



# Web开发进阶班第1期

## Tutorial 2 CSS

2023.07.27

[www.jiangren.com.au](http://www.jiangren.com.au)

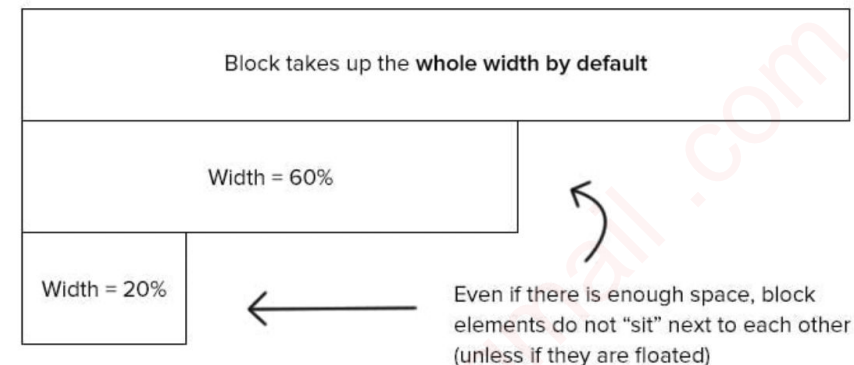
1. CSS Properties
2. 水平居中
3. Instagram Clone CSS

# 1. CSS Properties

- Display

```
div {  
  display: block;  
  display: inline-block;  
  display: inline;  
  display: none;  
}
```

## Block

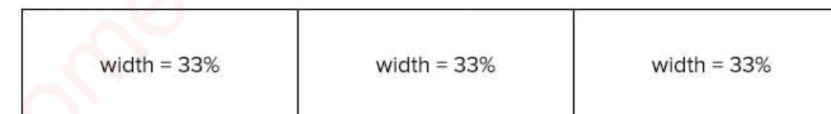


## Inline

Inline elements are things like **bold** and *italics*.  
You cannot control the height and width of these elements

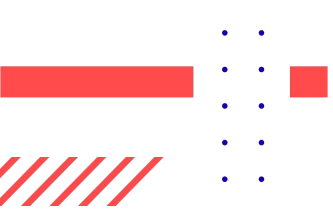
## Inline-block

inline block elements can sit on the same line



AND

combines block properties and *inline* properties

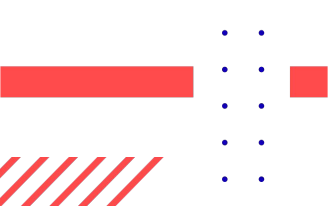


# 1. CSS Properties



- Display

display: none VS visibility: hidden



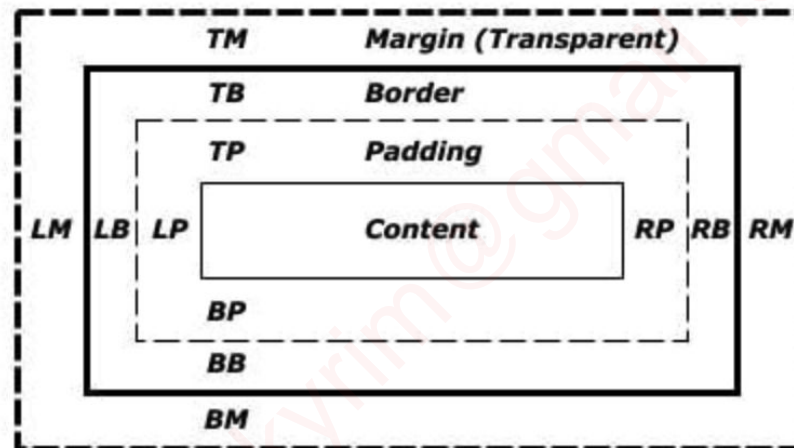
# 1. CSS Properties

- Width and Height
  - px - Pixels.
  - em - A unit of measurement, where 1 em = current font size.
  - rem - Root em. Same measurement as em, but makes life much easier without the inheritance problem
  - % - Percentages.
  - auto - highly useful unit, will explain below.
  - vw, vh
  - max-width, min-width, max-height, min-height

# 1. CSS Properties

- Margin and Padding

```
div {  
  margin: 20px 10px 20px 10px;  
  margin: 20px 10px 20px;  
  margin: 20px 10px;  
  margin: 20px;  
}
```

