



# CSS Flexible Boxes & Grid Layout

In this assignment, you will use **CSS Flexbox** in the layout of your Franklin page to meet the assignment specifications. In addition, you will be adding some JavaScript and creating the Gallery page on the weather site that uses **CSS Grid**.

## Specifications

❑ Create a *franklin-7* folder in the *assignments* folder and a new file *franklin-7.html* that starts as a copy of franklin-6. The developmental specification for this version of the Franklin page is that you use the CSS flex property for all layout on the page **without** any reference to other layout methods such as float or inline-block. All supporting folders and files should be included in this version as well.

❑ Add a *windchill.js* file to your *script* folder on the weather site that uses the wind speed and the average temperature between the high and the low predictions to compute and display the wind chill temperature as a new weather data item on to display with the rest of the data.

The formula to calculate the wind chill factor is:

$$f = 35.74 + 0.6215 t - 35.75 s^{0.16} + 0.4275 t s^{0.16}$$

where  $f$  is the wind chill factor in Fahrenheit,  $t$  is the air average temperature in Fahrenheit, and  $s$  is the wind speed in miles per hour.

Hint: See the Pen [JS Basic I/O](#)

❑ Add a *gallery-7.html* page that is an image gallery page that displays six (6) weather related images with brief descriptions below each image. You may use [placeholder/filler language](#) for the descriptions. The large view should display a maximum of three images across, the medium, two, and the small view should stack the images. This page must utilize the **CSS Grid display property** for the main content area which contains the images and descriptions.

❑ Incorporate the CSS **box-shadow** property when a user hovers over the images in the gallery and apply the shadow to the image and corresponding descriptive text in the large view only.

Hint: See the Pen [Image Effects](#) on [CodePen](#).

❑ Your site navigation on both pages should link back and forth between the Franklin and Gallery pages.

# Assessment

- Push/upload your *franklin-7.html* and *gallery-7.html* pages and supporting folder and files to your remote site.
- Update and upload your home page with this new assignment link to *franklin-7.html* on the remote site.
- Submit the URL of your remote site in the assignment drop-box.

Assessment Criteria
30 points possible: Weather Site Project Category
A base assessment is provided to ensure that continuous <b>standards</b> are met for HTML and CSS including semantics, HTML validation, CSS validation, meta information and file/folder naming and structure.
The Franklin page uses CSS Flexbox layout exclusively and displays properly.
Gallery page used CSS Grid layout for the image gallery portion of the page and displays correctly with the correct number of images per view.
The wind chill factor is displayed on the Franklin page either through an event or automatically using an external JavaScript script that interacts with the temperature and wind speed data.
A CSS box-shadow effect works on the image gallery in the large view only.
All three views on both pages are supported without any violations of responsive principles and recommendations.
The PARC and typography design principles are evident in all views.