



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

INTRODUCTION TO CSS



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

CSS

- What is CSS?
- CSS stands for Cascading Style Sheets
- It is used to bring design to our webpages



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

CSS

- There are three ways you can use CSS
 1. Inline
 2. Internal
 3. External



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

STYLE SHEET

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

```
<!DOCTYPE html>  
<html>  
<head>
```

```
<style>
```

```
  h1 {color: red;}
```

```
  a {font: 24px arial, courier; color: green;}
```

```
</style>
```

Internal

```
<link rel="stylesheet" type="text/css" href="style.css">
```

External

```
<title>Day3</title>  
</head>  
<body>
```

```
<h1 style="color:red;">Day2</h1>
```

Inline or embeded

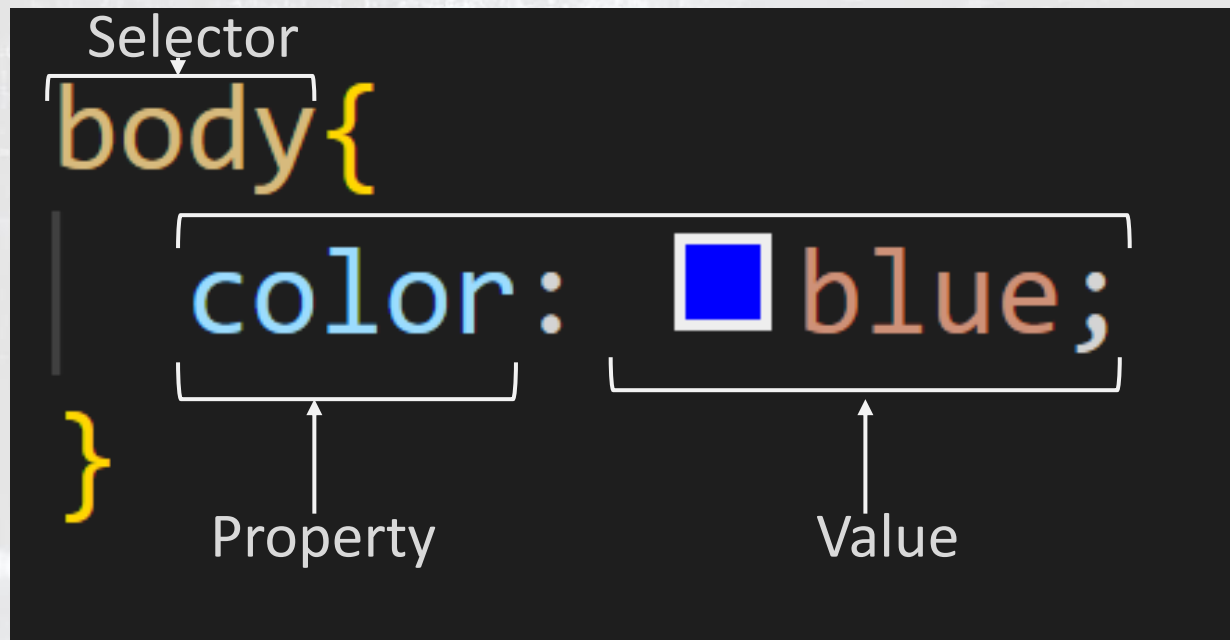
```
<a href="http://www.google.com">Google</a><br />  
<a href="http://www.yahoo.com">Yahoo</a>  
</body>  
</html>
```



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

ANATOMY OF CSS





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BACKGROUND-COLOR



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BACKGROUND-COLOR INLINE

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>link</title>
```

```
<body>
```

```
<h1> Color Below</h1>
```

```
<p style="background-color: lightskyblue; font-family: Times, Arial,  
sans-serif;">Coding is fun</p>
```

```
</body>
```

```
</html>
```



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BACKGROUND-COLOR – EXTERNAL/INTERNAL

```
<h1 style="color: blue;">Coding is fun</h1>
```

```
h1{
```

```
    background-color: lightskyblue;
```

```
}
```




INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

WAYS TO GET COLORS

- USE THE NAME(147 NAMES)
- USE RGB(0-255,0-255,0-255)
- USE HEX(#2CA40D)

[HTTPS://HTMLCOLORCODES.COM/COLOR-PICKER/](https://htmlcolorcodes.com/color-picker/)



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BASIC SELECTORS



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

TAG SELECTOR



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

TAG

A CSS tag selector is used to modify a group of HTML elements of the same tag type.


```
p {  
  background-color: ■ lightskyblue;  
}
```



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

TAG

```
p {  
  background-color:  lightskyblue;  
}
```

```
<p>My Background is LightSkyBlue</p>  
<p>  
  Lorem ipsum dolor sit amet, consectetur adipiscing elit,  
  tempor incididunt ut labore et dolore magna aliqua. Ut  
  veniam, quis nostrud exercitation ullamco  
</p>
```




INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

CLASS SELECTOR

CLASS

A CSS class is an attribute used to modify a group of HTML elements with unique styling and formatting with CSS.

```
.my-class {  
  background-color: grey;  
}
```

```
<p class="my-class">
```

CLASS

A class selector takes precedence over a tag selector.

```
p {  
  background-color: lightblue;  
}  
.my-class {  
  background-color: grey;  
}
```

```
<p>My Background is LightSkyBlue</p>  
<p class="my-class">  
  (the background of this will be grey) This is black Lorem  
  amet, consectetur adipiscing elit, sed do eiusmod tempor  
  labore et dolore magna aliqua. Ut enim ad minim veniam,  
  exercitation ullamco  
</p>
```

CLASS

- Class attributes can have multiple classes:

```
<div class="class-1 class-2 class-3"></div>
```

- Each of these can have different stylings