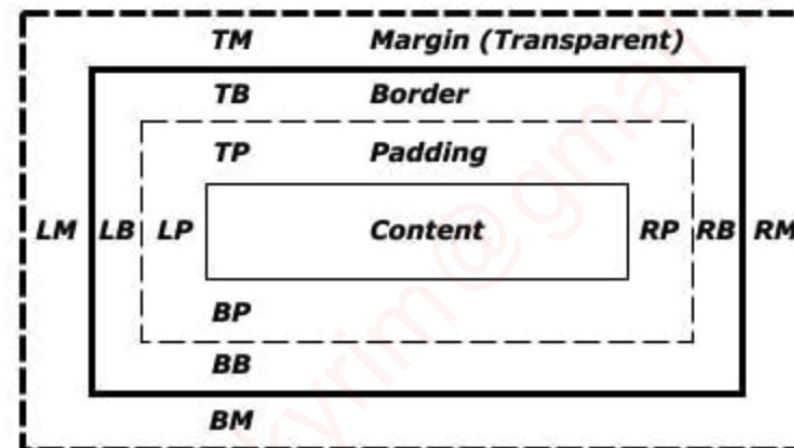


--- Margin edge  
— Border edge  
- - - Padding edge  
— Content edge

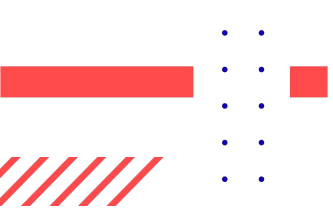
# 1. CSS Properties

- Margin and Padding

```
div {  
  /* This shorthand refers to TOP, Right, Bottom, Left.  
  Its easier to picture a clock at 12, 3, 6 and 9  
  respectively */  
  margin: 20px 10px 20px 10px;  
  
  /* This refers to Top, Left and Right, Bottom */  
  margin: 20px 10px 20px;  
  
  /* This refers to Top and Bottom, Left and Right */  
  margin: 20px 10px;  
  
  /* This refers to 20px worth of margin on all 4 sides */  
  margin: 20px;  
}
```



--- Margin edge  
— Border edge  
- - - Padding edge  
— Content edge

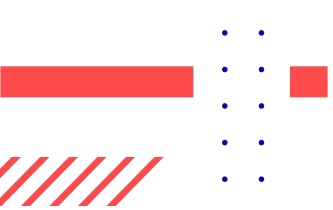


# 1. CSS Properties

- Border
  - border-width – width of the border. Same units as width and height
  - border-style – style of the border. Usual values are solid and dashed. For a complete list, take a look at [W3 Schools Website](https://www.w3schools.com/css/default.asp)
  - border-color – color of the border. Hex, and rgb values can be used.

```
div {  
    /* border width, style and color */  
    border: 1px solid black;  
}
```





# 1. CSS Properties

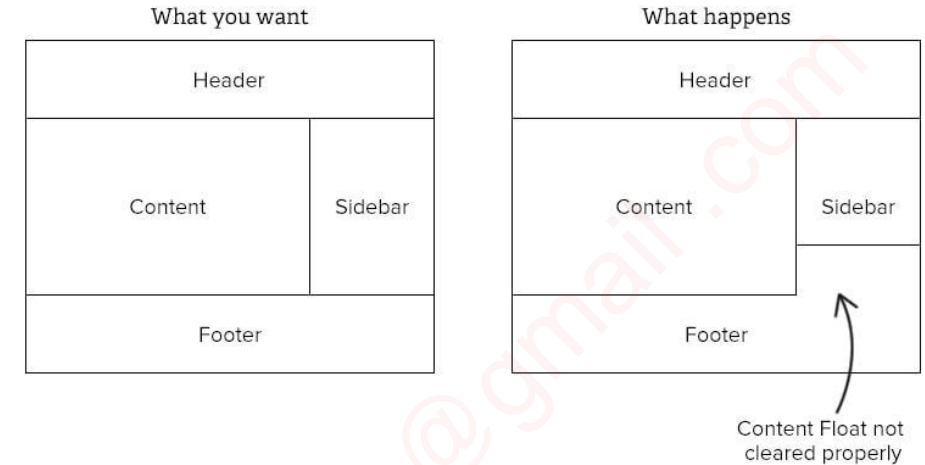
- Floats
  - left
  - right
  - none - removes the float

