

# WEB TECHNOLOGY

## ASSIGNMENTS WEEK 6

### BEFORE YOU START

with the assignments please download the template folder from Blackboard. Here you will find the files, screenshots and images needed for the assignment.

The exact margins, paddings, color values and font sizes are irrelevant. The exercises are about being able to set the values itself not having the exact same color or number of pixels.

The assignments are less elaborate than last week's assignment. This means that you will have to search more information for yourself. This way you will be able to remember the theory better. If you are wondering what the exact values should be you can always ask your lab teacher.

You are not allowed to change the HTML file by adding your own classes or id's to elements. Additional information about each assignment is in the description.

## ASSIGNMENT 1 – EXERCISE FLUID LAY-OUT

Using CSS create the lay-out in the image below. For this assignment you do not have to add HTML. There are multiple ways of doing the following assignment but in the following assignment you should use the “vw” (view width) and “vh” (view height) units in combination with the CSS “*calc()*” function.

Sources:

[https://www.w3schools.com/cssref/func\\_calc.asp](https://www.w3schools.com/cssref/func_calc.asp)

[https://www.w3schools.com/cssref/css\\_units.asp](https://www.w3schools.com/cssref/css_units.asp)

### TIPS:

1. Give the body 20 pixels padding.
2. The division should have a maximum width of 1000 pixels.
3. Center the division.
4. The division should always take up the whole width of the viewport minus the 20 pixels of padding on the left and the right.
5. The division should always take up the whole height of the viewport minus the 20 pixels of padding on the top and bottom.

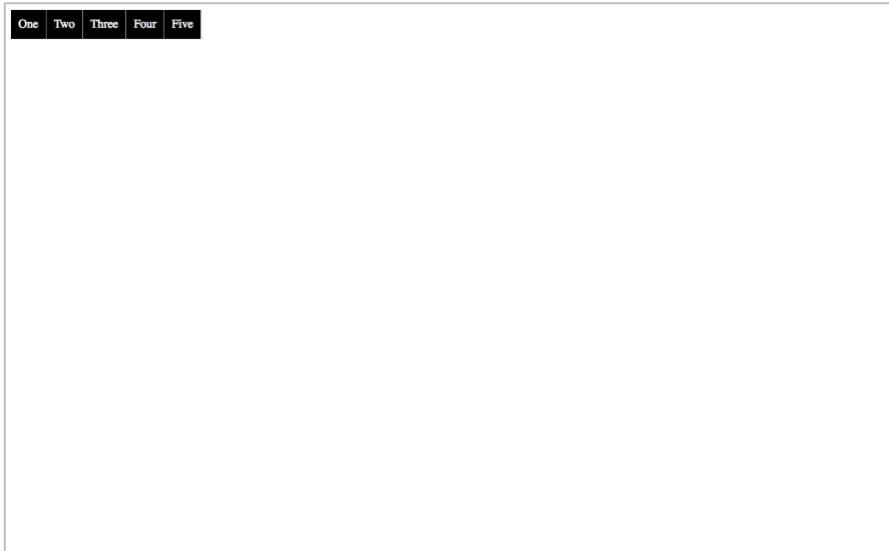


## ASSIGNMENT 2 – EXERCISE MEDIA QUERY

Using CSS create the lay-out in the image below. For this assignment you do not have to add or change the HTML.