```
<div class="size-small color-green font-3"></div>
```

- When naming classes use a dash “-” to break up the words and type all lower case



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

ID SELECTOR

ID

`<p id="Special"></p>`

- The id attribute specifies a unique id for an HTML element. The value of the id attribute must be unique within the HTML
- The id attribute is used to point to a specific style declaration in a style sheet. It is also used by JavaScript to access and manipulate the element with the specific id.



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

COMMENTS



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

COMMENTS

// Comments are declared using two forward slashes or /**/

You can use short cuts (control + /) windows or (command + /) mac for //

(shift + alt + /) windows (shift + option + /) mac for /**/



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

WEB DEV TOOLS



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BROWSER DEVELOPER TOOLS

- Every modern web browser includes developer tools. These tools do a range of things, from inspecting currently-loaded HTML, CSS and JavaScript to showing which assets the page has requested and how long they took to load. This article explains how to use the basic functions of your browser's devtools.



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

WHAT TO DO WITH HTML DEV TOOLS

- Select an element
- Delete elements
- Change text
- Change classes



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

DEV TOOLS CSS

- Click on select element to get the CSS
- You can change color and transparency
- Add and change properties
- https://www.youtube.com/watch?v=wcFnnxfA70g&t=1s&ab_channel=Jos%C3%A9Vidal



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BASIC SIZE



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BASIC SIZES

- Basic sizing is the same as html
- height: 100px; or 100%
- width: 100px; or 100%



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

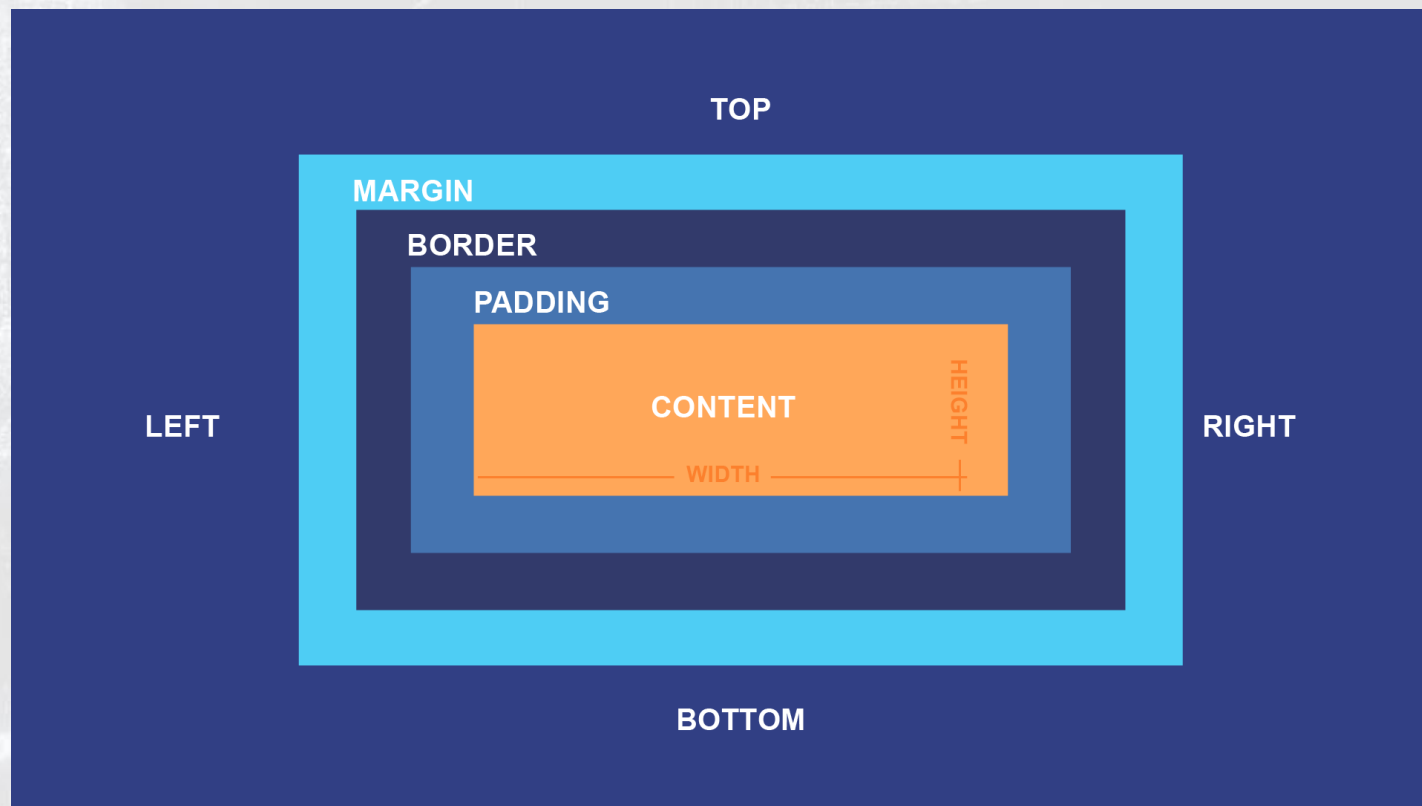
BOX MODEL



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

Box Model



<https://edu.gcfglobal.org/en/basic-css/the-css-box-model/1/>



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BOX MODEL

- Everything in CSS is a box, either a rectangle or square in shape.
