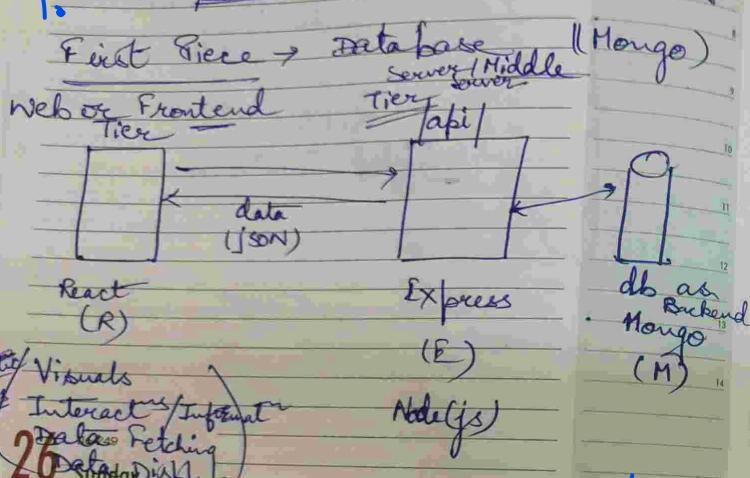


25 Saturday

Anzac Day (Australia, New Zealand)

Web Dev Mean Architecture



26 Sunday

Mongo db adds the data.

Express runs on Node & runs a api server (because react does not interact to db, react interact to Mongo db through Express)

React App is a Java Script Static Files

There is no failure. Only feedback. - Robert Allen

(js
image
css)

MERN

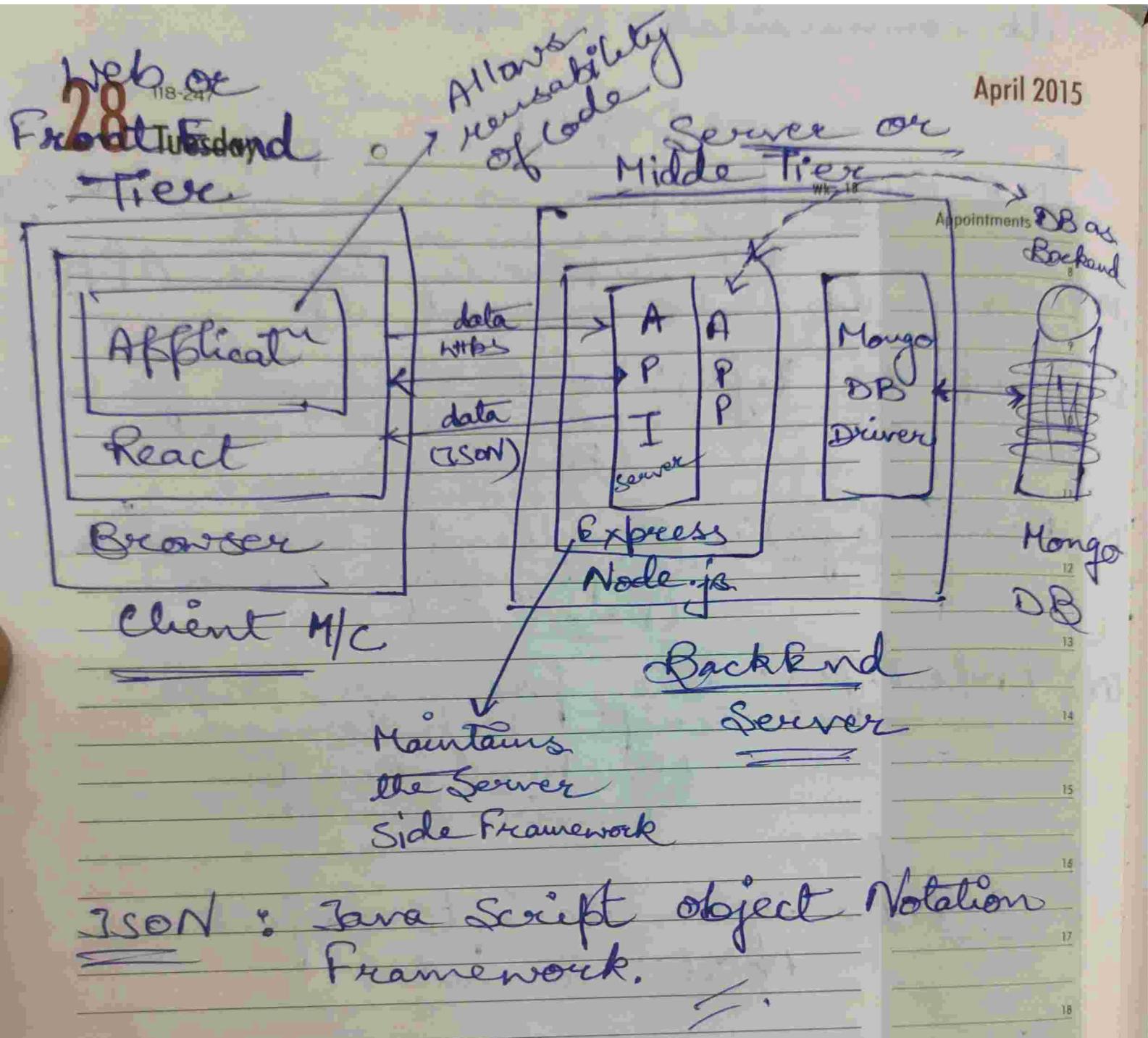
- Development is open source
- uses JS or SAX
- supports mobile app
- Mongo db : Document db
- Express (.js) : works on node js web framework (Backend)
- React (.js) : A client-side JavaScript framework (Frontend)
- Node (.js) : The premier Java Script web server. (Backend Runtime Environment)