# 1. CSS Properties

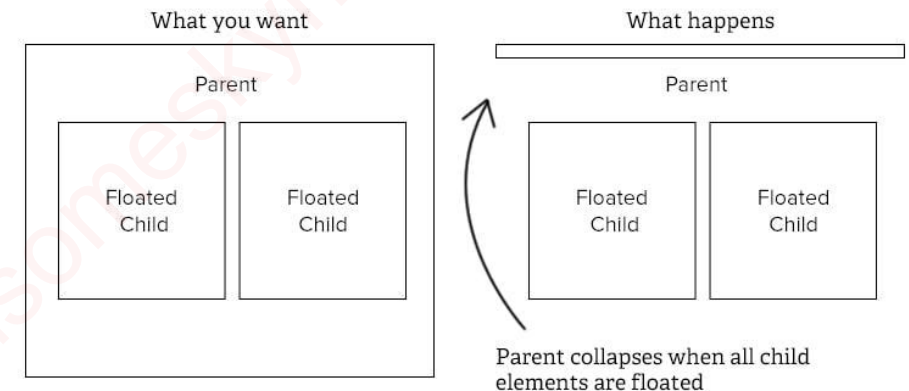
- Clear Floating

- clear: The Clear property takes in 3 values. left, right or both. As you might have suspected, `clear:left;` simply clears any floats on the left side, `clear:right;` clears floats on the right side while `clear:both;` ensures that all floats elements are cleared.
- overflow:hidden: This method is great for ensuring the parent element does not collapse like in problem 2. `overflow:hidden;` is set to the parent element to combat the problem.
- clearfix: No doubt you will have heard of or seen clearfix in tutorials. It is also set to the parent element to ensure float issues do not arise. The rationale behind the clearfix hack is to insert some content (a period) after the parent element to force the parent element to self clear since there is content after the floats.

## Float problem 1: not clearing



## Float problem 2: parent collapses



# 1. CSS Properties

- Color
  - Color here refers to text color. It takes on a #hex value or a rgb/rgba value as with border colors.

#000000

rgb(0,0,0)

rgba(0,0,0,0)

[https://www.w3schools.com/css/css\\_colors\\_rgb.asp](https://www.w3schools.com/css/css_colors_rgb.asp)

# 1. CSS Properties

- Background

- background-color: color of the background. Takes #hex value or an rgb value
- background-image: url(URI). Takes on the path to your image. Use the example above if the image is in the same folder.

To go down one folder, simple type the file name before the image.png. Example: css/image.png.

To go up one folder, type the file name with "../". Example: ../css/image.png

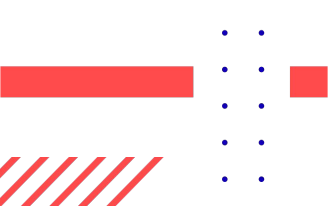
- background-repeat: whether you would like the background to repeat if the width exceeds the background size. Other values are repeat, repeat-x and repeat-y.
- background-position: position of the background relative to the HTML element. Two values are needed here, X and Y, where X is the amount of offset from the left and Y is the amount of offset from the top. Takes on either unit values (as with width and height) or left,center,right and top,center,bottom for left and right respectively.

```
body {  
    /* All background definitions are option, but at least  
    one must be stated. The above are default values given to  
    background if you have left anything undefined */  
    background: transparent image-url('image.png') left  
    top no-repeat;  
}
```

# 1. CSS Properties

- Position

- static, 该关键字指定元素使用正常的布局行为, 即元素在文档常规流中当前的布局位置。此时 top, right, bottom, left 和 z-index 属性无效。
- relative, 该关键字下, 元素先放置在未添加定位时的位置, 再在不改变页面布局的前提下调整元素位置(因此会在此元素未添加定位时所在位置留下空白)
- absolute, 不为元素预留空间, 通过指定元素相对于最近的非 static 定位祖先元素的偏移, 来确定元素位置。绝对定位的元素可以设置外边距(margins), 且不会与其他边距合并。
- fixed, 不为元素预留空间, 而是通过指定元素相对于屏幕视口(viewport) 的位置来指定元素位置。元素的位置在屏幕滚动时不会改变。
- sticky
- top, bottom, right, left, z-index



