

Software Exercise: Web Programming Lab

Practice Week #6

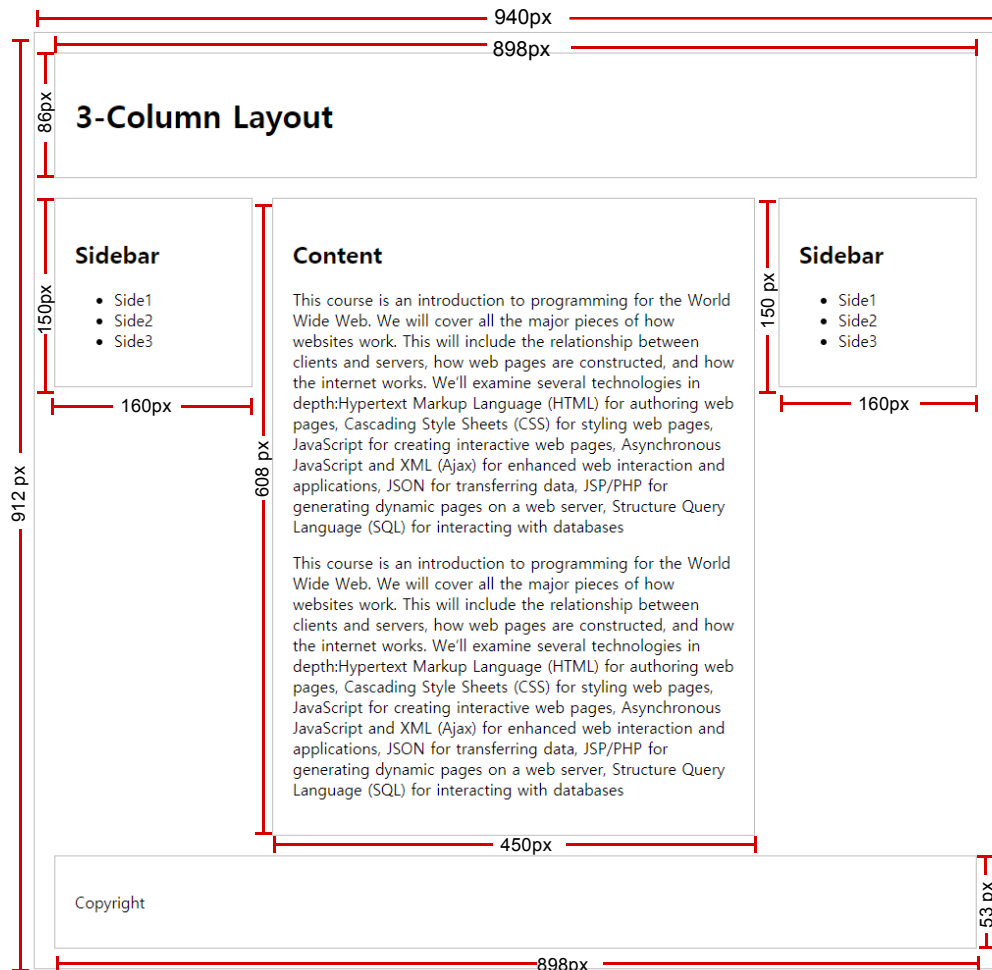
CSS Layout and Animation

Problem #1 (30 pts) Follow the code in the practice problems and submit snapshots of the results with HTML files.

(p21, p32, p54)

Problem #2 (20pts) Write an HTML code and CSS code to generate the following content:

- Design using the properties of **flexbox layout** (DO NOT USE **FLOAT** and **POSITION** property)






* You can use your preferred content as long as it fits in the given spaces.