### TIPS:

1. Set a media query at 960 pixels to change the styling.

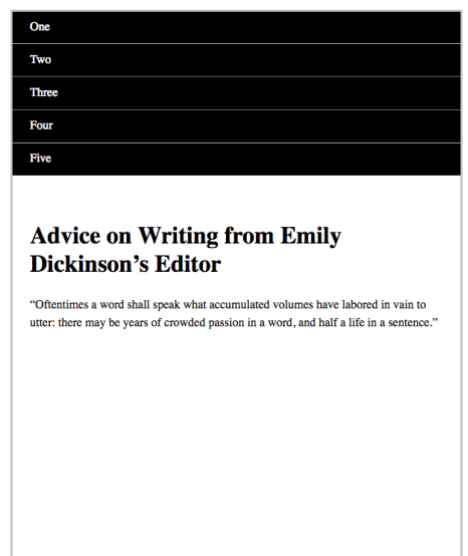
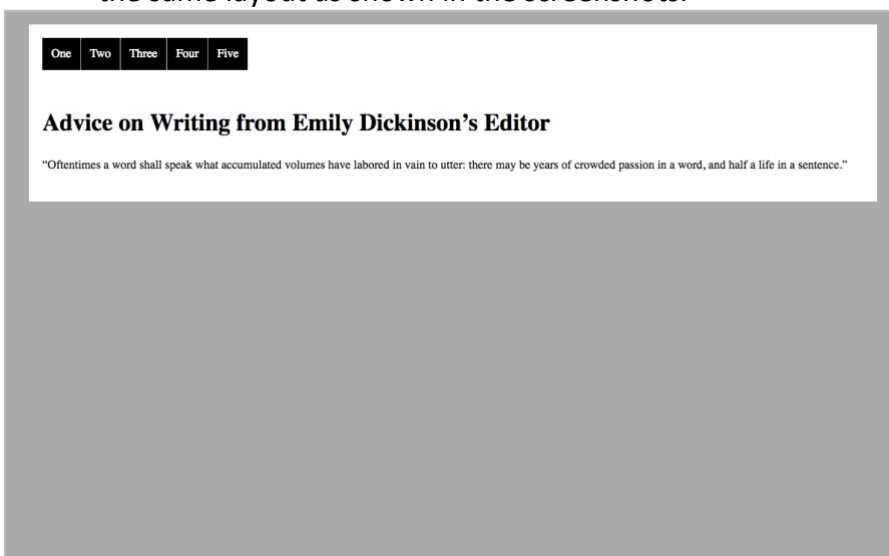


## ASSIGNMENT 3 – EXERCISE COMBINING FLUID AND MEDIA QUERY

Using CSS create the lay-out in the image below. For this assignment you do not have to add or change the HTML.

### TIPS:

- 1 Import and apply the “style-large.css” and the “style-small.css” files in the main “style.css” file depending on the browser window size. The breakpoint is at 800 pixels.
- 2 Make the lay-out fluid with a maximum width of 1100 pixels.
- 3 Set a Media Query breakpoint at 800 pixels.
- 4 Add the necessary CSS property:values to the “style-large.css” and the “style-small.css” to create the same layout as shown in the screenshots.



## ASSIGNMENT 4 – COMPLEX LAY-OUT 1

With CSS create the lay-out depicted below. For this assignment you do not have to add or change the HTML.

The large layout is the same as assignment 9 of the lab assignments of week 5. There are some slight changes in the CSS though.

Check out the spec sheet for this assignment.

Document outline	
13	bodyTitle
18	NAVTitle
26	2015 : What do you think about machines that think?
29	Edge Annual Question Series
49	Previous editions

### TIPS:

1. Make the lay-out fluid with a maximum width of 1200 pixels.
2. Set a Media Query breakpoint at 840 pixels.
3. For the book list at the bottom you will have to use a combination of selectors and the `calc()` function to see the margins right. Make sure the list is nicely aligned with the left and right side of the websites.

# Edge

CONVERSATIONSVIDEOSANNUAL QUESTIONEVENTSNEWSLIBRARYABOUT

## 2015 : WHAT DO YOU THINK ABOUT MACHINES THAT THINK?

### EDGE ANNUAL QUESTION SERIES

In recent years, the 1980s-era philosophical discussions about artificial intelligence (AI)—whether computers can “really” think, refer, be conscious, and so on—have led to new conversations about how we should deal with the forms that many argue actually are implemented. These “AIs”, if they achieve “Superintelligence” (Nick Bostrom), could pose “existential risks” that lead to “Our Final Hour” (Martin Rees). And Stephen Hawking recently made international headlines when he noted “The development of full artificial intelligence could spell the end of the human race.”

THE EDGE QUESTION—2015

WHAT DO YOU THINK ABOUT MACHINES THAT THINK?

But wait! Should we also ask what machines that think, or, “AIs”, might be thinking about? Do they want, do they expect civil rights? Do they have feelings? What kind of government (for us) would an AI choose? What kind of society would they want to structure for themselves? Or is “their” society “our” society? Will we, and the AIs, include each other within our respective circles of empathy?