- Inline elements are boxes that go across our page
- Block elements are boxes that go down our page
- A default box is as big as the content it holds. (p tag with text is the size of the text)
- Padding makes the box bigger from the inside
- Margins add space between two boxes
- Borders define the edge of our boxes
- Outline defines the outline of the boxes

BLOCK VS INLINE ELEMENTS

Here are the inline elements in HTML:

<a> <dfn> <abbr> <acronym> <bdo>
 <label> <button> <map> <cite> <code> <output>
<q> <i> <small> <object> <time> <script> <select> <sub> <sup> <textarea>

Here are the block-level elements in HTML:

<address> <figcaption> <article> <figure> <aside> <footer> <blockquote> <form> <h1>-<h6> <header>
<hr> <dl> <dt> <main> <fieldset> <nav> <noscript> <pre> <canvas> <section> <dd> <table>
<div> <tfoot> <video> <p>



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

DIV

`<div></div>`

The `<div>` HTML element is the generic container for content. It has very little affect on the content or layout until styled in some way using CSS.

EXERCISE

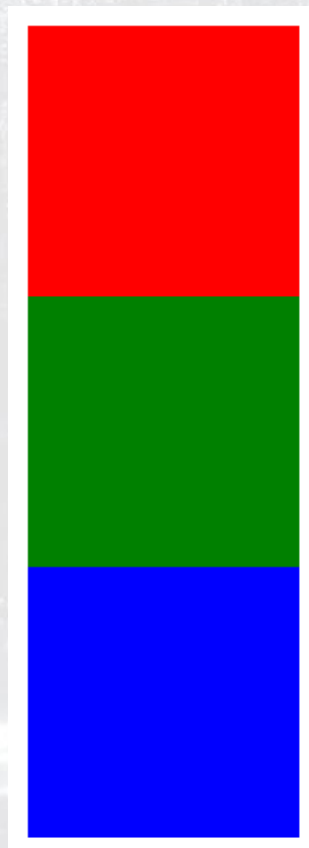
- Create a new directory in your ICR120 called Box_Model
- Add an index.html file
- Make 3 div elements in the body
- Add a class to each div. Give each one of these names red-block, green-block, blue-block
- Add internal CSS in the head of your file
- Make a div selector with height:100px and width:100px
- Make class selectors that make the background color the same color as the class name for each block



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BOX MODEL BORDERS



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BORDER

• PROPERTIES

- BORDER-WIDTH
- BORDER-COLOR
- BORDER-STYLE



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BOARDER-STYLE

- dotted - Defines a dotted border
- dashed - Defines a dashed border
- solid - Defines a solid border
- double Defines a double border
- groove - Defines a 3D grooved border. The effect depends on the border-color value
- ridge - Defines a 3D ridged border. The effect depends on the border-color value
- inset - Defines a 3D inset border. The effect depends on the border-color value
- outset - Defines a 3D outset border. The effect depends on the border-color value
- none - Defines no border
- hidden - Defines a hidden border