# 1. CSS Properties



- Flexbox

Homework Q&A

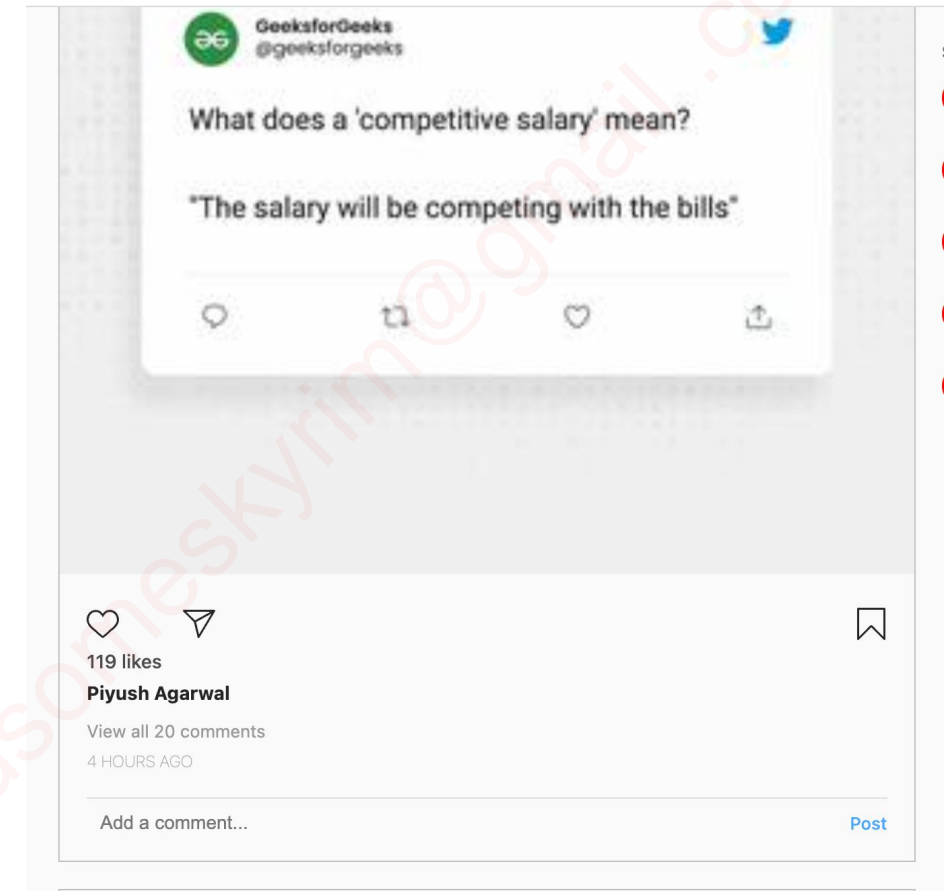
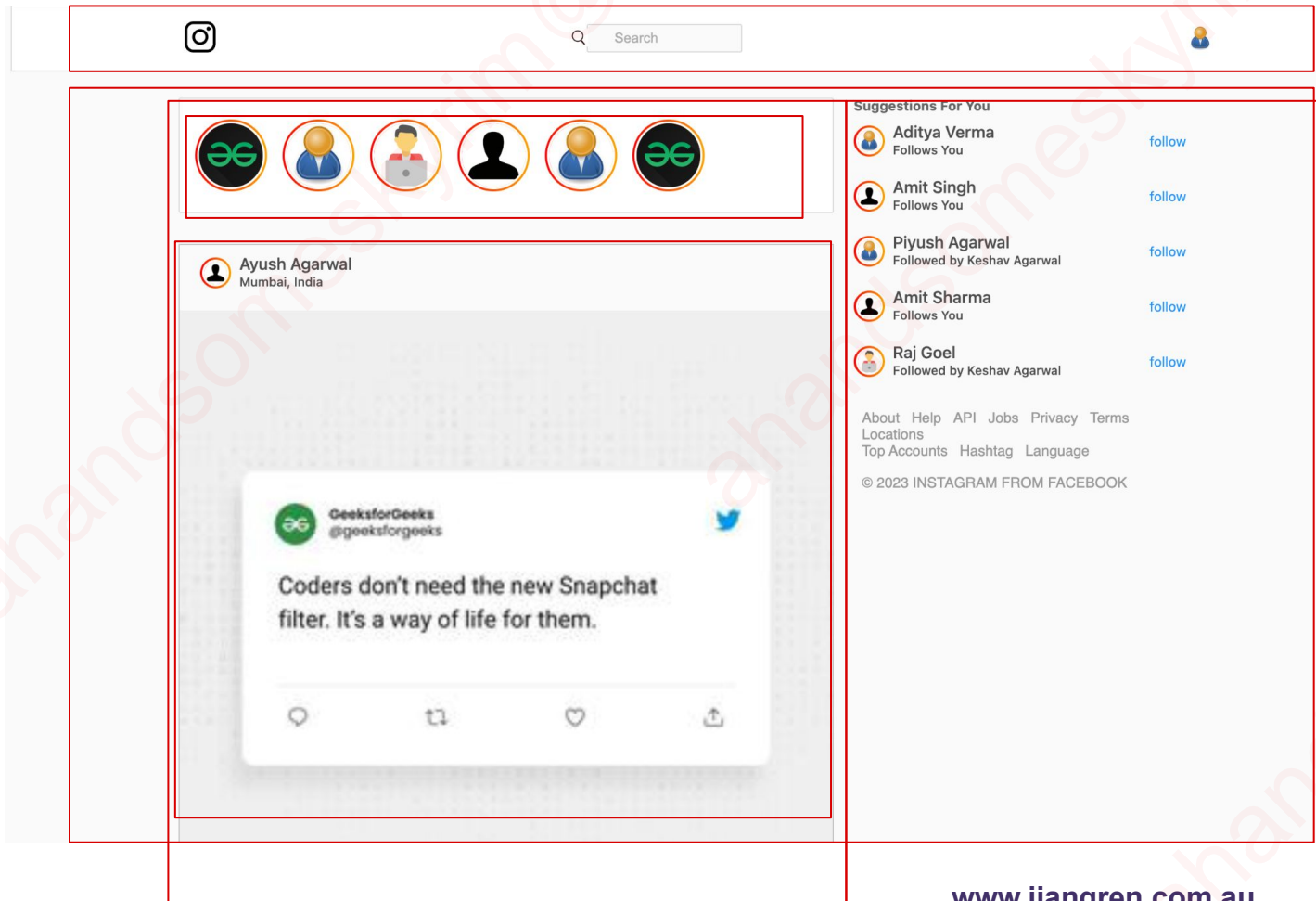
## 2. 水平居中