Numerous Edges have been at the forefront of the science behind the various flavors of AI, either in their research or writings. AI was front and center in conversations between charter members Pamela McCorduck (Machines Who Think) and Isaac Asimov (Machines That Think) at our initial meetings in 1980. And the conversation has continued unabated, as is evident in the recent Edge feature “The Myth of AI”, a conversation with Jaron Lanier, that evoked rich and provocative commentaries.

Is AI becoming increasingly real? Are we now in a new era of the “AIs”? To consider this issue, it's time to grow up. Enough already with the science fiction and the movies, Star Maker, Blade Runner, 2001, Her, The Matrix, “The Borg”. Also, 80 years after Turing's invention of his Universal Machine, it's time to honor Turing, and other AI pioneers, by giving them a well-deserved rest. We know the history. (See George Dyson's 2004 Edge feature “Turing's Cathedral”.) So, once again, this time with rigor, the Edge Question—2015:

WHAT DO YOU THINK ABOUT MACHINES THAT THINK?

John Brockman  
Publisher & Editor, Edge

### PREVIOUS EDITIONS

#### This Idea Must Die

Scientific Theories That Are Blocking Progress

Edited by JOHN BROCKMAN

#### What Should We Be Worried About?

Real Scenarios That Keep Scientists Up at Night

Edited by JOHN BROCKMAN

#### This Explains Everything

Deep, Elegant, and Beautiful Theories of How the World Works

Edited by JOHN BROCKMAN

#### This will make you smarter

Smartest Concepts in Science, Technology, and the World

Edited by JOHN BROCKMAN

#### IS THE INTERNET CHANGING THE WAY YOU THINK?

THE NET'S IMPACT ON OUR MINDS AND FUTURE

Edited by JOHN BROCKMAN

#### This Idea Is Brilliant

Lost, Overlooked, and Underappreciated Scientific Concepts Everyone Should Know

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## ASSIGNMENT 5 – COMPLEX LAY-OUT 2

With CSS create the lay-out depicted below. For this assignment you do not have to add or change the HTML. (document outline on the next page)

Document outline	
12	bodyTitle
16	headerTitle
20	L. asideTitle
22	L. donateSection
27	L. Monthly donation
40	L. One-time donation
46	L. Sunday newsletter
59	L. The Coming Victory of Democracy: Thomas Mann on Justice, Human Dignity, and the Need to Continually Renew Our Ideals

### TIPS:

1. Import and apply the “style-large.css” and the “style-small.css” files in the main “style.css” file depending on the browser window size. The breakpoint is at 760 pixels.
2. From the main “style.css” file, copy the CSS for the phone layout to the “style-small.css” file and the CSS for the desktop layout to the “style-large.css” file.
3. Move all the duplicate property:values from the “style-large.css” and the “style-small.css” files to the general “style.css” file.



# brainpickings

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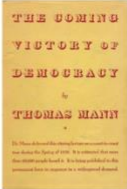
## The Coming Victory of Democracy: Thomas Mann on Justice, Human Dignity, and the Need to Continually Renew Our Ideals


“To come close to art means to come close to life, and if an appreciation of the dignity of man is the moral definition of democracy, then its psychological definition arises out of its determination to reconcile and combine knowledge and art, mind and life, thought and deed.”

BY MARIA POPOVA

“Progress is never permanent, will always be threatened, must be redoubled, restated and reimagined if it is to survive,” Zadie Smith wrote in her stirring essay on optimism and despair. But what does the reinvention, reassertion, and survival of progress look like when the basic fabric of democracy is under claw?

That is what Thomas Mann (June 6, 1875–August 12, 1955) examined on the cusp of World War II with a prescience that bellows across the decades to speak to our own epoch and to every epoch that will succeed us.






Thomas Mann at his desk (Thomas Mann Archive)

When Hitler seized power in 1933, the 58-year-old Mann, who had won the Nobel Prize in Literature five years earlier, went into exile in Switzerland. The following year, he visited America for the first time. He returned each year thereafter, until he finally emigrated permanently in 1938 and became one of a handful of German expatriates in the United States to vocally oppose Nazism and fascism. Between February and May 1938, just before the outbreak of the war, Mann gave a series of poignant and rousing lectures across America, published later that year as *The Coming Victory of Democracy* (public library) — a spirited insistence that “we must not be afraid to attempt a reform of freedom,” and a clarion call for the urgent work of continually renewing and reasserting democracy as menacing ideologies rise and fall against it.

