Exercises for IDATA2301 Web Technologies: Week #8: Feb 17th – 21th

EXERCISE 8.1 – PADDING, MARGINS, BORDER, SHADOWS [1H, FUNDAMENTAL]

In this exercise you will get a markup for product cards and will define sizing, padding, margins, borders and shadows to present the cards according to a desired outcome (reference image).

Get starter code from here: https://github.com/strazdinsg/web-examples/tree/main/public_html/exercises/ex08.1-sizing-borders-shadows

Set the necessary CSS styles in the `exercise.css` file, to get the cards look like defined in the reference image below. (You should not change anything in the HTML markup, neither should you edid the `predefined.css`)

You can decide:

a) To challenge yourself, try to set all properties on your own, without hints! Don't worry about specific pixel values – it does not matter whether it is 20px or 25px of padding, as long as things look proportional.
b) To have an easier start, you can follow the hints listed after the reference image.

When you are done, the page should look as follows (the reference image):

Note: the images are random and will differ in your solution.

If you would like some hints, here are the steps to perform:

- Explore the HTML markup. Find out the structure. Pay attention to what element types, classes, and IDs the elements have! You will need to refer to some of those in the CSS.
- If you want to work like a pro, reset the global styles first:
  - Set 1 rem unit equal to 10px (Hint: video 4.1.9)
  - Reset the box sizing model to border-box; reset margins and paddings to 0px for all elements.
  - From now on, use 0.1rem instead of 1px in all the measurement units mentioned below.
- Set margin for the whole body to 20px (2rem)
- Set font size:
  - 48px (4.8rem) for first-level headings (h1)
  - 32px for second-level headings
  - 20px for paragraphs
- Set size and whitespace for all cards (Hint: all cards are having `class="card"`):
  - width: 250px
  - height: 400px
  - margin on top: 40px
  - margin horizontally (between the cards): 20px

- Set borders for all cards to:
    - Dashed
    - Color: `darkgray`
    - 1px thin
- Set margin for the element containing the description (both heading and text) in the card to 20px horizontally and 10px vertically.
- Set up border rounding for all cards:
    - border radius to 10px
    - Hide the sharp corners of images on the top (Hint: `{overflow: hidden}` for the card)
- Add shadows for the cards:
    - Regular shadow for all cards:
        - No horizontal or vertical offset
        - 5px blur
        - No spread
        - Color: lightgray (full opacity, i.e., no transparency)
    - More emphasized shadow for the highlighted card (Product 2) to make it stand out and look like being higher than others:
        - No horizontal or vertical offset
        - 20px blur
        - 10px spread
        - Color: #C8C8C8, with 75% opacity. Hint: the color value is `rgba(200, 200, 200, 0.75)`

EXERCISE 8.2 – ANIMATE THE CARDS [0.5H, BONUS]

Extend the solution for exercise 8.1. Add a *liveliness animation* when the user hovers the mouse over a card. Here is an example of how it could look. We have not learned how to animate changes of CSS styles. Can you find it out on your own? 😉

EXERCISE 8.3 – ABSOLUTE POSITIONING [0.5H, FUNDAMENTALS]

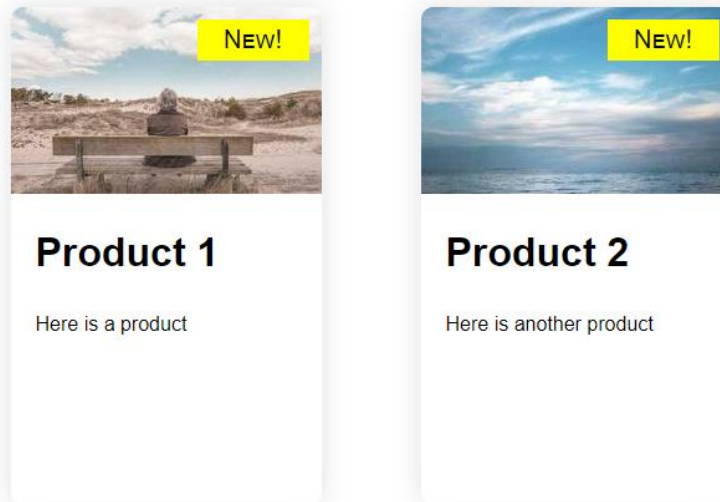In this exercise you will practice absolute positioning.

Get starter code from here: https://github.com/strazdinsg/web-examples/tree/main/public_html/exercises/ex08.3-absolute-position

Your task is to **position the yellow box with a label "New" in the top-right corner of the product cards**, see reference image below. Don't modify the HTML or the file `predefined.css`! **You can do this task by changing only the `exercise.css` file.**

Here is the reference image showing how the page should look when you are done with the exercise:

Exercise 8.3 - Absolute position

Your task is to position the `.tag` element (the yellow one with "NEW!") on top of product image. Align it to top-right of the card, give it a margin (1em).

EXERCISE 8.4 – EXTRA CHALLENGE [1H, BONUS]

This is an extra challenge where you practice how to operate in unknown waters – how to do something in CSS when you have not learned how to do it.

Get starter code from here: https://github.com/strazdinsg/web-examples/tree/main/public_html/exercises/ex08.4-extra-challenge

As usual: don't modify the HTML, nor the file `predefined.css`.

Your task: add necessary styles to `exercise.css` to make the "NEW!" tags look as follows:

Product 1

Here is a product

Product 2

Here is another product

No hints this time. Train your exploration and problem-solving skills!