**Des exercices :**

Retour à votre version html du fermier chinois:

* Ajoute l'attribut Altaux images. Quel est le but de cet attribut?
* Ajoute une classe « *bonne* » ou « *mauvaise* » aux balises entourant les mots «bon» et «mauvais».
* Recherchez l'attribut de lien pour indiquer la page vers laquelle le lien doit conduire et ajoutez-le.
* Assurez-vous que lorsque vous cliquez sur les liens, la page s'ouvre dans un nouvel onglet de navigateur.
* Trouvez l'attribut pour afficher une petite zone de texte lors du survol des liens, comme ceci:

**Concept 1: CSS selectors**

CSS selectors allow you to select in your html the content to be stylized via the tag containing it.

**Exercises :**

Back to your html version of the Chinese farmer :

* Style the paragraphs: use a Serif font, increase the spacing a little, use a basic size that makes it easy to read. Give the text a dark color, but not black.
* Style links so that they are easily readable.
* Style the "hover" and "visited" state of the links.

**Concept 2: block model**

All tags are rendered visually as a "block". This is called the [box model](https://www.w3schools.com/css/css_boxmodel.asp). Each block includes margin, padding border properties.

You can control the dimensions and spacing of this block:

* width/ height : width and height dimensions
* Border: controls the border. For example: border:1px solid #FF0000; creates an edge made of a solid red line #FF0000 and 1px thick
* padding: the space between the content of the block and its outline (the border). The padding "inflates" the block.
* Margin: the space around the block, outside it. The margin distances the block from its surroundings. You should know that these sometimes [collapse](https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Box_Model/Mastering_margin_collapsing) but for now you don't have to worry too much about it, just know it exists.

**Exercises :**

Back to your html version of the Chinese farmer :

* Give the body a maximum width of 90%.
* Then, center the body by playing with the margin property
* Make sure that the quotes are only half the pages width
* Using only the margin property, place the quotes in the middle.
* Increase the text size in quotations to 160% of the default text size
* Give a slightly greyish colour to the background of the quotations
* Add a 3px Firebrick border to the left of each quotation
* The text of the quotations touches the border, it's not pretty. Add a 30px space between the border and the text of the quotation.
* Make sure that the quotes have an empty space of 80 pixels above and below.
* Find out how to add a background color to your body
* Change the background color to use a color gradient (go to <http://www.colinkeany.com/blend/>)
* Add a background image to your body
* Make sure that the image does not repeat itself
* Change its positioning to bottom right
* Changes its size to cover

**CSS selectors (part 2) :**

**The most important ones**

Most often, the elements to be stylized are selected via the attribute class (.name-of-class) and id (#name-of-lid).

**Exercises**

Back to your html version of the Chinese farmer :

* Using only the tag as a selector, italicize all quotations.
* Identify the quotes of the villagers and the farmer by assigning each a corresponding class.
* Change the color of the left edge of the quotes according to the person speaking.

**Select using parents and children elements**

**Exercise**

Back to your html version of the Chinese farmer :

* Select an element of the header and gives it a yellow background (use the child selector)

**All other selectors**

* + and >
* Select via the attribute [attribute]
* There are a few others. To get an idea of what they allow, go read the [W3Schools documentation](https://www.w3schools.com/cssref/css_selectors.asp), then play with [CSS Dinner](http://flukeout.github.io/)

**Exercises**

Back to your html version of the Chinese farmer :

* Italics the text of the quotations
* Capitalize all instances of the words "good" and "bad".
* Put the words "Bad" in red
* Put the words "Good" in green
* Style the table so that the background color of each row is alternating grey or white
* At the first item in the list (types of people), play with background-image and padding-right to make the image appear
* At the second item of the list (types of people), play with background-image and padding-right to make the image appear
* At the third item of the list (types of people), play with background-image and padding-right to make the image appear
* Put the first paragraph in bold

**Concept 3: CSS positioning**

CSS allows you to define the visual positioning of the elements. It is probably the richest and therefore the most complex system, because the ways of controlling positioning has had a rather complicated history. It was long ago necessary to use *hacks*. Things are more stable now, especially if you don't have to support users stuck on internet explorer 9.... But let's start over from the beginning.

**Understanding the Browser Rendering flow**

Each html block has a "display" property which is either: display: inline | inline-block | block and is displayed according to its order of appearance in the html file. This is called the **natural positioning flow** or more simply the **flow**.

If you add a float: left | right; it will take whatever you applied it to outside of the normal rendering flow and put it as far left or right as possible, but respecting the margin.

More info on float: <https://developer.mozilla.org/en-US/docs/Web/CSS/float>

**Exercise :**

Back to your html version of the Chinese farmer :

* Make the text run around the images, using the float property on the images (adjusted with margin to distance the text from the image).

**Breaking the flow**

The flow is the default behavior. You may need an element to exit the position flow.

position : static | relative | absolute | fixed ;

The position property allows you to position an element anywhere (via the top and left properties), from the coordinates of its first parent in position: relative or static. [Experiment via this Pen](https://codepen.io/pixeline/pen/vmzNjw?).

**Exercises :**

* [Put the notification block in the bottom right corner of the browser, even if you scroll](https://codepen.io/pixeline/pen/dWqMxe)

**Going further**

More information on CSS positioning: [http://learnlayout.com](http://learnlayout.com/)

**3. Web fonts**

By default, the browser uses the fonts installed on the client's computer. However, you can use specific fonts: the **webfonts**.

**Exercises :**

* Visit [Google Webfonts](https://fonts.google.com/): changes the font of your document to this one: Open Sans.

**4. Useful tools**

* Removes the default css used by browsers ([reset.css](https://www.alsacreations.com/astuce/lire/36-reset-css.html)), or leaves on a normalized basis ([normalize.css](https://github.com/necolas/normalize.css))
* Check that your HTML is **valid** via the [w3c validator](https://validator.w3.org/)
* Check that your HTML allows **good organic SEO**, via other tools like the [Google Lighthouse Test](https://developers.google.com/web/tools/lighthouse/)
* Install [Emmet](https://emmet.io/) in your code editor.

**5. Exercises to finish this sprint**

* Reproduce as accurately as possible the following layouts:
  + [homepage of turlututu.com](https://github.com/becodeorg/CRL-Woods-4.27/blob/main/Assets/turlututu.png)
  + or
  + [CodeCollab homepage](https://github.com/becodeorg/CRL-Woods-4.27/blob/main/Assets/activecollab.png)

Create a repository for the project. Do not forget the description, the URL of the GitHub Page and the readme !

[Project Validation sheet](https://docs.google.com/spreadsheets/d/1RkYTp9EY5Ljqq1LVNEUY63wP1t2nTmMl7vKm-CuLwSk/edit?usp=sharing)