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BORDER-WIDTH

• BORDER-WIDTH

- border-width: 10px; = and even sided border on all four sides.
- border-width: 10px 220px 1px 50px; will have an uneven starting from the top going clockwise.
- border-width: 10px 20px; top and bottom first then left and right
- border-width: 10px 20px 30px; top will be done first then left and right then the bottom.



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

SHORT HAND BORDERS

- border: 10px double grey; This has to be written in this order
- This will allow us to style individual sides of a border
 - border-top: 5px solid black;
 - border-right: 10px double grey;
 - border-bottom: 5px solid green;
 - border-left: 20px solid blue;



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BORDER RADIUS

- Border-radius: 10px;
- Border-radius: 10px 20px;
- Border-radius: 10px 20px 30 px;
- Border-radius: 10px 20px 30 px 40px;
- You can make a circle by using 50%;

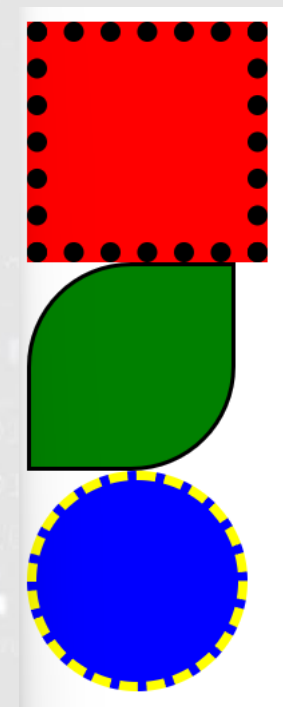


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE

- In each of your blocks add a border: for red 10px, blue 5px, green 2px
- Give red a black dotted border
- Make green look like a lime
- Make blue into circle with a yellow dashed border





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BOX MODEL PADDING

PADDING

- Padding adds space between border and content
 - If your box is 300px and your padding is 10px you are then making your box an extra 10 px
 - Padding has can use one valuable padding: 10px;
- Or padding can be like borders where you can assign the size to a specific size



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

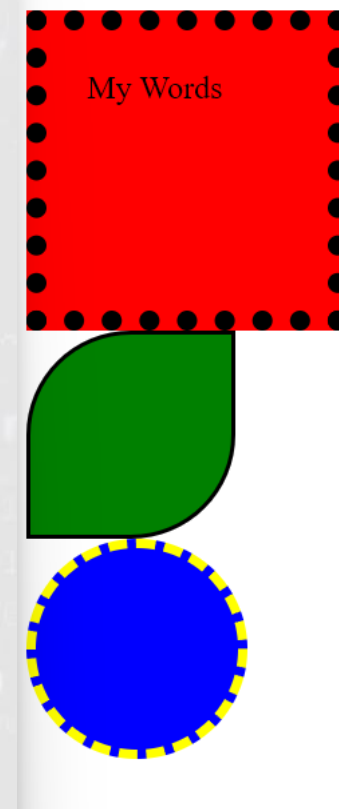
475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

PADDING

- How to use padding:
- You can choose individual sides
- padding-top
- padding-bottom
- padding-left
- padding-right
- padding: 1px 2px 3px 4px; this will select all sides starting from the top going clockwise (top 1px, left 2px, bottom 3px, right 4px)
- padding: 1px 2px 3px; (this looks like top 1px, left 2px, right 2px, bottom 3px)
- padding: 5px 1px; (top, bottom 5px; left, right 1px)

EXERCISE

- Add some text in the red-block div tag
- Then add 20px of padding
- Notice how the text moves and the block displaces the others





