

# Web designing & development

Lotus Educare Academy Navi mumbai

# Atul Kumar Singh

- Website/web app developer & trainer
- 3+ years of web development experience
- Expertise:-1.)Javascript (vanilla & node.js)
  - 2.)mySql
  - 3.)MongoDb
  - 4.)Angular
  - 5.)Php
  - 6.)Laravel
  - 7.)Html & css
- Github:- <https://github.com/atul92cs>
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# Course Outline

- html
- css
- vanilla javascript
- mysql
- nodejs (using express.js)
- github
- final project

# Pre Requisites

- Visual studio code /atom (<https://code.visualstudio.com/>)
- Mysql (xampp/mysql workbench)  
(<https://dev.mysql.com/downloads/installer/>)
- Git bash (<https://git-scm.com/downloads>)
- Node.js (<https://nodejs.org/en/download/>)
- Github account (<https://github.com/>)
- Heroku account (<https://heroku.com/>)

# System requirements

- Ram :- 2gb/4gb/8gb/16gb/32gb
- Operating system :-linux/windows/mac

# When are we going to learn?

- Week 1 :- Html & css
- Week 2:- Vanilla javascript & Mysql
- Week 3:- Node.js
- Week 4:- Github & Project

# How browser works?

## How Web Browser Works..



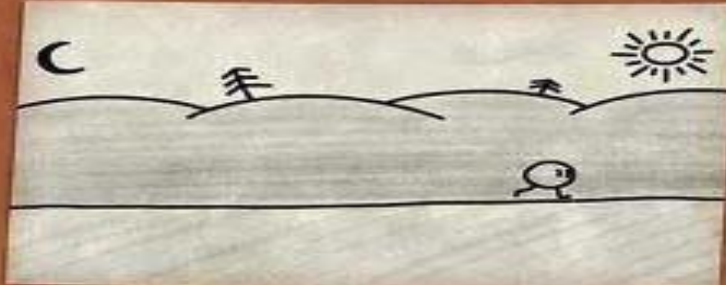
1



2



3



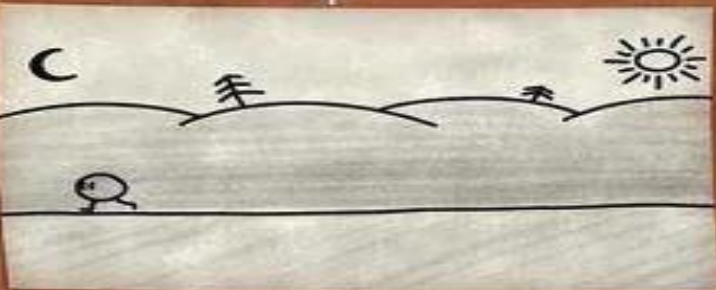
4



5



6



7



8



9

# Some basic terms of online world

- Url:-Uniform resource locator
- Http:-Hyper text transfer protocol
- Https:- Hyper text transfer protocol secure
- IP:- Internet Protocol
- WWW:- World wide web



# Html & Css

What is Html? How to use it?

# What is Html?

- It's an acronym for Hyper Text Markup Language
- Used for creating webpages/documents
- Building blocks of Web
- Consists of tags
- Latest Version is Html5

# Creating an Html file

- Html file does not require a server
- Files must end with .html extension
- Html pages run in browser
- index.html is the root/home page of a website

# Tag Syntax

- Syntax:-<tagname>Content</tagname>
- elements tags surrounded by angle brackets
- Normally comes in pairs (i.e. start tag and end tag)
- End tag is usually the same but with a forward slash
- Some tags close themselves (ex. Image tag, break tag)

# Html page structure

- `<html>`  
  `<head>`  
    `<title></title>`  
  `</head>`  
    `<body>`  
      `<h1>heading tag</h1>`  
      `<p>Paragraph tag</p>`  
      `<p>Paragraph tag</p>`  
    `</body>`  
  `</html>`

# Basic Page Structure

```
<!DOCTYPE Html>
```

```
<html>
```

```
  <head>
```

```
    <title>Page Title</title>
```

```
  </head>
```

```
  <body>
```

```
    <h1>Heading tag</h1>
```

```
    <p> My First Paragraph</p>
```

```
  </body>
```

```
</html>
```

# Elements of html

- 2 Types of elements:- Inline & Block
- Inline
  - Do not start a new line
  - Take only necessary width
  - Ex:- <p>,<h2>,etc
- Block
  - Starts a new line
  - Take full width available
  - Ex:- <div>,<section>,

# Tag attributes

- All tags have attributes
- Provide information for the elements/tags
- placed within the starting of the tag



# Css

- It is an acronym for Cascading Style Sheets
- Used to modify html tags default functions
- Can be used for in 3 ways :-Inline,Internal and External
- Not an programming language
- Can be used with Sass/Less to provide logic
- File should be saved with .css extension when used externally

# Selectors

- Component of html used to select tags,elements of html pages
- Can be used i.e. tag and elements together to modify specific component
- Syntax :-  
    element/tag :{attribute:value}

# Color

- Tag/element attribute used to set color .
- Can be used in 4 ways :-
  - 1.)Colors
  - 2.)Html5 colors
  - 3.)Hexadecimal
  - 4.)RGB

