

Lab 6: CSS for Layout

Due: 03/22/2025

The purpose of this lab is to add a layout to your lab webpage using the latest layout techniques: **CSS Flex** and **CSS Grid**.

NOTE: This lab assumes the HTML structure defined in your previous labs:

In-between the BODY tags ...

```
<header>  
</header>
```

```
<main>  
</main>
```

```
<footer>  
</footer>
```

...and in the FOOTER, you have a list of citations (or references, or whatever) in a UL:

```
<h2>Citations</h2>  
<ul>  
  <li></li>  
  <li></li>  
</ul>
```

If, for some reason, your content is not in this structure, fix it before going on or things will definitely not work out in this lab.

Make a copy of Lab 5

- Make a copy of all the files in it to a new folder named **lab06**

- Change the TITLE in the HTML to reflect the change to “Lab 6”
- Change the `<main> ... </main>` element into `<article> ... </article>`. Semantically, this change makes sense now that we know about `<article>`.
- Add an `<aside>...</aside>` to your page, i.e., some content that is tangentially related to the content of the article. This element goes between `<article>` and `<footer>` and it will appear to the right of your page.

Add a container to contain the text

- Your document must use a “container” as seen in lecture. In HTML, just inside the BODY tags add a DIV

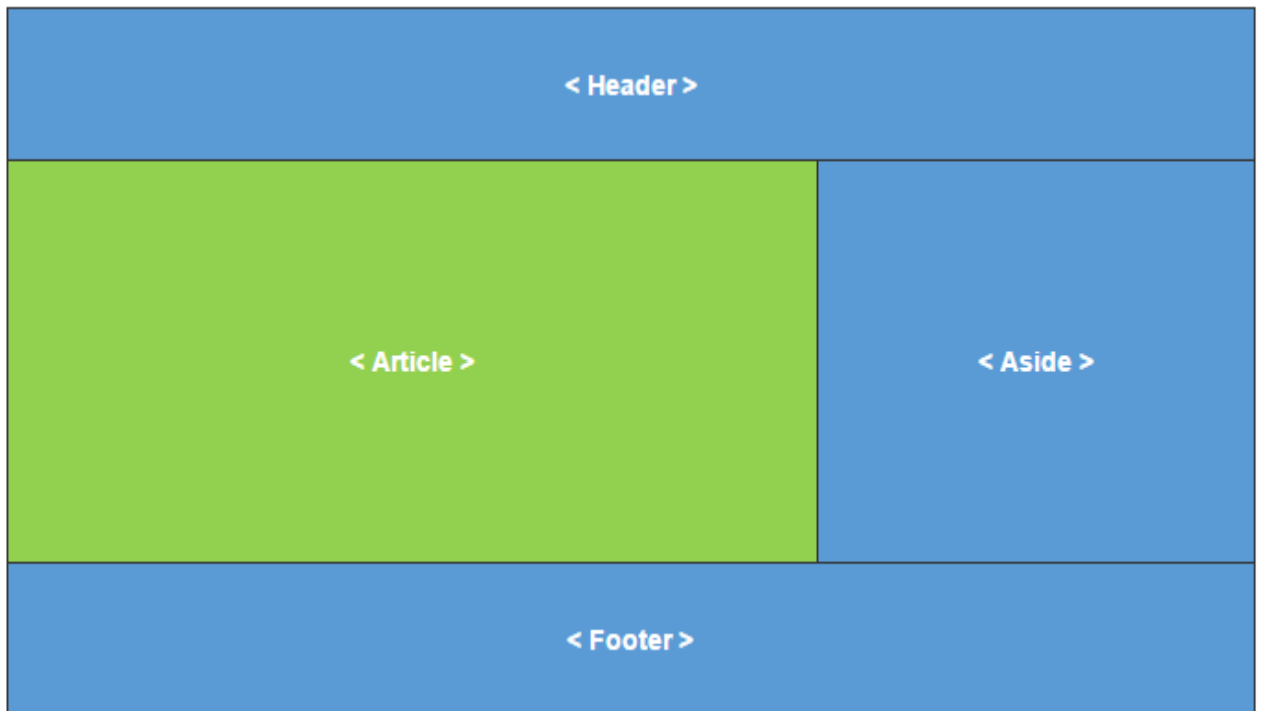
```
<body>
<div class="container">

</div>
</body>
```

