is AT LEAST (min-width) 800px or larger: */
```

```
@media screen and (min-width: 800px) {
```

```
  html {
```

```
    font-size: 125%; /* increase font size on large screens! */
```

```
  }
```

```
}
```

Padding.

Increase the padding between paragraphs when a page is viewed on a narrow device

```
/* Some default style: */
```

```
article p {
```

```
  /* Common typographic style: padding on top, margin on bottom */
```

```
  padding-top: 0.5rem;
```

```
  margin-bottom: 1.5rem;
```

```
}
```

```
/* @media query override: */
```

```
/* Example using "max-width":
```

```
* When the browser is AT MOST (max-width) 600px or smaller: */
```

```
@media screen and (max-width: 600px) {
```

```
  article p {
```

```
    /* It is common for line-height to be 1.5rem, so in this e.g.:
```

```
    * - large devices: 0.5rem + 1rem = 1 line of whitespace
```

```
    * - small devices: 1rem + 2rem = 2 lines of whitespace */
```

```
    padding-top: 1rem;
```

```
    margin-bottom: 2rem;
```

```
  }
```

```
}
```


Button Size.

Increase the size of buttons on touchscreens

```
/* Some default style: */
```

```
button {  
  /* Use padding to define the "content" size of the button */  
  padding: 1em 2em;  
}
```

```
/* @media query override: */
```

```
/* Example: detecting "touchscreen" device type with "hover: none"  
* When the browser does NOT have the ability to "hover":  
*/
```

```
@media (hover: none) {  
  /* overwrite previous values only on devices that cannot "hover" */  
  button {  
    padding: 2em 4em;  
  }  
}
```

Button Size.

You can add multiple media queries within a stylesheet, tweaking your whole layout or parts of it to best suit the various screen sizes.

The points at which a media query is introduced, and the layout changed, are known as breakpoints.

```
/* Mobile phones - AT MOST (max-width) 480px or smaller*/
@media screen and (max-width: 480px) {
  /* ... */
}

/* Tablets - AT MOST (max-width) 768px or smaller */
@media screen and (max-width: 768px) {
  /* ... */
}

/* Desktops - AT MINIMUM 769px (min-width) or larger */
@media screen and (min-width: 769px) {
  /* ... */
}
```

Demo.

MOBILE FIRST™

Mobile First.

A common approach to web design is to start with a simple single-column layout for narrow-screen devices (e.g. mobile phones).

Then, use min-width queries to check for wider screens, and add only the rules necessary to implement a multiple-column layout when you know that you have enough screen width to handle it.



Why?

Mobile-first websites are lighter in processing requirements for mobile users, since the browser only has to apply the CSS that occurs before @media queries.

The processing of complex media queries and the rendering of intricate layouts are done by larger devices, which presumably has higher computational power.

Mobile layouts are simpler (usually [plain HTML][html-responsive-by-default] will suffice!) and therefore: easier to implement, faster to code, and easier to maintain. Complexity should be added incrementally as screen sizes increase.

MOBILE FIRST DESIGN



Some examples.

Choosing an Online Work Order System: Next Steps

The choice of work order systems can be overwhelming—but we encourage you to test out several software solutions and read independent reviews to find the best CMMS software for your organization.

With MaintainX, you can deliver better operational efficiency to your maintenance operations. The **mobile-first platform** offers an excellent collection of common-sense features without unnecessary complexity to slow down your workflows.

MaintainX

Simplify your equipment maintenance
with **digital Work Orders**

Get Started Free



Caroline Eisner ↗

[Go to Author's Page](#)

Google Maps for mobile devices were first released in 2006; the latest versions feature GPS turn-by-turn navigation along with dedicated parking assistance features. By 2013, it was found to be the world's most popular smartphone app, with over 54% of global smartphone owners using it.



Wikipedia

[https://en.wikipedia.org › wiki › Google_Maps](https://en.wikipedia.org/wiki/Google_Maps) ⋮

Google Maps - Wikipedia

MEDIA QUERY
SPECIFICITY.

Order MATTERS.

@media queries do not add specificity to your selectors.

The examples above only worked because the queries were placed at the end of the stylesheet – remember that, in a tie between two equally specific selectors, the last selector read by the Browser wins.

A common best practice is to place your @media queries at the end of your files so that you do not need to make your @media queries any more specific than they need to be.

```
/* DO */
/* Default col width takes 1/3 of the viewport */
.col {
  width: 33.33%;
}
/* Default col width takes 100% of the viewport */
@media screen and (max-width: 480px) {
  .col {
    width: 100%;
  }
}

/* DON'T */
@media screen and (max-width: 480px) {
  .col {
    width: 100%;
  }
}
.col {
  width: 33.33%;
}
```

Can you find my mistake?

AT-RULES SYNTAX.

Some examples.

LAB TIME.