

LAB 4 (WEEK 38)

Images

CSS

Box Model

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Goal of the day

This week we will continue working with the heroes' pages that we started during the last lab session.

The main goal is to control the design of the web pages to make them more attractive¹. The goals are divided in the following categories:

- Create/use external CSS files
- Work with the box model (margins and paddings)
- Use different CSS selectors
- Paint the boxes
- Align elements horizontally
- Dimensioning the boxes

You can find some useful readings/resources below as well as in Blackboard.

https://developer.mozilla.org/en-US/docs/Web/CSS/Child_selectors

https://www.w3schools.com/html/html_classes.asp

https://www.w3schools.com/css/css_boxmodel.asp

https://www.w3schools.com/cssref/pr_text_text-align.asp

<https://developer.mozilla.org/en-US/docs/Web/CSS/vertical-align>

https://www.w3schools.com/cssref/pr_class_display.asp

¹ Attractive: Ok, I know, the term "attractive" may be quite subjective, so let's just accept this statement as true; even if the final result does not look very nice from your point of view... [Beauty canon over time](#) :-S

Exercise 1 – Marvel Heroes

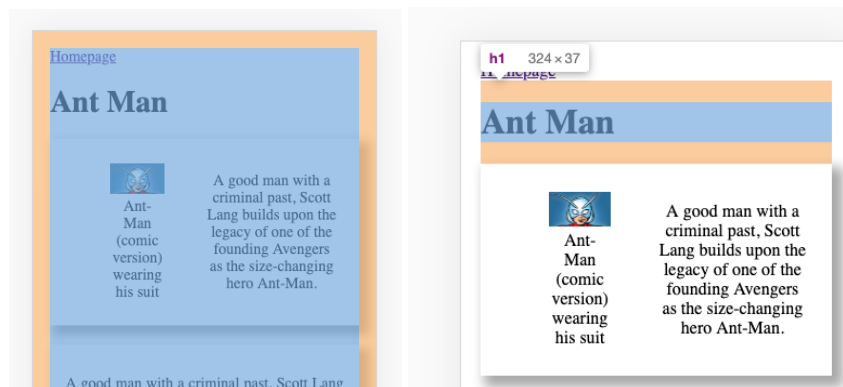
In this exercise, you will be working with CSS. **You can add things to the HTML-files, but the structure needs to remain the same.** There are additional comments in the code to help you go through the exercises (Blackboard “Learning materials” -> “Week 37 and 38 (Lecture & Lab 4) -> “Lab 4” -> “Lab 4 description” -> “lab4-ex1-src.zip”).

Exercise 1.1

Create a new CSS-file (“styles.css”) and store it in the root folder. Then, link it to the file “ant-man/index.html”.

Create the proper CSS rules to achieve the following goals:

- Add a 5% margin to the whole page
- Add a margin of 20px (bottom and top) and 0px (right and left) for all its children (Hint: https://developer.mozilla.org/en-US/docs/Web/CSS/Child_selectors)



Exercise 1.2

Give the first <div> a class called “card”

- Give the card a white background
- Add a border to the card
- Set the “box-sizing” to “border-box”
- Add a padding of 10px to the card
- Give the card a width of 100%
- Display the elements inside the card centred
- Add a box shadow to the card with the following properties:
 - o 7px 7px 10px 3px darkgrey

The card is divided in two columns. Give the first <div> a class called “left”, and the second a class called “right”

- Give the figure a width of 100%
- Both divs (left and right) should be 45% wide, and their contents will be centred vertically (we will talk more about aligning elements in further lectures and labs)
(Hint: https://www.w3schools.com/cssref/pr_pos_vertical-align.asp)

This should look like this:

[Homepage](#)

Ant Man



Ant-Man (comic version)
wearing his suit

A good man with a criminal past, Scott Lang builds upon the legacy of one of the founding Avengers as the size-changing hero Ant-Man.

Exercise 1.3

Find the `<div>` underneath the first card (look for comments in the code). This `<div>` should **contain the same styling as the first card**, but with these changes:

- Justify the text
- Add a padding of 5%

This should look like this:

A good man with a criminal past, Scott Lang builds upon the legacy of one of the founding Avengers as the size-changing hero Ant-Man.

From the Big House to the Ant Farm

Desperate to provide for his family, but unable to make ends meet, electronics genius Scott Lang turned to burglary and inadvertently won himself a prison sentence. After being released early for good behavior, he knuckled down to raise his daughter Cassie, though soon discovered nothing had changed with his luck and fortunes. When Cassie fell ill from a devastating heart ailment and her surgeon was abducted by a mysterious wealthy man, Lang reluctantly returned to his life of crime in an effort to save his daughter's life.

Assuming scientist Hank Pym's home might offer expensive equipment to pawn for cash, Lang broke in, but discovered something far more valuable—unknownst to him, he was staring his future in the face. He left the home with Pym's old Ant-Man gear and uniform, left over from the scientist's early days as a Super Hero with the Avengers, and set out to use it to rescue Cassie's surgeon.

Can you reuse CSS rules and override them to do achieve the previous? How?

