You’ll configure an image gallery with flexbox properties in this Hands-On coding exercise. Download the FlexboxGridExcerise.zip and unzip it before you begin. Create a new folder called <lastname>Flexbox. Copy the flexstart.html file and the six .jpg image files to your new folder.

1. Launch your text editor and open the flexstart.html file provided with these instructions. Rename the file index1.html. (5 points)
2. Add a **div** element within the main element with assigned **gallery** id that contains the following six images. This will be your flex container with each image a flex item (15 points):

<img src="bird1.jpg" width="200" height="150" alt="Cardinal">

<img src="bird2.jpg" width="200" height="150" alt="Grosbeak">

<img src="bird3.jpg" width="200" height="150" alt="Gyrfalcon">

<img src="bird4.jpg" width="200" height="150" alt="Wren">

<img src="bird5.jpg" width="200" height="150" alt="Hawk">

<img src="bird6.jpg" width="200" height="150" alt="Eagle">

1. Configure an id named **gallery** within the internal style element. Set the **display** property to **flex**, **flex-direction** property to **row**, **flex-wrap** to **wrap**, and **justify-content** to **space-around**. (15 points)

Save the file and test in a browser. Note that the browser configured empty space between the flex items (img elements) on each row, there is no empty space in the vertical area between each row element.

1. Configure the flex items to have a margin to add empty space between rows. (Note: flex item is a child of the flex container.) Edit the index.html file and code CSS above the closing style tag for the img selector that sets a 1em **margin** and a **box-shadow** with a 10px horizontal and vertical shadow, 10px blur effect, and #777 for the color of the shadow. (20 points)

Save and test your file in a browser. As you resize your browser, your flex items will adjust to fit within the window. Next you will try a different grid style configuration.

1. Save a copy of the index1 file and name it index2.html. The div element will be your grid container. Each img element is a grid item since it is a child element of the div. (5 points)
2. Replace the property styles you had created in the head section. Configure new property styles for your #gallery id (20 points):
   1. Set the **display** property to **grid**.
   2. To divide the available browser space into three columns of 200 pixels each, set the **grid-template-columns** property to **repeat(3, 200px)**.
   3. To cause the browser to automatically generate rows as needed, set the **grid-template-rows** property to **auto**.
   4. Configure the base size of the gutters between row and column tracks by setting the **grid-gap** (and **gap**) properties to **2em**.

Save and test. The grid should stretch as you widen the browser.

1. Configure the image gallery grid to be responsive and automatically change the number of columns and rows displayed as the browser viewport is resized. Use the **auto-fill** keyword in the **repeat()** function to direct the browser to fill the viewport with as many columns as it can without overflowing. Edit the index2.html file and change **repeat(3, 200px)** to **repeat(auto-fill, 200px)**. (15 points)

Save and test your results in the browser. When the browser viewport is just large enough to display three images in a row, widen the browser viewport, and more columns will display in a single row. As you narrow the browser viewport, the number of columns will decrease.

1. Submit your zipped folder named <lastname>Flexbox in Blackboard. Be sure both index1 & 2 HTML files are included along with the six images used for this assignment. (5 points)