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BOX MODEL MARGINS



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

MARGINS

- Margins in CSS are applied to an element, so it forms space around the element, pushing other elements away.
- Margins between two elements will have the same space if defined on both elements; 20px on one and 20px on another will only have 20px in total
- Margins can be defined with negative numbers. -20px
- Margin auto can help get blocks in the center of the page

margin: auto;

margin: 0 auto;

This allows us to have 0 vertical and then
It centers itself with the auto.



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

MARGINS

- How to use margins:
- You can choose individual sides
- margin-top
- margin-bottom
- margin-left
- margin-right
- margin: 1px 2px 3px 4px; this will select all sides starting from the top going clockwise (top 1px, left 2px, bottom 3px, right 4px)
- margin: 1px 2px 3px; (this looks like top 1px, left 2px, right 2px, bottom 3px)
- margin: 5px 1px; (top, bottom 5px; left, right 1px)

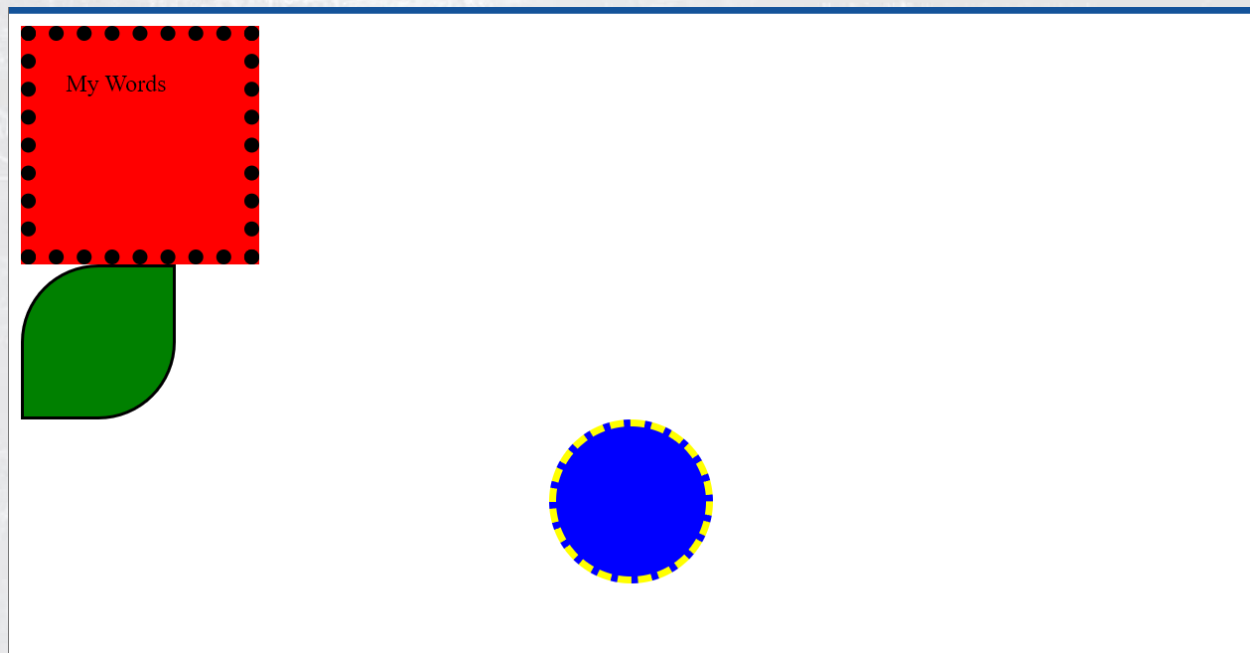


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE 1

- Center the blue of your blocks to the middle of the page





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE 2 PART 1

- Make three new blocks below your current blocks (green, red, blue)
- Separate the three new blocks from the first three using margins
- Stack your new blocks like this using margins:

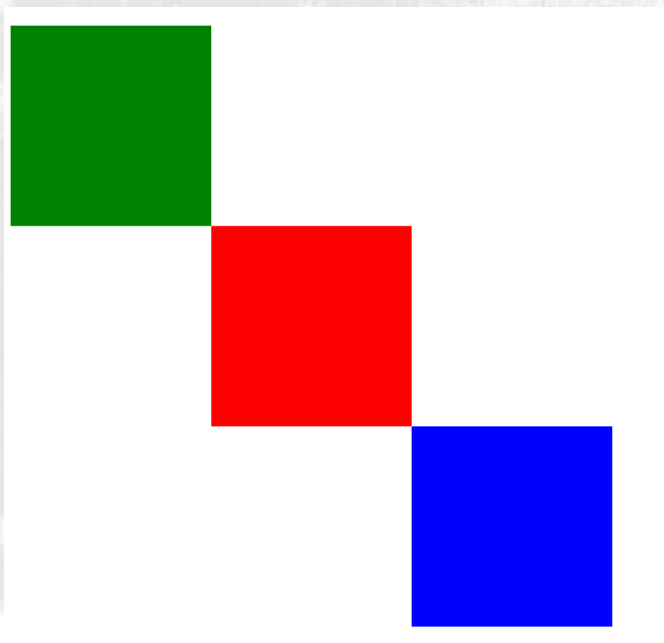


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE 2 PART 2

- Stack you new blocks like this using margins:





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

BOX MODEL OUTLINE

OUTLINE

- Outlines are similar to borders but outlines don't change the space or the layout of your website.
- outline: 2px solid red;
- You can offset your outline to add cool effects
- outline-offset: 3px;

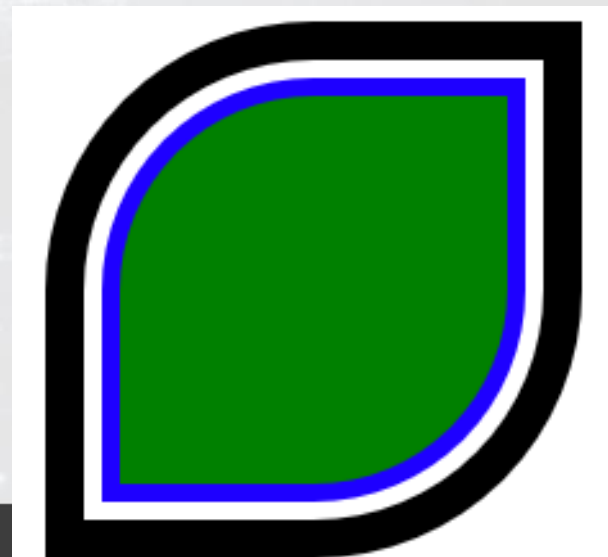


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE

- Add a 20px margin between the green and other blocks
- Make a blue border 5px and black outline 10px with an offset 5px:





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

DISPLAY



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

DISPLAY

- Html has block and inline elements
- <h1> tags are default to blocks