- And then in CSS, create a class named ".container" and apply the appropriate styles to make the content "float" so to speak, in the center of the viewport.
- Give the container a width of anything between 85 to 95% ... your preference
- Give the container a max-width of 1000px or so ... your preference

Apply a page layout using CSS Grid

Using the CSS **Grid** layout technique, you will position your HEADER, ARTICLE, ASIDE, and FOOTER elements into a classic "c-clamp" layout using CSS Grid Layout properties



- All four structural elements in your webpage must be positioned using GRID properties.

To implement a layout using CSS Grid, you'll need to add the grid styles in your CSS. These styles must target *the one HTML element that directly contains* all the structural elements - in this case you're targeting your HEADER, ARTICLE, ASIDE, and FOOTER. The style that does this is already there! It's your `.container{ }` style.

In your CSS, **add** these properties to your `.container` style

```
display: grid;
grid-template-columns: 2fr 1fr;
```

At first, the layout will look wrong until you apply the next step which is to tell the HEADER and FOOTER to span from lines 1 through 3.

- Required: use a **group selector** to apply the following style to both the HEADER and FOOTER at the same time. (See links on BB if you don't remember group selectors)

Then add this property to that selector...

```
grid-column: 1 / 3;
```

At this point, the layout should look correct *except* you need to fix the readability problem created by putting the ARTICLE and ASIDE side-by-side.

- Hint: add *elbow room* (i.e. margin and/or padding) to just the elements that need the extra space, on just the sides that need it.

Create a new "Lead" section

- In the HTML, create a new structural element **between the HEADER and ARTICLE**: use a <section> element and put a class on it. A class name of "lead" would make sense.
- *Move* some content from your ARTICLE to the "lead" section. Suggestion: your first H2, FIGURE, and a paragraph.
- Cut it from the ARTICLE
- Paste it into the lead section

Again, the layout will look wrong until you apply the next step.

- In your CSS, set the lead section to span from lines 1 through 3. (Required: add the .lead selector to the grouped HEADER and FOOTER selector that has the grid-column property in it.)

Every web developer's goal is to *not* alter your original HTML document. However in this case, depending on how you setup your content originally in your ARTICLE and ASIDE **you may need to move some content around to balance the page layout**. (Normally you would never do that, but for these lab assignments it's okay.) Try and get the content in the ARTICLE and ASIDE to somewhat line-up equally, side-by-side ...make it look balanced.

Style the "Lead" section

- Apply styles to your lead section. Because you created your own styles for Lab 5, exactly what you do next depends on what you did in Lab 5.
- At the very least, try adding a border around your lead section. Some size, style, and color that goes with the rest of your page design.
- Make sure the content within the border doesn't touch the border. (Add padding.) And if

necessary, margin to move the border away from other content above or below it as you see fit.

- Continue to add styles - keeping in mind that more is better for this assignment. (Demonstrate that you know how to use all kinds of CSS properties!) However, keep in mind whatever you do, the content still needs to be readable.

Here is an example, albeit a boring one, of what your lab might look like, except using your content (and hopefully a far more interesting set of styles):

William Shakespeare

Header

That guy who wrote things

About Shakespeare

William Shakespeare (26 April 1564 (baptised) 23 April 1616) was an English poet, playwright and actor, widely regarded as the greatest writer in the English language and the world's pre-eminent dramatist. He is often called England's national poet and the "Bard of Avon". His extant works, including some collaborations, consist of about 38 plays, 154 sonnets, two long narrative poems, and a few other verses, the authorship of some of which is uncertain. His plays have been translated into every major living language and are performed more often than those of any other playwright.