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# brainpickings


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## ASSIGNMENT 6 – FLEX BASICS

In this assignment you'll apply some basic flex properties to align div elements. Use the CSS "display:flex" property to create the lay-out in the image below.

### TIPS:

- 1 Set the width of the 'section' element to 1200pixels.
- 2 Center the 'section' element with flex.
- 3 Place the "div" elements in line by using the "display:flex" property / value.
- 4 Make the "div" elements take up an equal amount of space of it's parent element using the "flex:\* \* \*px" shorthand.

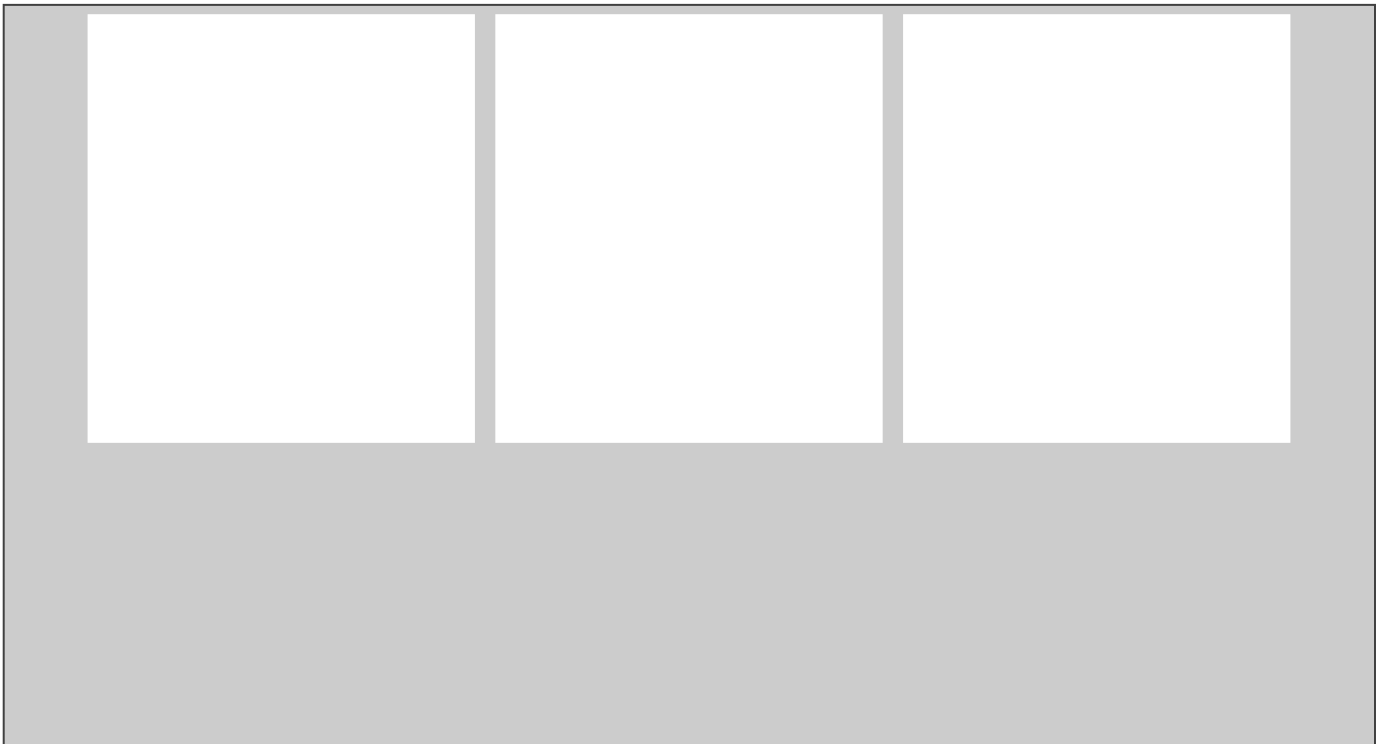


Figure 1:Flex aligned divisions

## ASSIGNMENT 7 – FLEX WRAP

In this assignment we'll align divisions using display flex.

