

Lists - Exercises

Preparation

In this exercise, we will add a “services” page to the *balloons* website and link it to the CSS file we created last week.

Download the *services-with-errors.html* file from Teams. Correct the errors and save as *services.html*

You should save this file in your *balloons* website folder, alongside the site’s *index.html*.

Open *services.html* in your code editor. The file is a simple HTML page, similar to the *index.html* page which you have created already.

If you preview *services.html* in your browser, you will see that it has not been linked to a CSS file, so looks nothing like your index page.

Rectify this by adding a *link* tag to the document’s *head* element, just like you did in *index.html*. When done, preview the page to make sure the CSS is linked to correctly (i.e. the colours and fonts are like index.html).

Notice how the *h3* elements are automatically displayed as *Arial*, even though we have not defined anything for them in the CSS file?

This is the power of *inheritance* at work. Because we set the *font-family* on the *body* element, all elements that we add to the page will automatically be displayed in the same font.

However, all is not well, as the *h3* elements are also inheriting the *color* that we set in the *body* rule (#555). They would probably look nicer if they were the same colour as the *h2* elements.

- Open the balloons website’s CSS file in your code editor
- Add the following *rule* to the file:

```
h2, h3, h4 { color:
            #99007f;
}
```

- The above rule uses a *grouped selector* which targets headings from level 2 to level 6 and gives them all the same colour
 - We omit the *h1* element from the selector, as we want that to be *purple*, which we have already defined a rule for.
 - Note, although we are not currently using *h4*, we can add them to the selector now so that if we do use it in the future, it will be the correct colour.
- You can now remove the *color* declaration that you had previously added to the *h2* rule as it is redundant. When done, the *h2* rule will look like this:

```
h2 { font-style:
      italic; font-size:
          1.5em;
}
```

- We could have left the *h2* rule as it was and omitted *h2* from the *grouped selector* we created earlier. Why do you think we have not done this?

Exercise 1

In this exercise, we will add some *lists* to the *services* page, so open this file in your code editor.

Part 1 - Unordered list

The HTML

- In your code editor, locate the paragraph that begins with: *We make all kinds of balloons...* (after the heading: *Manufacturing*).
- This paragraph contains a comma-separated list of balloon types (*Birthday balloons, Etc.*). We are going to replace this with an *unordered list*.
- First, on the line after the paragraph's closing tag, add the opening tag for a *ul* element. On the line below that, add the matching closing tag for the *ul*.
- Between the opening and closing *ul* tags, on a new line, add the opening and closing tags for an *li* element
 - Remember, *li* elements are always *nested* within *ul* or *ol* elements.
- Add the first balloon type to the *li* element: *Party balloons*
- The code should look something like this:

```
<ul>
<li>Party balloons</li>
</ul>
```

- Save the file and preview it in your browser. Is the list being displayed? Is there a *bullet* beside the *item*? Is the list item *indented*. If you answered No to any of these questions, go back and check your code.
- If all is well, return to your code editor and add the remaining items to the list (Helium-filled balloons, Hot-air balloons).
 - Each of the *items* should be placed in it's own *li* tag, but they should all be within the same *ul* tag
- The resulting code should look something like this:

```
<ul>
  <li>Birthday balloons</li>
  <li>Helium-filled balloons</li>
  <li>Hot-air balloons</li>
</ul>
```

- When this is done, you should modify the paragraph above the list so that it contains the text: *We make all kinds of balloons, including:*
 - i.e. remove the things that are now in the list
- Save your file and preview the page in your browser. It should look like this:

We make all kinds of balloons, including:

- Birthday balloons
- Helium-filled balloons
- Hot-air balloons

The CSS

- Open your website's CSS file in your code editor
- Add a new *rule* to the file:
 - The *selector* will be **ul**
- Add a *declaration* to the *rule*
 - The *property* will be **list-style-type**
 - The *value* will be **square**

- See the presentation for an example of the syntax if you are stuck.
- Save all of your files and preview *services.html* in your browser. Has the type of *bullet* changed? If it has not (i.e. it is still a solid black disc), check your CSS syntax for errors.
- If you have time, experiment with the other possible *values* for *list-style-type* for unordered lists:
 - **circle** and **none**
- When you are finished experimenting, change the value back to **square**

Part 2 - Ordered list

The HTML

- In your code editor, locate the paragraph that begins with: *How the customisation process works...* (second last paragraph in page).
- Again, the paragraph contains a *list* of “steps” in the customisation process. This time the items are numbered (1 -3) and the order they are in is relevant.
- Your task: Create an *ordered list* for the “steps” listed in the paragraph
- Note, you should follow the same steps as you did for the unordered list, but this time, the outer *list* tag will be **ol**
- Also, when adding the text to the *li* elements, you do not need to add the *numbers* – The browser will add the numbers for you when the page is displayed.
- When you have finished, adjust the paragraph above the list (removing the items you have added to the list)
- Save the file and preview it in your browser. Is the list being displayed? Is there a number displayed beside each *item*? Is each list item *indented*. If you answered No to any of these questions, go back and check your code.
- The list should look like this when viewed in the browser:

How the customisation process works:

1. You choose or create a design
2. You choose the balloon(s) you want
3. We make the balloons for you

Get in touch with our sales team for more details

The CSS

In this case, we don't need to change the *list-style-type* of the *list* as the default value for this property (*decimal*) is what we require.

However, we can still explore the other options.

- Open your site's CSS file in your code editor
- Add a new *rule*
 - The *selector* will be *ol*
- Add a declaration to the *rule*:
 - The *property* is *list-style-type*
- For the value, try each of the following in turn. Each time you change the value, save your files and preview *services.html* in your browser:

- **decimal** (the default, so nothing will change on the page)
 - **decimal-leading-zero**
 - **lower-alpha**
 - **upper-alpha**
 - **lower-roman**
 - **upper-roman**
- When you are finished experimenting, you can remove the *ol* rule from your style sheet.

Lists - review

Lists are one of the most powerful tools available to us in HTML.

- Machines understand that the *items* within a *list* are all related to each other, or are part of a collection/series
- Humans can scan lists for information, quickly and efficiently

On modern websites, lists are used extensively in all kinds of ways (not always obviously). We will be exploring some of these uses in future exercises.