* You are encouraged to refer to https://www.w3schools.com/css/css3_flexbox.asp and other websites for a deeper understanding flexbox layout module usage

Problem #3 (20 pts) Write an HTML code and CSS code to generate the following content:

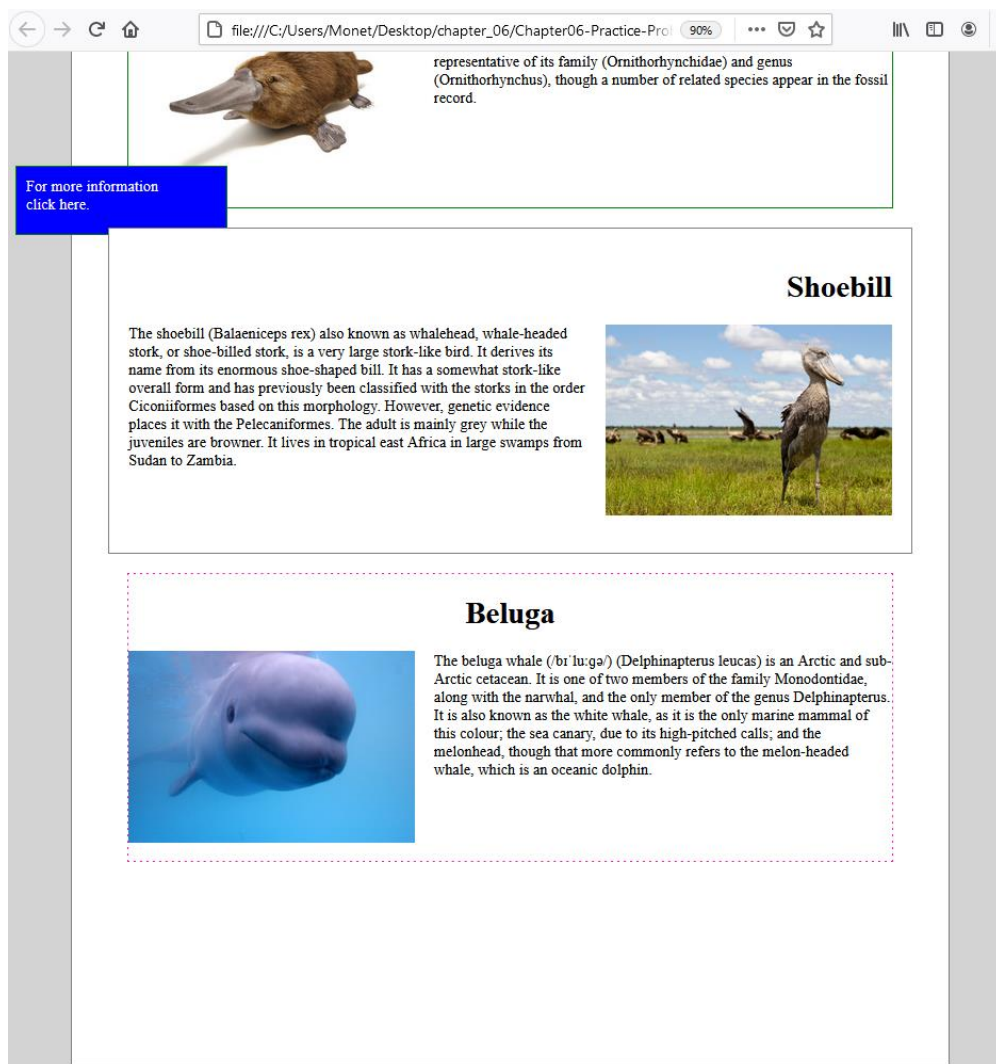
- Design using <div> elements as shown below
- Images and texts are given. Make it look same as picture.

The screenshot shows a web browser window with the following layout:

- Platypus**
 - For more information click here.
 - 
 - The platypus (*Ornithorhynchus anatinus*), sometimes referred to as the duck-billed platypus, is a semiaquatic egg-laying mammal endemic to eastern Australia, including Tasmania. The platypus is the sole living representative of its family (*Ornithorhynchidae*) and genus (*Ornithorhynchus*), though a number of related species appear in the fossil record.
- Shoebill**
 - The shoebill (*Balaeniceps rex*) also known as whalehead, whale-headed stork, or shoe-billed stork, is a very large stork-like bird. It derives its name from its enormous shoe-shaped bill. It has a somewhat stork-like overall form and has previously been classified with the storks in the order Ciconiiformes based on this morphology. However, genetic evidence places it with the Pelecaniformes. The adult is mainly grey while the juveniles are browner. It lives in tropical east Africa in large swamps from Sudan to Zambia.
 - 
- Beluga**
 - 
 - The beluga whale (*Delphinapterus leucas*) is an Arctic and sub-Arctic cetacean. It is one of two members of the family Monodontidae, along with the narwhal, and the only member of the genus *Delphinapterus*. It is also known as the white whale, as it is the only marine mammal of this colour; the sea canary, due to its high-pitched calls; and the melonhead, though that more commonly refers to the melon-headed whale, which is an oceanic dolphin.