Shakespeare's mug shot

Your new "lead" section

Content stolen from your article

Article

Aside

Early Years

Shakespeare was born and brought up in Stratford-upon-Avon. At the age of 18, he married Anne Hathaway, with whom he had three children: Susanna, and twins Hamnet and Judith. Between 1585 and 1592, he began a successful career in London as an actor, writer, and part-owner of a playing company called the Lord Chamberlain's Men, later known as the King's Men. He appears to have retired to Stratford around 1613 at age 49, where he died three years later. Few records of Shakespeare's private life survive, and there has been considerable speculation about such matters as his physical appearance, sexuality, religious beliefs, and whether the works attributed to him were written by others.

Shakespeare produced most of his known work between 1589 and 1613. His early plays were mainly comedies and histories and these works remain regarded as some the best work produced in these genres even today. He then wrote mainly tragedies until about 1608, including Hamlet, King Lear, Othello, and Macbeth, considered some of the finest works in the English language. In his last phase, he wrote tragicomedies, also known as romances, and collaborated with other playwrights.

Life

William Shakespeare was the son of John Shakespeare, an alderman and a successful glover originally from Snitterfield, and Mary Arden, the



Canonical plays

Except where noted, the plays below are listed, for the thirty-six plays included in the First Folio of 1623, according to the order in which they appear there, with the two plays that were not included (Pericles, Prince of Tyre and The Two Noble Kinsmen) being added at the end of the list of comedies.

Comedies

- The Tempest
- The Two Gentlemen of Verona
- The Merry Wives of Windsor
- Measure for Measure
- The Comedy of Errors
- Much Ado About Nothing
- Love's Labour's Lost
- A Midsummer Night's Dream
- The Merchant of Venice
- As You Like It
- The Taming of the Shrew
- All's Well That Ends Well

Apply a Flex layout to your citations

- Assuming you used an unordered list for your citations (or references or whatever you called them), add a class to the UL. For example, add: "flowing-boxes" or something like that.
- Then, in CSS add the following styles to the class .flowing-boxes:

```
display: flex;
justify-content: center;
flex-wrap: wrap;
padding-left: 0;
```

You can play around with some of the styles above. Google css justify-content or css flex-wrap, and read-up on the options you have. Try some of the other values to see what they do.

- Then, create a new style in your CSS using a descendant selector targeting the LIs inside the new class - something like this: .flowing-boxes li and add these declarations:

```
flex-basis: 200px;
list-style-type: none;
```

Here too you can play around with the flex-basis property. Google it. Also look into flex-shrink and flex-grow.

- Add more declarations to the class above to style it in a way that fits with your webpage's style. At the very least, you should probably add all the properties of the box model (border, margin, and padding). And then add some other styles, like border-radius and maybe a background color ...it's up to you.

Here's another example of what your webpage should look like at this stage (but yours should be better using more CSS properties):

royal decree, and the school would have provided an intensive education in grammar based upon Latin classical authors.

- Richard III
- Henry VIII

Citations

Shakespeare entry in
Collins English Dictionary,
HarperCollins Publishers,
1998.

Greenblatt 2005, 11;
Bevington 2002, 1–3; Wells
1997, 399.

Dobson 1992, 185–186

Craig 2003, 3.

Shapiro 2005, xvii–xviii;
Schoenbaum 1991, 41, 66,
397–98, 402, 409; Taylor
1990, 145, 210–23, 261–5

Chambers 1930, Vol. 1:
270–71; Taylor 1987, 109–
134.

The Norton Anthology of
English Literature:
Sixteenth/Early
Seventeenth Century,
Volume B, 2012, pg. 1168

Bertolini 1993, 119.

Schoenbaum 1987, 14–22.

Schoenbaum 1987, 24–6.

From Wikipedia: William Shakespeare and Shakespeare's plays. This webpage, by Robert M Kostin

Upload your work

When you are done with your webpage, close everything and use your FTP software to upload your files as usually.

Report your work

Remember: Use the validators to check your work.

- In our Blackboard section, in Lab 6, post a link to your webpage to receive credit for this Lab.

Acknowledgment

The lab has been used in previous terms by other instructors, Prof. Read-McFarland, Prof. Kostin, etc.; I've edited it with my own modifications.