CSS Flexbox Review

Introduction to CSS Flexbox and Flex Model

- **Definition**: CSS flexbox is a one-dimensional layout model that allows you to arrange elements in rows and columns within a container.
- **Flex Model**: This model defines how flex items are arranged within a flex container. Every flex container has two axes: the main axis and the cross axis.

The flex-direction Property

- **Definition**: This property sets the direction of the main axis. The default value of flex-direction is row, which places all the flex items on the same row, in the direction of your browser's default language (left to right or right to left).
- **flex-direction: row-reverse;**: This reverses the items in the row.
- **flex-direction: column;**: This will align the flex items vertically instead of horizontally.
- flex-direction: column-reverse;: This reverses the order of the flex items vertically.

The flex-wrap Property

- **Definition**: This property determines how flex items are wrapped within a flex container to fit the available space. flex-wrap can take three possible values: nowrap, wrap, and wrap-reverse.
- **flex-wrap:** nowrap;: This is the default value. Flex items won't be wrapped onto a new line, even if their width exceed the container's width.
- **flex-wrap: wrap;**: This property will wrap the items when they exceed the width of their container.
- flex-wrap: wrap-reverse;: This property will wrap flex items in reverse order.
- **flex-flow Property**: This property is a shorthand property for flex-direction and flex-wrap. In this example, we set flex-direction to column and flex-wrap to wrap-reverse.

flex-flow: column wrap-reverse;

The justify-content Property

- **Definition**: This property aligns the child elements along the main axis of the flex container.
- **justify-content: flex-start;**: In this case, the flex items will be aligned to the start of the main axis. This could be horizontal or vertical.
- **justify-content: flex-end;**: In this case, the flex items are aligned to the end of the main axis, horizontally or vertically.
- **justify-content: center;**: This centers the flex items along the main axis.
- **justify-content: space-between;**: This will distribute the elements evenly along the main axis.
- **justify-content: space-around;**: This will distribute flex items evenly within the main axis, adding a space before the first item and after the last item.
- **justify-content: space-evenly;**: This will distribute the items evenly along the main axis.

The align-items Property

- **Definition**: This property is used to distribute items along the cross axis. Remember that the cross axis is perpendicular to the main axis.
- align-items: center;: This is used to center the items along the cross axis.
- align-items: flex-start;: This aligns the items to the start of the cross axis.
- align-items: stretch;: This is used to stretch the flex items along the cross axis.