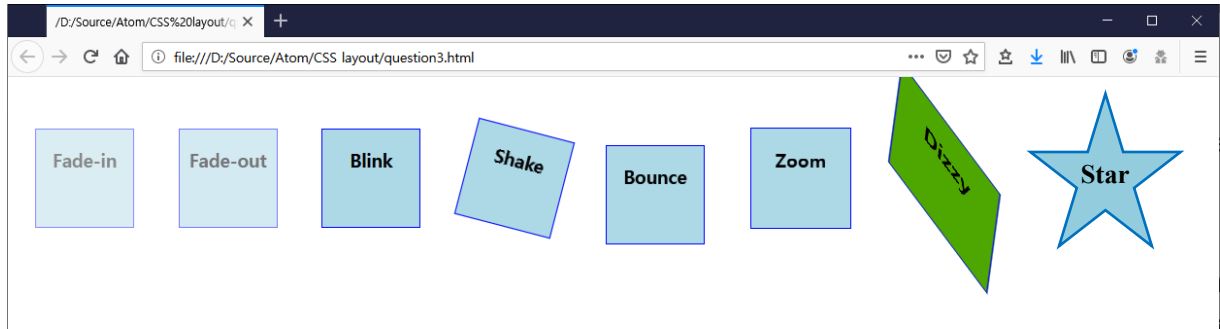
▪ Restrictions

1. Body background color is light grey. Other elements have white background.
2. Wrapper class size is fixed as 880x1180 pixels with 20pixels padding. Set margin value as auto to make it centered. Border is 2 pixels solid line with grey color.
3. Animal class size is fixed as 800x300 pixels with 20pixels margin and padding. Only shoebill has border same as wrapper class. Use appropriate tag for headline.
4. Image size is fixed as 300x200 pixels.
5. Between animal picture and text, 20 pixels padding.
6. Scrollbar should always be visible, even if it's not needed.
7. Info box should be fixed on the windows viewpoint located as 150 pixels from top, 10 pixels from right. Info box can cover platypus and beluga but cannot cover shoebill. Refer the picture below. The infobox should have width of 200px and a height of 50x. Background color: blue. The infobox has a black border around it.



Problem #4 (30 pts) Write CSS code and HTML code to generate the following content:

- Use CSS animation as shown below



- There are 7 squares with different effects, and only Fade-in is implemented. Create the rest squares.

- **Restrictions**

1. Fixed condition: duration is 2 seconds, have no delay, and infinitely iterate.
2. Fade-out: Use 'animation-name:fade', do not create new keyframes.
3. Blink: This box blinks every 3 seconds.
4. Bounce: Speed should change when box bounces.
5. Shake: The box should shake violently but do not change the duration.
6. Zoom: Small box size (80%) and big box size (120%) should be iterated.
7. Dizzy: The box must tilt, stretch, and change color at the same time.
8. Star shaped: If the box is upside down, the box turns into a **Star**.

- **Hint)**

- Animation effect properties

Properties	Details	Default
animation-name	@keyframes Specifies the name of the animation.	
animation-duration	Specify the amount of time, in seconds (s) or milliseconds (ms), required to animate a cycle.	0s
animation-timing-function	Specifies the timing function for the animation effect.	ease
animation-delay	Specify the number of seconds (s) or milliseconds (ms) to wait between when the element is loaded and when the animation actually begins.	0s
animation-iteration-count	Specifies the number of times to play the animation.	1
animation-direction	Specifies the direction in which to repeat when the animation ends and then repeats.	normal
animation-fill-mode	Specifies the style of the element when the animation is not executed (end or wait).	
animation-play-state	Specifies the animation playback state (play or stop).	running



Submission Guidelines

- ✚ A compressed file named W06_ID_NAME.zip via icampus
 - For each problem, create a folder named **Problem#**, and put the corresponding file(s) into the folder.
- ✚ Grading policies:
 - Your comments (if any) must be written in ENGLISH.
 - Layout and animation features should be shown correctly on web browser.
 - Clean code, good commenting are important components of your grade.