- <a> tags are default to inline
- You can change the default so an <a> tag will display a block and h1 will display as inline

DISPLAY

- display: block;
- display: inline;
- display: inline-block;
- If you want to hide something you can use two things:
visibility: hidden; hides the block but keeps the space available
display: none: completely removes it from the page

BLOCK VS INLINE ELEMENTS

Here are the inline elements in HTML:

<a> <dfn> <abbr> <acronym> <bdo>
 <label> <button> <map> <cite> <code> <output>
<q> <i> <small> <object> <time> <script> <select> <sub> <sup> <textarea>

Here are the block-level elements in HTML:

<address> <figcaption> <article> <figure> <aside> <footer> <blockquote> <form> <h1>-<h6> <header>
<hr> <dl> <dt> <main> <fieldset> <nav> <noscript> <pre> <canvas> <section> <dd> <table>
<div> <tfoot> <video> <p>



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- Flex box is a design layout using pure CSS
- It simplifies your layouts
- The outside is called a flex container
- The inside are called flex items



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

Flexbox

Flexbox

Flex Container

Flex Item 1

Flex Item 2

Flex Item 3

FLEXBOX

- How to make a flexbox
- As we have mentioned CSS has block and inline elements.
- There was a new feature added in 2009 called flexbox
- You can choose display: flex
- This will allow you to use very useful positioning tools



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE

- Make a new directory in ICR120 called Flexbox
- Add index.html
- Add a internal CSS in the header
- Make a div called container
- Nest three div's inside the container and give each div two class names; flex-item and block-1 or 2 or 3



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

EXERCISE

- In the flex-item style: 200px by 200px
- Make each block a different background color
- In the container style: display: flex;



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

FLEX-DIRECTION



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

• flex-direction:

- row
- row- reverse
- column
- column-reverse

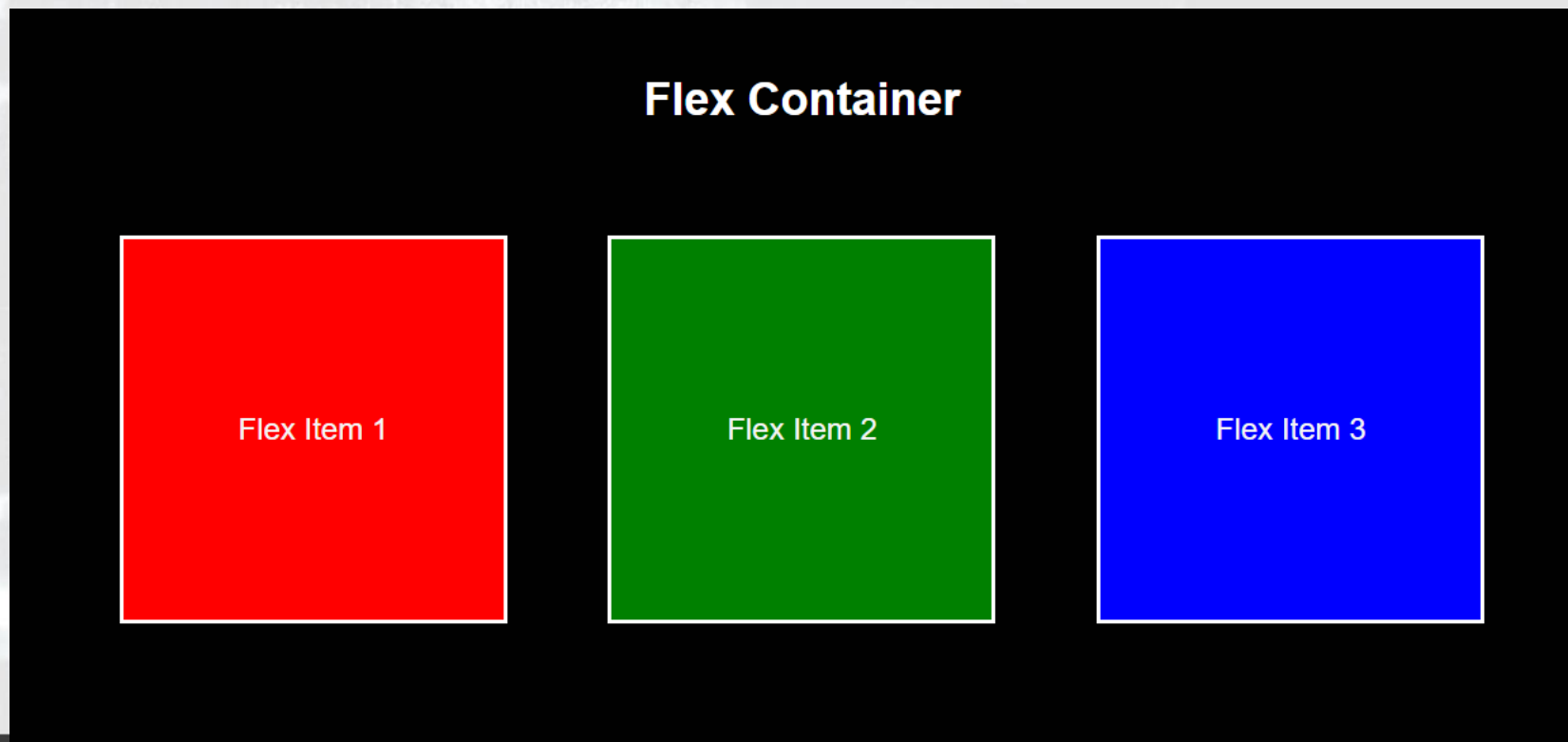


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- flex-direction: row (This is default)



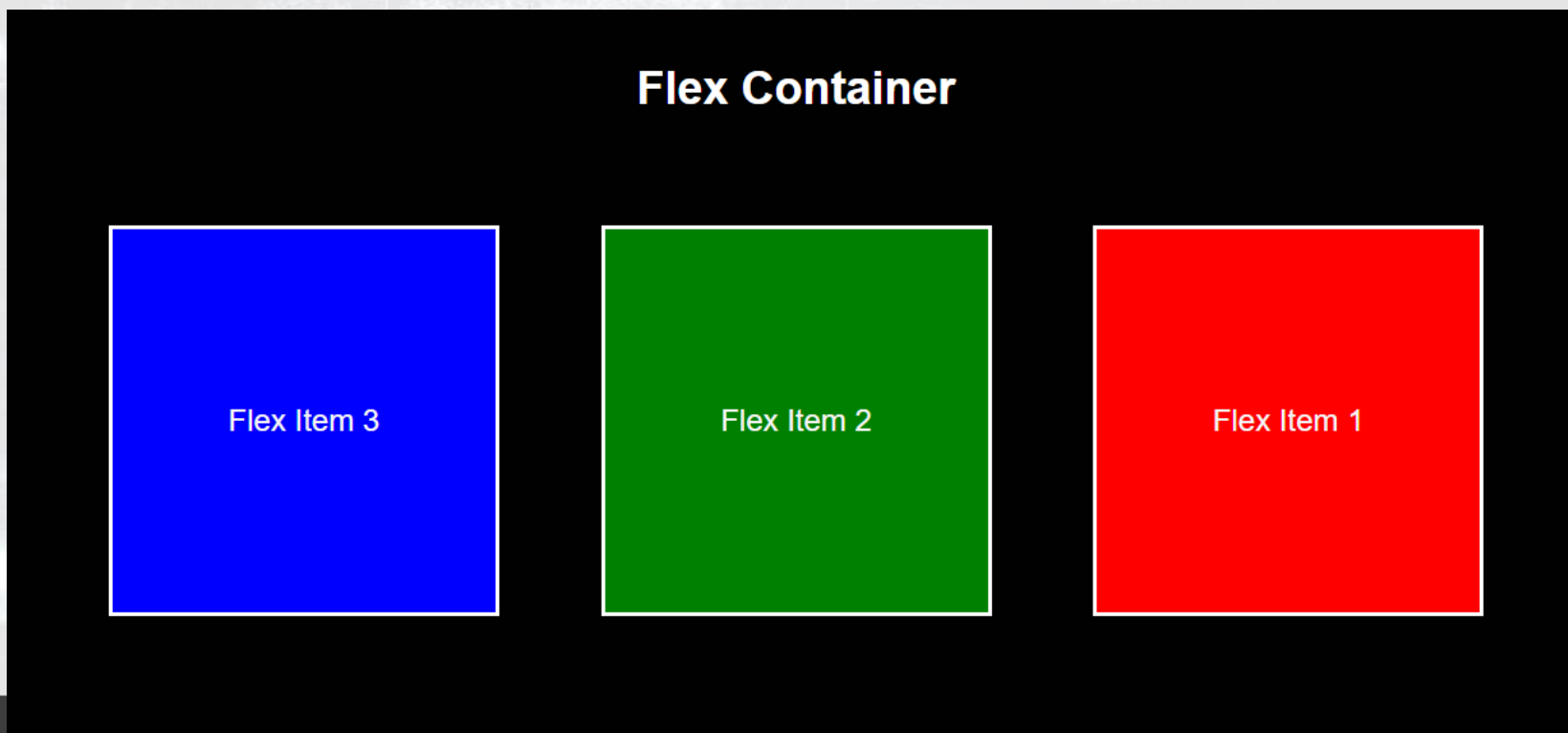


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- flex-direction: row-reverse