# Background

- used for changing background of elements/tags
- image or color can be added to background

# Border

- Attribute used to define the border of the elements/tags
- can of values:-
  - 1.)dotted
  - 2.)dashed
  - 3.)solid
  - 4.)double
  - 5.)groove
  - 6.)ridge
  - 7.)inset
  - 8.)outset
  - 9.)none
  - 10.)hidden

# Margin

- attribute to create space around an element/tag
- can be mentioned individually and together
- can be mentioned in px,vh,vw,%.em as measuring unit
- can be mentioned together in this format in order to define each margin separately :- margin:- top right bottom left

# Width

- Describes the width of an element/tag
- Does not relate with margin,padding,borders
- Note \* :- max and min width overrides the width of the element/tags

# Height

- Defines the height of an element/tag
- Does not relate to padding ,margin,borders.
- If max-height and min-height is defined it does overrides the default height
- If height is set to some numeric values and it does not fit within the specified height it will overflow,however we can define overflow using overflow property



# Padding

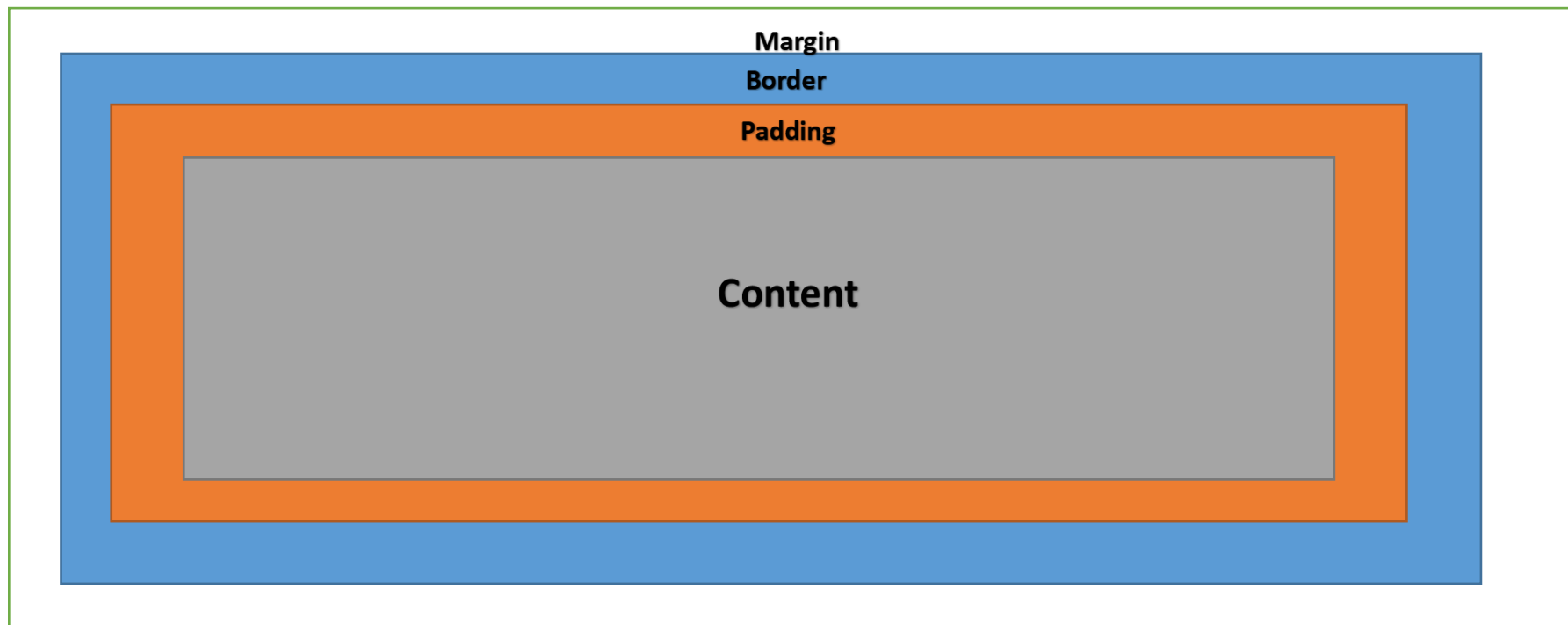
- It is property through which you generate space around the content inside of any defined border
- can be specified in three ways :-
  - 1.) Length:-px,em,etc
  - 2.) %:-specifies a padding of % of the width of containing element
  - 3.) Inherit:-specifies the padding that should be inherited from the parent element
- Can be used individually and also together

# Font

- Used to decorate text in paragraph, heading an website
- Can be used to convert text in upppercase as well as into lowercase
- Can be used to bold and italic text also
- Can be used to change the standard text font family
- Also can be used to change color of the text in webpages also

# Box Model

- All html elements can be considered as boxes.
- In css box model is used when taking about design and layout.
- consists of margins,borders,padding and the actual content.



# Form

- Element which can be used to collect input from the user in order to submit to the server.
- Can consist for different type of input
- Can consist of more than one input
- Should contain a button in order to submit the form
- Also can be used to fetch the information from the source