JSON

→ Java Script object Notation Format.

These four technologies make the full stack.

The only time you realize you have a reputation is when you're not living up to it. - José Iturbide



To analyse Basic HTML Page in VS Code

January 2015

19

Monday

Martin Luther King Day (USA)

<!DOCTYPE html>

Chrome / Firefox, Safari
tells browser that you are using HTML5

<html> ✓
<head>
<title> My 1st Page </title>
</head>

root of an html document
container of meta data
element

<body> ✓
<p> Hello world! </p> ✓
</body>
</html>

contains the data which is rendered by browser

paragraph tag

<!DOCTYPE html>

<html lang="en">

→ lang attribute specifies the language of the elements' content.
"en" → English, "es" → Spanish, "fr" → French

<head>

<meta charset="UTF-8" >

<meta name="viewport" content="width=device-width, initial-scale=1.0" >

<title> Document </title>

</head>

<body>

<p> This is a paragraph </p>

<p> --- </p>

</body>

</html>

The common question that gets asked in business is, 'why?' That's a good question, but an equally valid question is, 'why not?' - Jeff Bezos

HTML document has
2 sections: (i) Head
(ii) Body

10 Friday

016-349

HTML: is the code that is used to structure a web page & its contents.

The components used to design the structure of websites are called HTML tags.

HTML files ends with .html or .htm extension.
index.html → (home page) (updated version of text files)

VS Tool Emmet Abbreviation
As we click this open a boilerplate
↓ html sample code or
then a code opens

Emmet Abbreviation: it a tool kit, it gives many helpful tools.

VS Code makes it easy that, you do not need to learn, see & write the whole code, this functionality is not available on notepad.

If we have also installed an extension live server on VS Code.

January 2015

Text files → .txt
Python files → .py

January 2015

17 Saturday

017-348

You will write the code on VS code Editor

Save the code

Go live oft at left bottom

Then, you can see your HTML tags. S/p

HTML Tag: A container for some content or other HTML tags.

<p> This a paragraph </p>
opening tag Content closing tag

HTML Element

Note: In VS Code, we do not need to write closing tags, they come automatically with opening tag see here.

OK!

Head Tag: tells the information which do not be displayed on web page but must be known by the code.

Body Tag: tells the information which actually displays on the web page.

(HTML5 specific)

This attribute encourages web developers to use UTF-8 character set, which covers almost all of the characters & symbols in the world!

<Head>

MDN Reference (Developers guide)
Shows the content of the particular word selected

viewport means website must be responsive.

(As we change the screen size or aspect ratio then we see how much the particular website is responsive.)

UTF-8 → Universal Text Format Encoding

21

021-344

Wednesday

→ .html / .htm

January 2015

Quick Points about HTML Wk - 4

- It is not case sensitive.
- Html tag is the parent of head & body tag.
- Most of html elements have opening & closing tags with content in b/w.
- Some tags have no content in b/w.
eg. `
` break line tag.
- We can use inspect element / view page source to edit html.
- Not necessary to write doctype at the top.
- # To edit any attribute on web page
then ^{right} click on html web page
 - ↓ view source code
 - or simple inspect to edit anything!