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- flex-direction: column

Flex Container

Flex Item 1

Flex Item 2

Flex Item 3

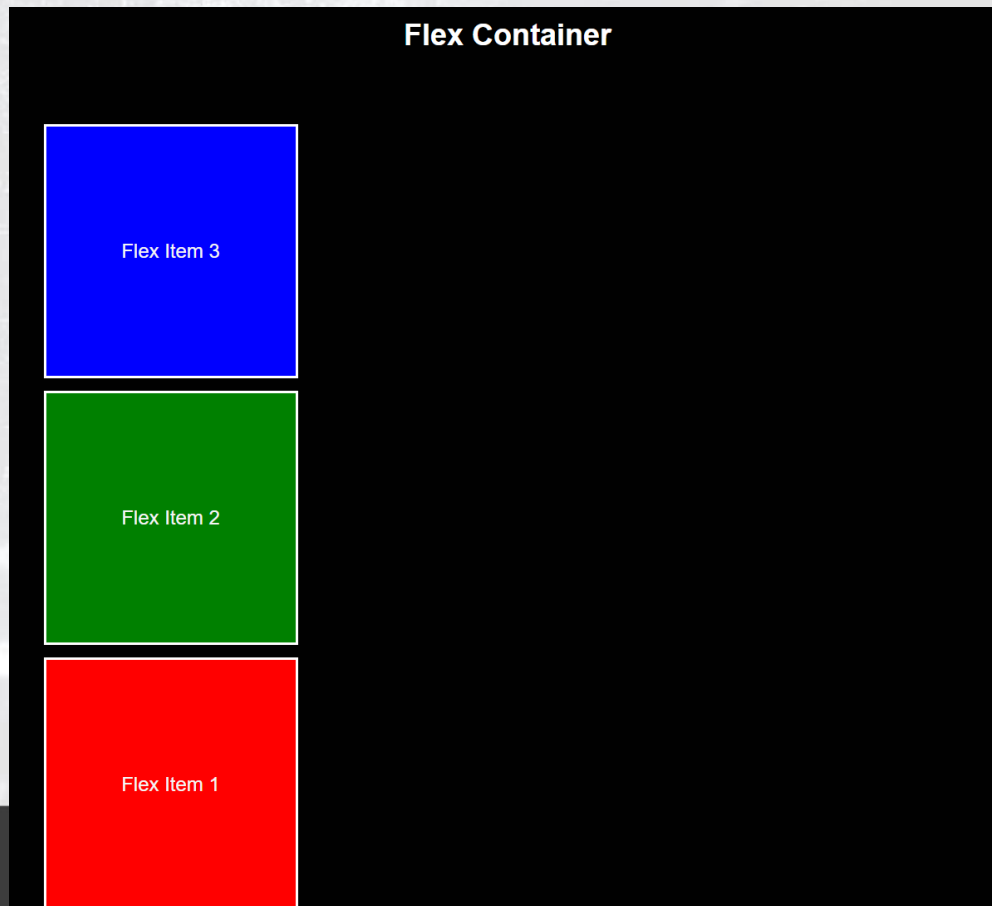


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- flex-direction: column-reverse





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX JUSTIFY-CONTENT



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

• justify-content

- flex-start// default
- flex-end
- center
- space-between
- space-around
- space-evenly

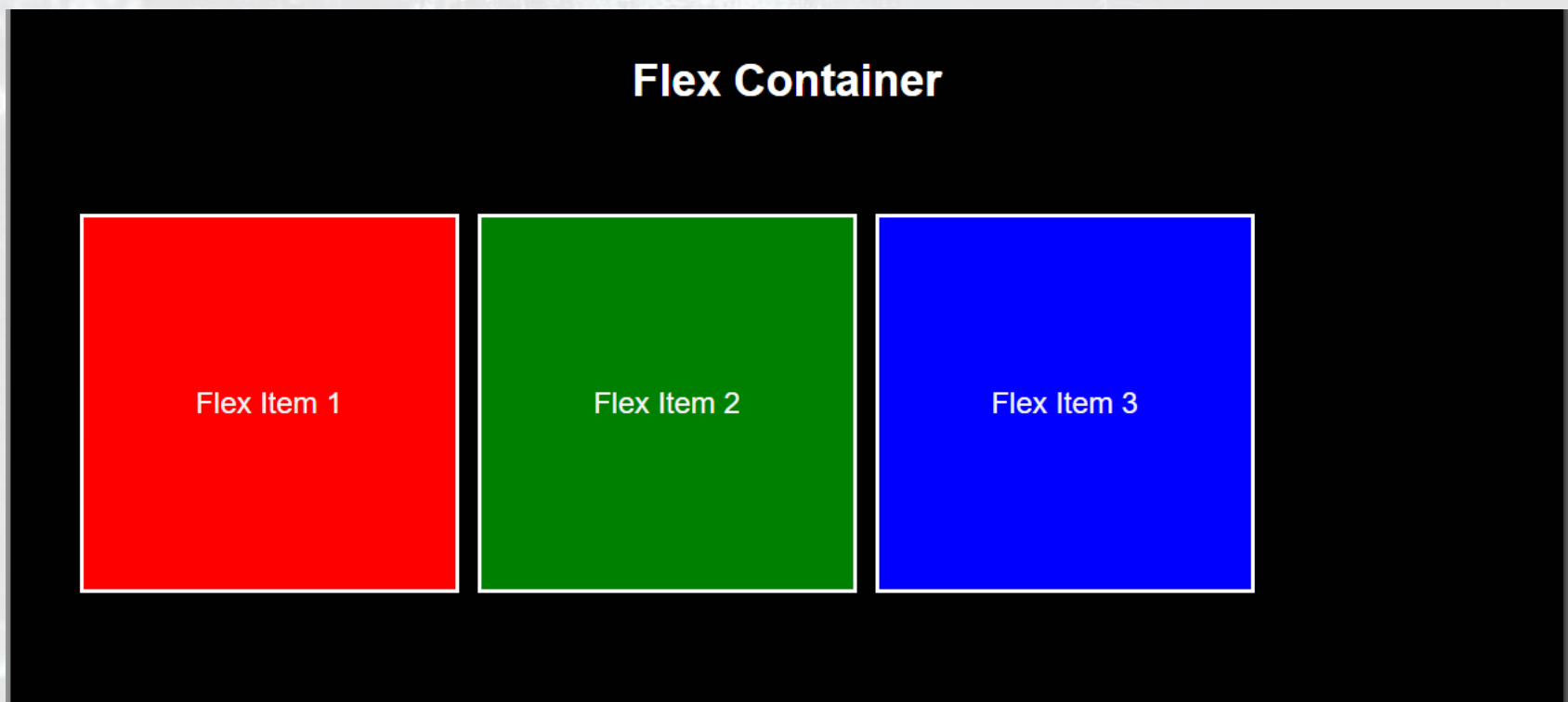


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- justify-content: flex-start // default



**There is additional padding



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

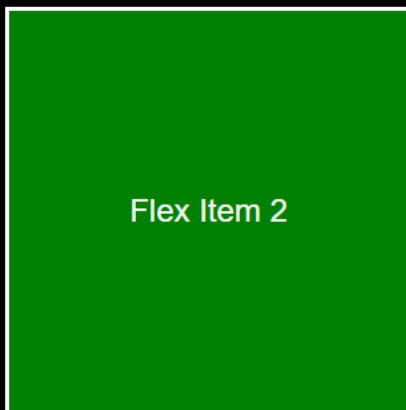
FLEXBOX

- justify-content: flex-end

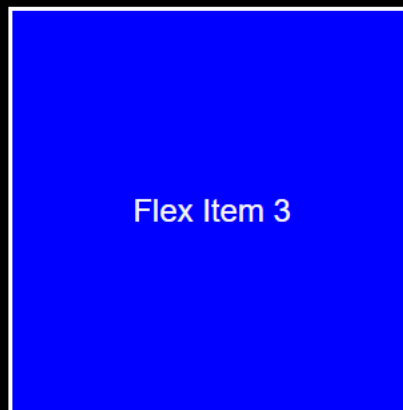
Flex Container



Flex Item 1



Flex Item 2



Flex Item 3

**There is additional padding



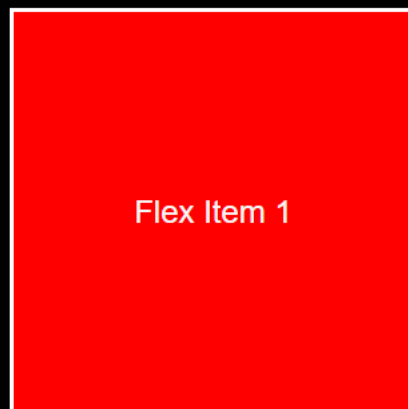
INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

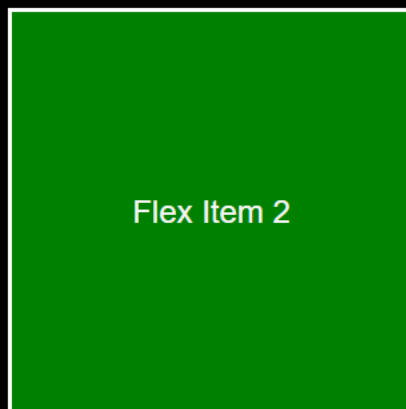
FLEXBOX

- justify-content: center

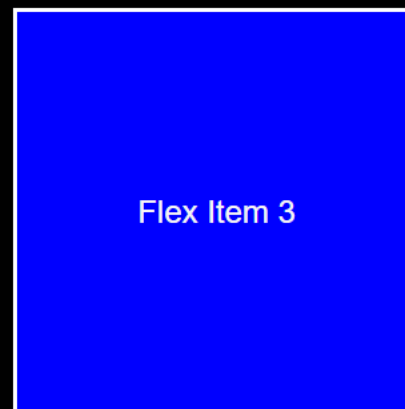
Flex Container



Flex Item 1



Flex Item 2



Flex Item 3

**There is additional padding

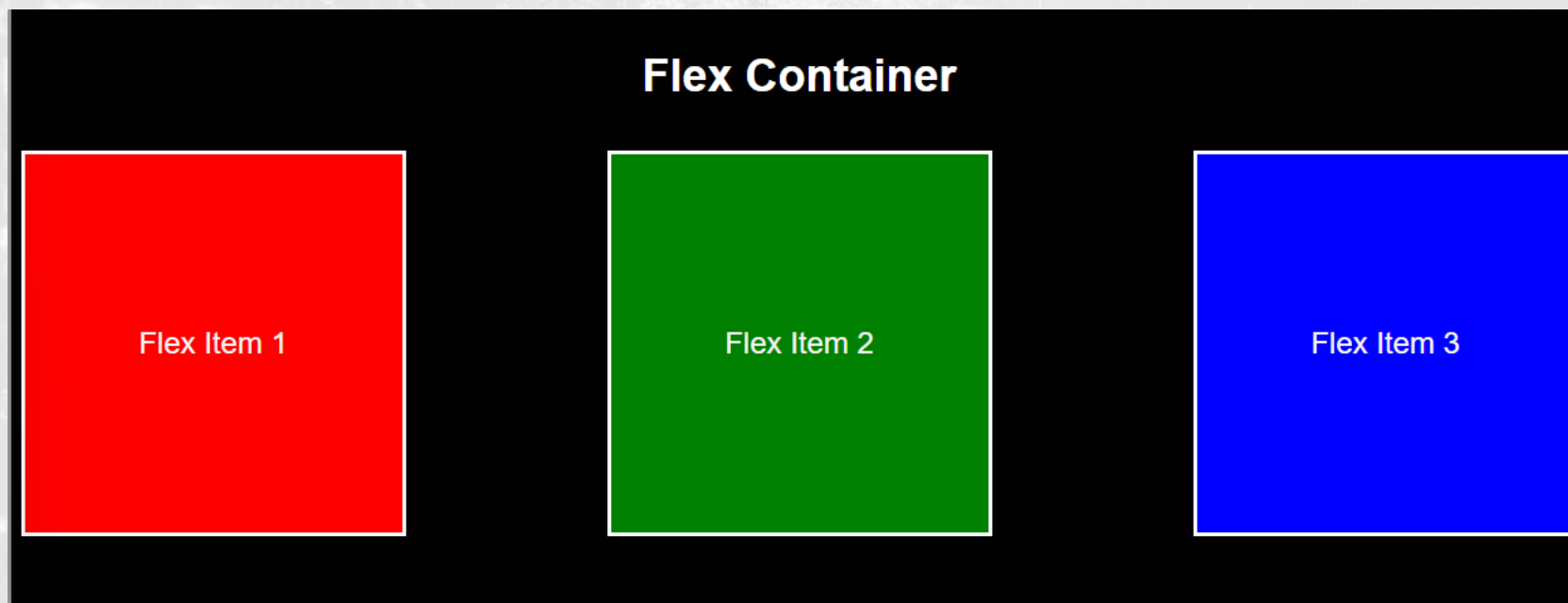


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- justify-content: space-between



**Padding removed

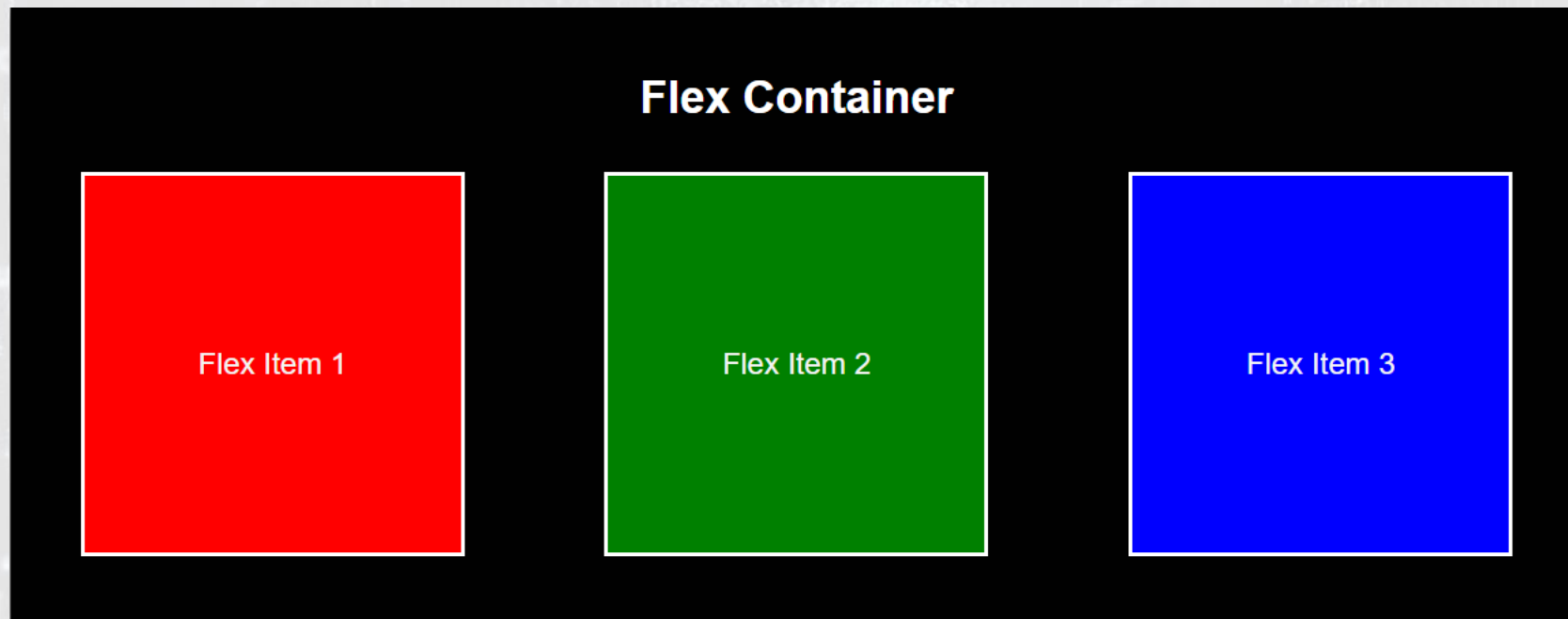


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- justify-content: space-around



**Padding removed

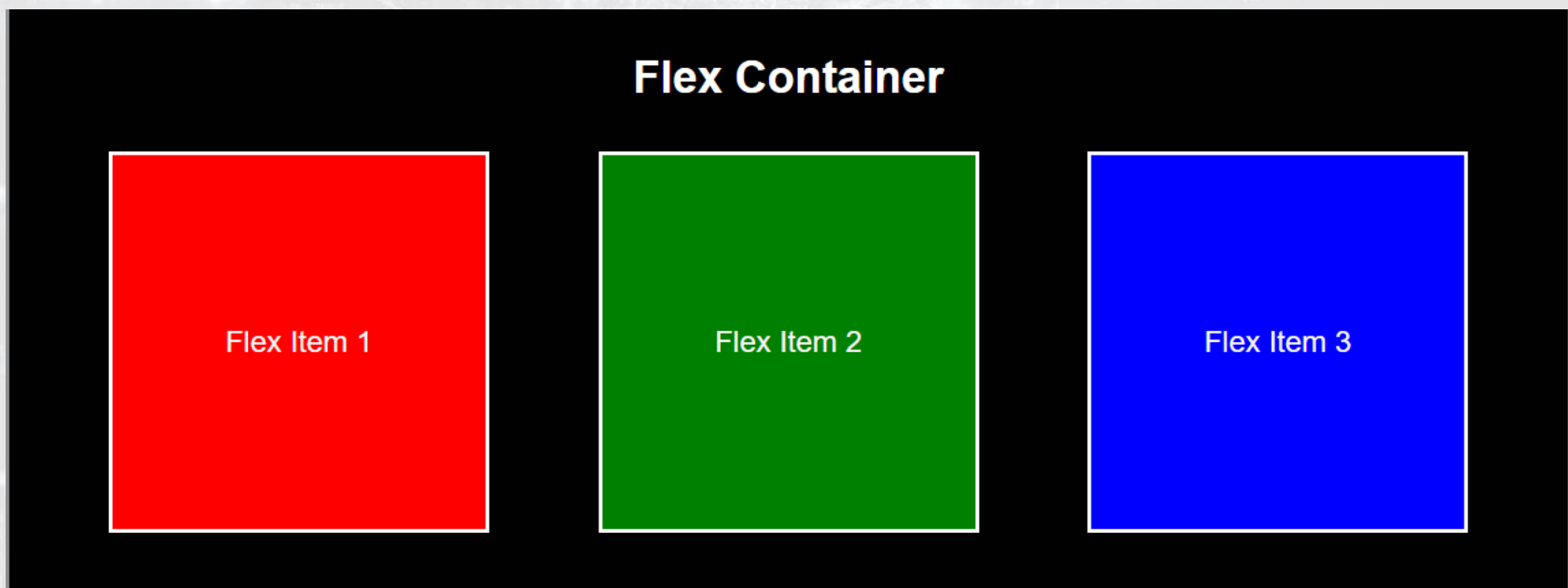


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- justify-content: space-evenly



**Padding removed



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

ALIGN-ITEMS

FLEXBOX

- align-items:

- flex-start
- flex-end
- center
- stretch
- base-line

- For all examples I have made my container height: 80vh (80% of viewport height)



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1

FLEXBOX

- align-items: flex-start

Flex Container

Flex Item 1

Flex Item 2

Flex Item 3



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- align-items: flex-end

Flex Container

Flex Item 1

Flex Item 2

Flex Item 3



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- align-items: Center