Use the CSS “display:flex” property to create the lay-out in the image below.

### TIPS:

1. Center the “main” element within the body using “flex”.
  2. Place the “div” elements in line by using the “display:flex” property / value.
  3. Align the number in the “div” element to the vertical center.
  4. Align the number in the “div” element to the horizontal center.
  5. Give the “div” element a base width of 80px.
  6. Make the “main” element wrap around the divs when resizing the browser window (fig. 2)
  7. Now align the “div” elements to the right wrapping them from the left (fig. 3).
- (you could use photo's in this assignment to make an imagegallery)



Figure 2: Wrap



Figure 3: Wrap Reverse

## ASSIGNMENT 8 – THE POWER OF FLEX

In this assignment we'll make a mobile first, responsive website using flex.  
Use the CSS “display:flex” property to create the lay-out in the images below.  
Check out the following link:

[https://www.w3schools.com/css/css\\_rwd\\_mediaqueries.asp](https://www.w3schools.com/css/css_rwd_mediaqueries.asp)

### TIPS:

#### Phone layout:

- 1 Place all elements within the section in line by using the “display:flex” property / value.
- 2 Make each element in the section element grow and shrink equally and set it's initial width to 100% of the width of it's parent element “flex: flex-grow flex shrink flex-basis” shorthand.
- 3 Make the section wrap it's content.

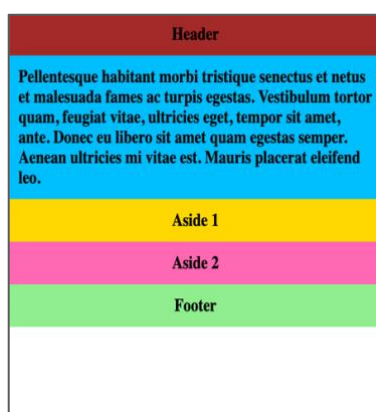


Figure 6: Phone Layout

#### Tablet layout:

- 1 Now place the 'aside' elements next to each-other by changing their flex-basis property.

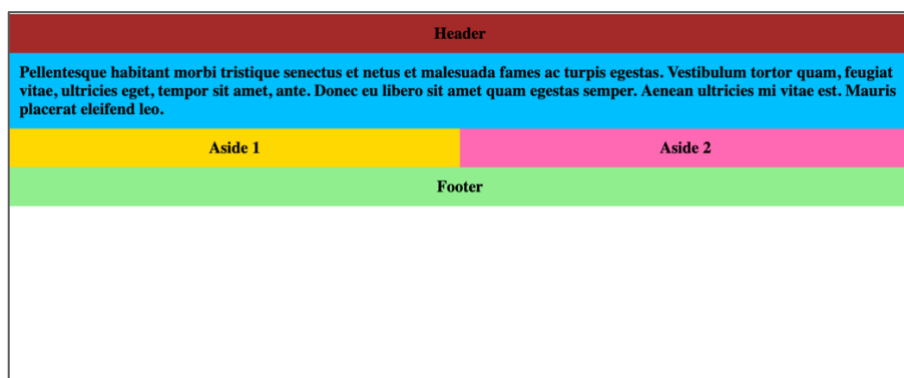


Figure 5: Tablet Layout



### Desktop layout:

- 1 Make the “main” element take up 3 times as much space as the aside elements using the “flex: flex-grow flex shrink flex-basis” property.
- 2 Change the order of the elements to place the ‘aside’ element with the class ‘.aside\_1’ on the left and the ‘aside’ element with the class ‘.aside\_2’ on the right of the ‘main’ element.
- 3 Set the width of the ‘section’ element to 80% of the ‘body’.
- 4 Center the ‘section’ element with flex.



Figure 4: Desktop Layout

### Media-Queries:

- 1 Switch to the tablet layout when the browser-window is bigger then 600 pixels;
- 2 Switch to the desktop layout when the browser-window is bigger then 1000 pixels.

## ASSIGNMENT 4 – THE POWER OF FLEX

Test your might at <https://flexboxfroggy.com/>. See if you can finish all the challenges.