List in HTML

3 Types

- (i) ordered
- (ii) Unordered
- (iii) definition

① body

```
<h1> Ordered List </h1>
<ol> <li> Apple </li>
      <li> Mango </li>
      <li type="A"> Banana </li>
      <li type="1" start="5"> Orange </li>
      <li> Papaya </li>
</ol>
```

O/p.:

1. Apple
2. Mango
3. Banana
4. Orange
5. Papaya

②

h1 Unordered list </h1>

```
<ul>
    <li> Potato </li>
    <li type="circle"> Cabbage </li>
    <li> Onion </li>
</ul>
```

③

h1 definition list </h1>

```
<dl>
    <dt> Rohit </dt>
    <dd> Rohit is a good cricketer </dd>
</dl>
```

Nesting
List in
HTML

26

Monday

026-339

HTML → It is developed in 1991
HTML → It is developed in 2000. ✓ January 2015
It is developed in 2014 ✓
It is case sensitive ✓

Republic Day (India), National Day (Australia)

Wk - 5

FORM In HTML:

Save

Assignments, .chm, .cht, .xml

XHTML: (Extensible Hyper Text Markup Language)

- upgraded version of HTML ✓
- Similar to HTML ✓
- More strict than HTML ✓
- XHTML combines HTML with XML. ✓

Major Differences from HTML

- XML version ✓
- (i) DOCTYPE is mandatory ✓
- (ii) <html>, <head>, <title> & <body> are mandatory. ✓
- (iii) Elements must be properly fixed nested & always be closed. ✓
- (iv) Lowercase, one root element. ✓

<title> <title>
<body> <body>

Steps to convert from HTML to XHTML.

- (i) Add XHTML <!DOCTYPE> to the first line of every page. ✓
- (ii) Add xmlns attribute to html elements. ✓
- (iii) change all element name to lowercase. ✓
- (iv) close all elements. ✓
- (v) change all attribute names to lowercase. ✓

XHTML Document Structure

Tuesday

27

Appointments

✓ <?xml version = "1.0" >

✓ <!DOCTYPE HTML PUBLIC "-//W3C//DTD
XHTML 1.1//EN" "http://www.w3.org/
TR/xhtml1/DTD/xhtml1.dtd" >

(document type definition)

✓ <html xmlns = "http://www.w3.org/
1999/xhtml" >

<head> <title> Title of a web Page </title>

</head>

<body>

contents to be displayed on the web
page.