Flex Container

Flex Item 1

Flex Item 2

Flex Item 3

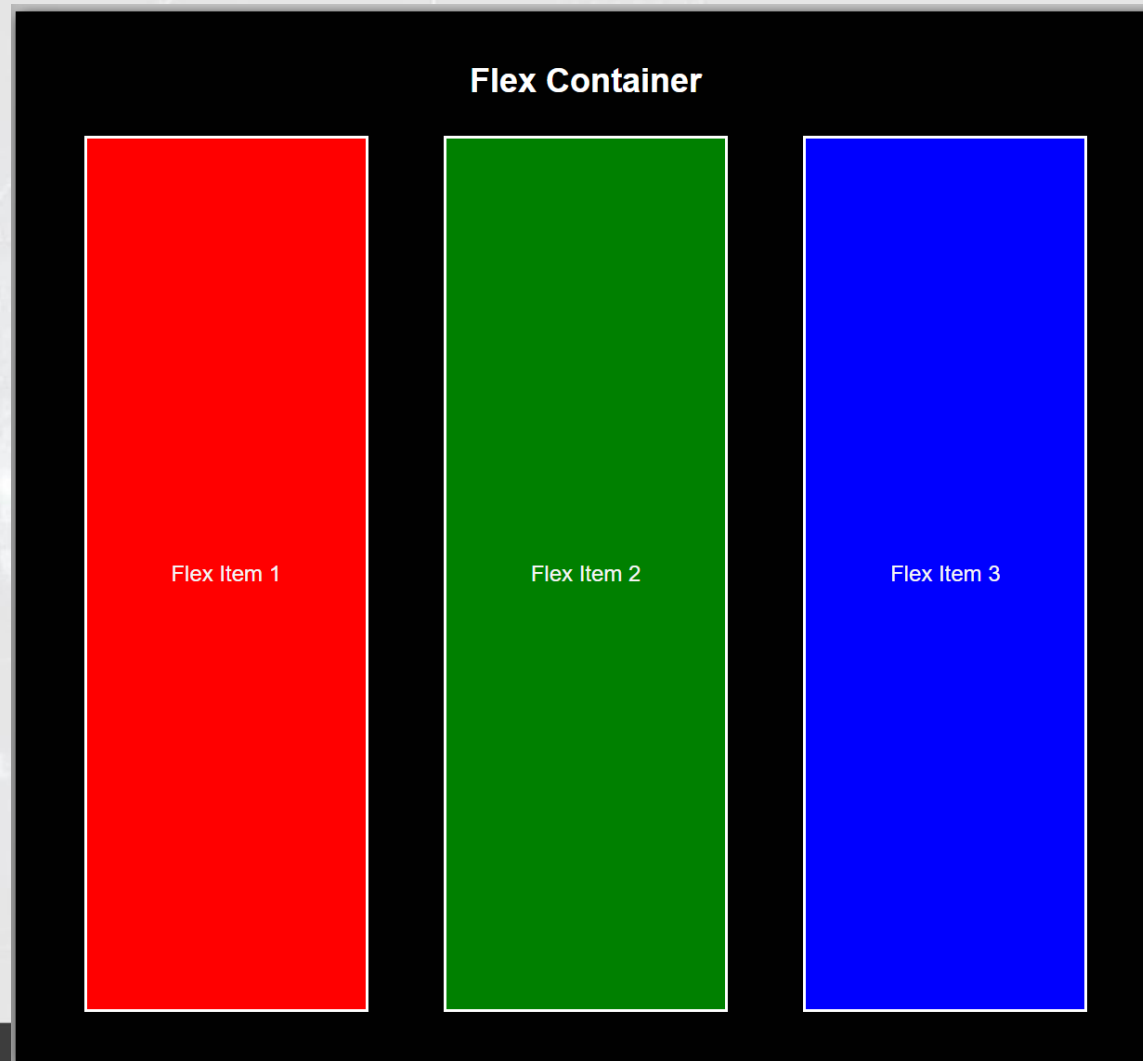


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- align-items: stretch
- I have removed height from my items



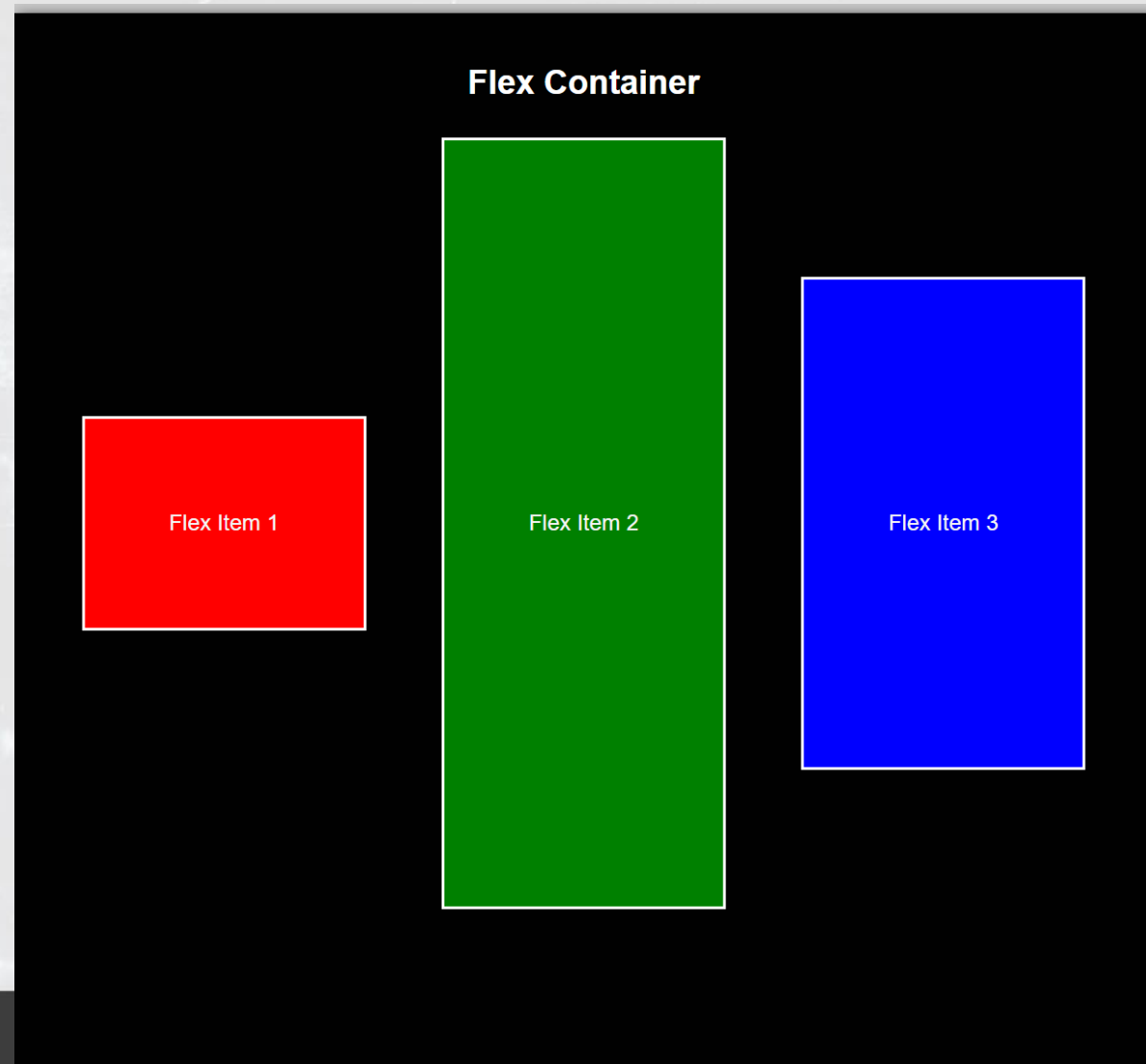


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- align-items: base-line
- Height:
- Red: 150px
- Green: 550px
- Blue: 450px





INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX ALIGN-SELF



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- align-self:

- flex-start
- flex-end
- center
- stretch
- Baseline

- Align self is the same as align-items except you add it to the item vs the container



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

FLEX-WRAP



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- flex-wrap:
 - nowrap//default
 - wrap
 - wrap-reverse

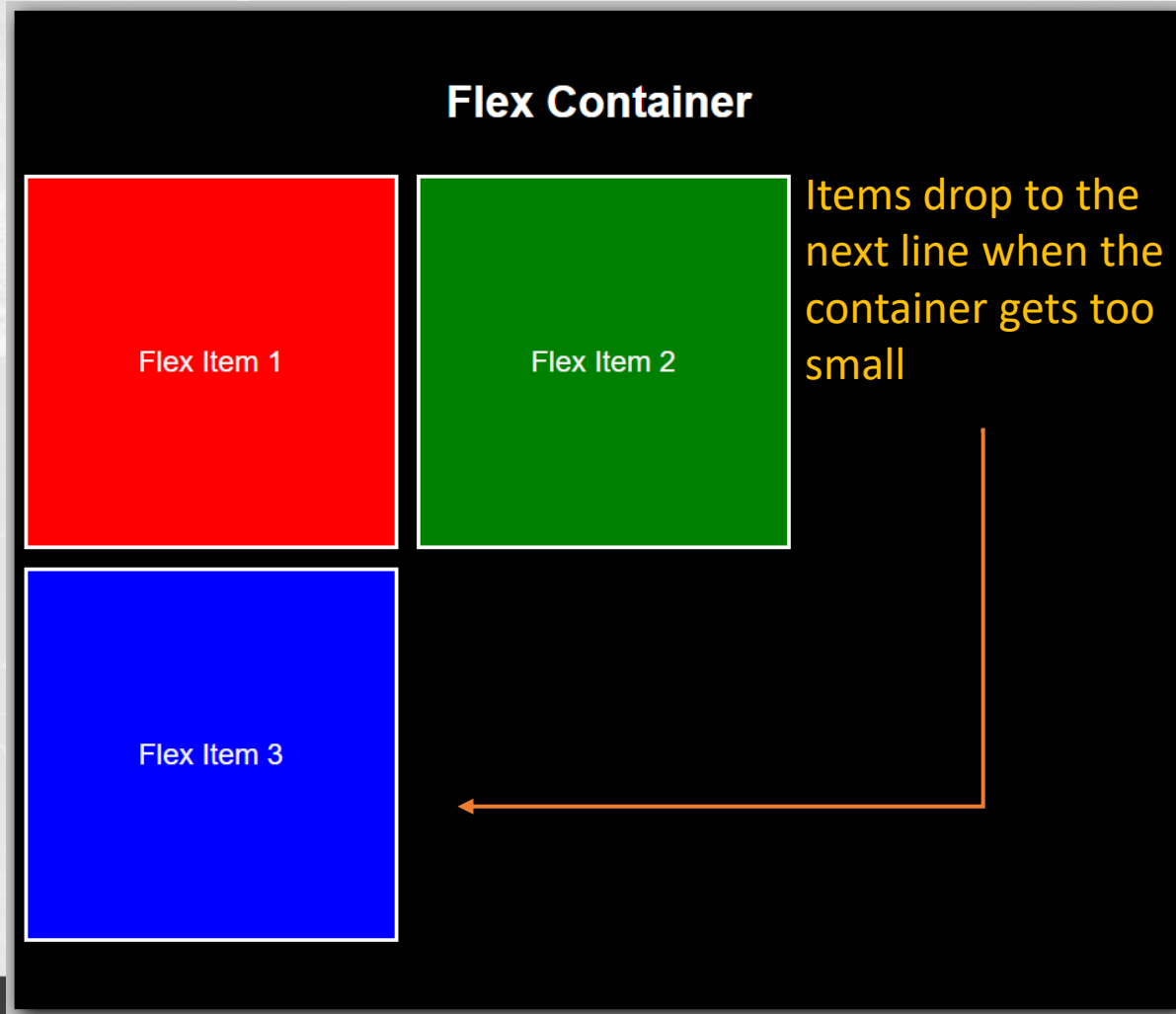


INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- flex-wrap: wrap





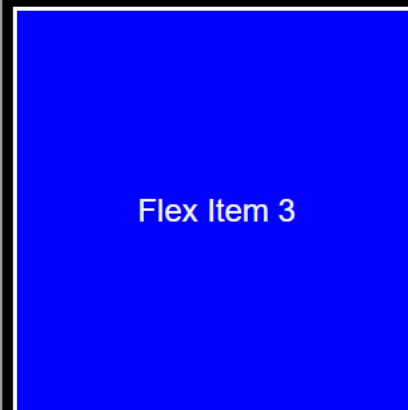
INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA

FLEXBOX

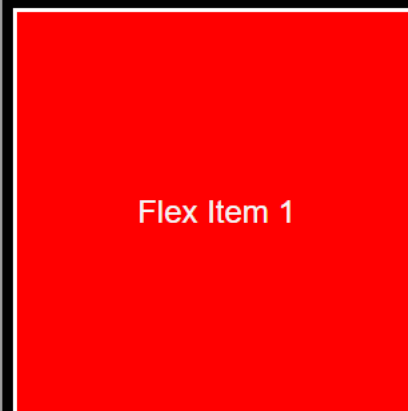
- flex-wrap: wrap-reverse

Flex Container

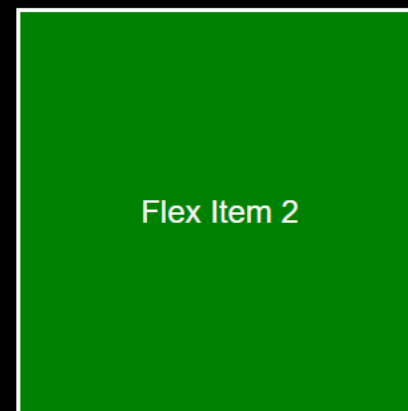


Flex Item 3

Items drop in reverse
to the next line when
the container gets
too small



Flex Item 1



Flex Item 2



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

FLEX-ORDER



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

- Change the order:
 - `order:x`; will allow you to change the order of your flex items



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

FLEXBOX

```
.block-1 {  
  background-color: ■ red;  
  order: 2;  
}
```

Flex Container

Flex Item 3

Flex Item 1

Flex Item 2



INSTITUTE OF
TECHNOLOGY
DEVELOPMENT
OF CANADA

FLEXBOX

• Flex-Grow:

```
.block-1 {  
  background-color: ■ red;  
  flex-grow: 2;  
}  
.block-2 {  
  background-color: ■ green;  
  flex-grow: 4;  
}  
.block-3 {  
  background-color: ■ blue;  
  flex-grow: 1;  
}
```

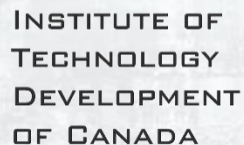
475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

Flex Container

Flex Item 1

Flex Item 2

Flex Item 3



475 GRANVILLE STREET, VANCOUVER, BC, V6C 1T1
PHONE: +1(604)558-8727, +1(604)409-8200
TOLL FREE: +1(888) 880-4410
FAX: +1(888) 881-6545
WEB: WWW.ITDCANADA.CA
EMAIL: STUDYING@ITDCANADA.CA