Exercise 1.4

Find the <div> for Ant Man's best friend. Give this <div> the same as in exercise 1.3. The result should look like this:

Ant man's best friend

My best friend is ...



Iron Man

Exercise 1.5

Give all of the other character pages the same styling as in the exercises above.

Hulk:

[Homepage](#)

Hulk



Very angry Hulk (comic version)

Scientist Bruce Banner's inner turmoil transforms him into the mean, green rage machine called the Hulk.

Scientist Bruce Banner's inner turmoil transforms him into the mean, green rage machine called the Hulk.

The Monster Inside

The child of an abusive father, Bruce Banner grew up shy and introverted, yet a scientific genius. As a young man, thanks to his standout work in the field of nuclear physics, he attracted the attention of the U.S. Army who wanted to adapt his theories for weaponry. Banner resisted such notions, but failed attempts at landing steady work convinced him to accept a position at a federal nuclear research facility at a missile base in the New Mexico desert.

At the base, Banner was befriended by Betty Ross, daughter of General Thaddeus "Thunderbolt" Ross, a man who took an instant disliking to the diminutive, passive scientist. While at the base, Banner began to develop and build a bomb that utilized a high concentration of gamma radiation, a project of high interest to an undercover foreign agent stationed there. When a teenager named Rick Jones wandered onto the test field just as Banner started the countdown for the gamma bomb's initial test detonation, the scientist rushed out to the area to warn Jones, but the foreign agent purposefully continued the test. The bomb exploded, bathing Bruce Banner in its radiation.

Hulk's best friend

My best friend is ...



Iron Man

Iron Man:

[Homepage](#)

Iron Man



Iron Man (comic) wearing his suit

Tony Stark is the wealthy son of industrialist and weapons manufacturer Howard Stark and his wife, Maria. Tony grew up a genius with a brilliant mind for technology and inventions and, naturally, followed in his father's footsteps, inheriting Stark Industries upon his parents' untimely death. Tony designed many weapons of war for Stark Industries, far beyond what any other company was creating, while living the lifestyle of an irresponsible playboy

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Fate would take a dark turn for Tony Stark once he decided to consult on a weapons contract overseas in enemy terrain. An improvised explosive device exploded underneath Tony's transport, and he was brought to the brink of death.

Awakening as a prisoner of the warlord Wong-Chu, Tony made a gruesome discovery: the explosion had sent a piece of shrapnel mere inches from his heart. It was only the timely intervention of fellow captive and engineer Yinsen that kept the shrapnel at bay. While held captive, and forced to work on weapons, Tony turned his near-death experience into inspiration. What if he could power an iron suit that would not only keep the shrapnel from killing Tony, but also help him to escape?

Iron Man's best friend

My best friend is ...

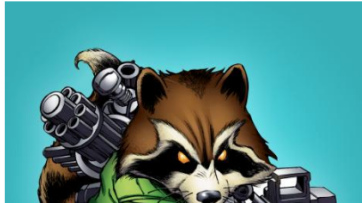


Hulk

Rocket Raccoon:

[Homepage](#)

Rocket Raccoon



Rocket Raccoon (comic) shooting a weapon

Known for his snarky, trigger-happy personality, Rocket Raccoon first appeared 10,000 years in the future as a mysteriously helpful, if not annoying, woodland creature on planet Hailailae. Since then—or maybe before then—he has become the most well-known trash panda this side of the Keystone Quadrant

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Don't be fooled by his standoffish and morally ambiguous bravado, this tactical genius will put his hide on the line for his friends and the galaxy they defend.

The Ranger

A native of the Keystone Quadrant, Rocket Raccoon began his life as a protector of an unidentified humanoid race known as the Loonies. They came to the planet hundreds of years prior when psychiatrists, searching for a place to house and study their criminally insane away from the contempt of everyday society, founded an asylum on planet Halfworld. Wanting their new environment to be as friendly as possible, the founders brought furry creatures to comfort their patients while they built robots to help care for them. For years, the psychiatrists studied patients on Halfworld before returning home and leaving their patients under the sole care of the remaining robots. As time passed the robots became sentient and longed to leave Halfworld. They genetically engineered the Earth-like animals, creating humanized caretakers to function in their stead, and withdrew to build a ship capable of breaking through the force field surrounding the planet—another security measure left behind by the founders.

Rocket Raccoon's best friend

My best friend is ...



Groot

© All the images and texts were taken from [Marvel site](#)

If you have completed 100% of the task, CONGRATULATIONS! It is not easy if you have never done it before!

Exercise 2 – Personal Portfolio (optional)

Continue working on your portfolio (oblig 1).

Some ideas to play a bit with CSS rules.

- Remove inline styles if exist.
- Use your own CSS files.
- Use a different background colour for each page.
- First paragraph of each page must use a different colour to display the text, e.g: #555555 (you cannot use “id” or “classes”. Find the proper selector)
- Use uppercase headings

Notice that the ideas listed above are not requirements of the coursework. The description of the coursework will be on blackboard after this session. These are only ideas to test CSS rules.