- 使用 **position: relative**、**absolute** 和 **top**、**left** 偏移值
- 使用 **position: relative** 和 **absolute**、**top**、**left**、**right** 和 **bottom** 偏移值和 **margin: auto**
- 使用 **flexbox**、**justify-content**、**align-item**
- 使用 **flexbox**、**justify-content** 和 **align-self**
- 使用 **flexbox** 和 **margin: auto**

The definition of `auto` varies with **elements**, **element types** and **context**. In margins, `auto` can mean one of two things: take up the available space or 0 px. These two will **define different layouts for an element**.

### 3. Instagram Clone

- HTML page





### 3. Instagram Clone

- HTML page

Ins:

<https://img.icons8.com/?size=512&id=32323&format=png>

Search:

<https://img.icons8.com/?size=2x&id=132&format=png>

Avatar

<https://img.icons8.com/?size=512&id=13042&format=png>

<https://img.icons8.com/?size=2x&id=UxhvsTk41ftA&format=png>

<https://img.icons8.com/?size=2x&id=dxHnyxU0iDkL&format=png>

<https://img.icons8.com/?size=2x&id=dxHnyxU0iDkL&format=png>

<https://img.icons8.com/?size=2x&id=20750&format=png>

Random pic:

<https://source.unsplash.com/featured/300x200>

Heart:

<https://img.icons8.com/?size=2x&id=87&format=png>

Comment:

<https://img.icons8.com/?size=2x&id=143&format=png>

Send:

<https://img.icons8.com/?size=2x&id=2837&format=png>

Tag:

<https://img.icons8.com/?size=2x&id=119&format=png>



# Q & A