</body>

</html>

28

028-337

Wednesday

UTF

Universal Text Format - 8
Encoding

January 2015

Wk - 5

Every XHTML Document must begin
with

<?xml version = "1.0" encoding = "UTF-8"?>

<!DOCTYPE html PUBLIC "-//W3C//DTD

XHTML 1.1//EN" href: // www.w3.org/TR/

xhtml11/DTD/xhtml11.dtd>

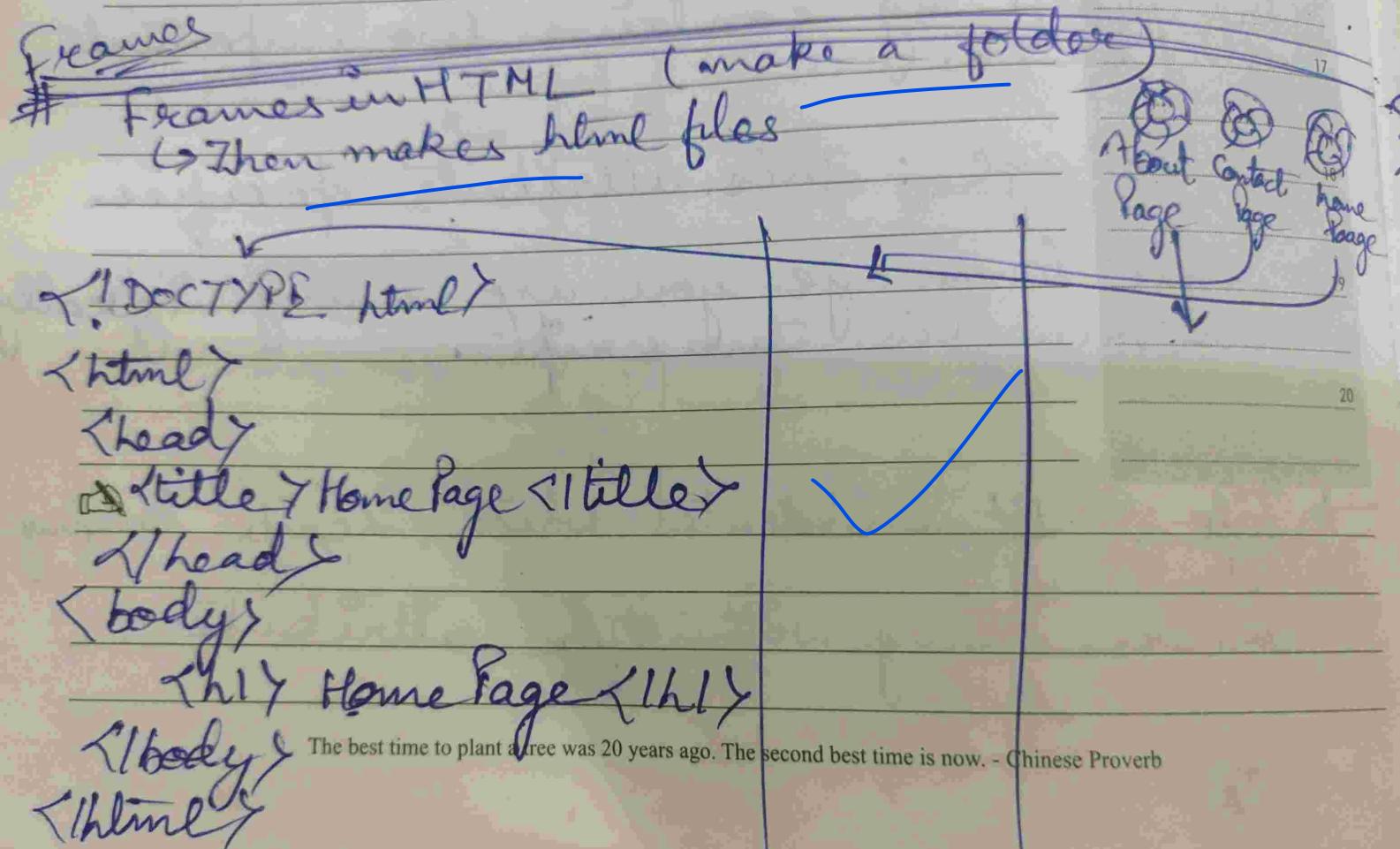
• Doc type

Three types

* Strict

* Transitional

* Frameset



Friday

6

Wellington, New Zealand

Frame tag → Frame set
 frame tag →

HOME | ABOUT | CONTACT

Home Page

© Copyright 2024

Student / Courses / Development / Project

(i) we will make three pages for
HOME Page, About Page, Contact Page
 home.html, about.html, contact.html

→ (Here, we will use anchor tag)

(ii) Make a new page (Header)

<!DOCTYPE html>

Header.html

<html>

<head>

<title> Header Page </title>

</head>

<body>

<h1 align = "center">

Home.

Wk - 6

Appointments

About

Contact

<h2>

<body>

039-326

8. </body>

Wk - 6

(iii) Make another page footer.

<!DOCTYPE html> —

footer.html

<html>

<head>

<title> footer </title>

✉ </head>

<body>

<h2 align = "center">

© Copyright 2028

I am not a product of my circumstances. I am a product of my decisions. - Stephen Covey

Student / Courses / Development / Project

</h2> </html>

(iv) Add one more Page

Monday

Appointments

MAIN Page

(In which, we embed all 5 pages)

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title> MAIN PAGE </title>
```

```
</head>
```

```
<frameset rows="15%, 70%, 15%">
```

child
of
frame
tag

```
<frame name="frameheader" src="header.html"></frame>
```

```
<frame name="framebody" src="home.html"></frame>
```

```
<frame name="framefooter" src="footer.html">
```

```
</frame>
```

```
</frameset>
```

```
</html>
```

10

041-324

Tuesday

I-Frame

Wk - 7

Appointments

(Improved version of frameset)

```
<head>
  <title> I Frame Index </title>
```

```
<head>
```

```
<body>
```

```
<header>
```

```
<nav> ✓
```

```
<menu align = "center">
```

```
<h2>
```

```
<a href = "home.html" target = "framebody">
  HOME </a>
```

```
<a href = "about.html" target = "framebody">
  ABOUT </a>
```

```
<a href = "contact.html" target = "framebody">
```

```
  CONTACT </a>
```

```
<h2>
```

```
</menu>
```

```
<nav>
```

```
<header>
```

Definiteness of purpose is the starting point of all achievement. - W. Clement Stone

February 2015

for content of
website you will use
text tag

042-323

Wednesday

11

<section>

Appointments

1. Lifename name = "framebody" src = "home.html" width = "1200"
height = "400" >
</lifename>
</section>

12. <footer align = "center" >

13. <h2>

- ~~h2 align = "center" >~~

14. © copyright 2024

15. Student | Courses | Development | Project

16. <h2>

17. </footer>

Header

HOME | ABOUT | CONTACT

About us

Body

Footer

Challenges are what make life interesting and overcoming them is what makes it meaningful. - Joshua J. Marine

© Copyright 2024 Student | Courses | Development | Project

14

045-320

Saturday

FORMS

in HTM^{Nk-7}

Name : [Name] ✓

(water mark)

Father Name : [Father Name] ✓

Mother Name : [Mother Name] ✓

Email : [Email] ✓

Gender : Male Female

Phone Number : [Phone Number] ✓

15

046-319 Sunday

Date of Birth : [mm\dd\yy]

[Submit] ✓

Wk-7

Appointments

1. HTML

Wk - 8

Apprenticeship

2. Head

<title> HTML FORM </title>
</head>

3. Body Output

4. Name:

5. <input type = "text" name = "Name" size = "15"

6. maxlength = "30" placeholder = "Name">

7. Father Name:

8. <input type = "text" name = "Father Name" size = "15"

9. maxlength = "30" placeholder = "Father Name">

10. Mother Name:

11. Email:

12. <input type = "email" name = "email" size = "15"

13. maxlength = "30" placeholder = "Email">

14. Gender:

15. <input type = "radio" name = "gender" value = "Male" size = "15"

16. maxlength = "30" value = "Male">

 Male

17

048-317

Tuesday

Maha Shivaratri (India, Mauritius)

Wk - B

Appointments

<input type="radio" name="gender" value="male"/>
size="15" maxlength="30" > Female

Phone Number:

maxlength="30" placeholder="Phone number"

Date of birth:

size="15" maxlength="30" >

</body>
</html>

30

120-245

Thursday

Abhram

It is computer language
used for web de
April 2015

CSS

Wk - 18

Appointments

(Cascading Style Sheets)

CSS: describes how HTML elements are to be displayed on screen (it beautifies the page or website) OK!

→ It covers multiple layout at once.

Types of CSS (related to page)

(i) Internal CSS: holds css rules for the page in the head section of the HTML file.

(ii) External CSS: It is a file containing only css syntax.

(iii) Inline CSS: It allows you to apply a unique style to one HTML element at a time.

→ CSS is developed by Hakon Wium Lie in 1996.

→ Developers & users can easily modify the website with the help of CSS.

→ Now a days, every browser supports CSS.

Inline CSS:

```
<html>
<head>
    <title> CSS </title>
</head>
<body>
    <h1> welcome to our class </h1>
</body>
</html>
```

To add inline CSS

```
<h1 style = "color : red;"> welcome
to our class </h1>
```

O/p: Welcome to our class

(The colour of text will be
changed to Red).

19

139-226

Tuesday

Internal CSS:

Wk - 21

Appointments

<html>
<head>
 <title> CSS </title>
 <style>

OK!

~~selector~~ <h1> {
 color: red;
~~declaration~~ { background-color: yellow;
</style>
</head>

<body>

<h1> welcome to our class </h1>

<h1> computer class </h1>

<h1> spoken classes </h1>

<h1> Academic Education </h1>

</body>

</html>

Wednesday

20

obj:

Appointments

all the h1 headings will be displayed in red colour & also background colour is changed to yellow.

welcome to our class

Academic Education

text → Red
Colour

Yellow
Colour
(background)
for each
heading

21

141-224

Thursday

→ Extension → .css
abd.css

May 2015

External CSS: make a new CSS

Appointments

file & save it with .css extensn.

Then, link this file to main html
file abd.html.

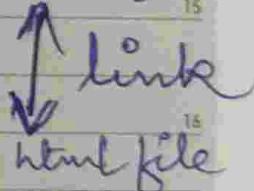
File → abd.css

h1 {

color: white;
background-color: blue;
text-align: center;
height: 2 cm;
line-height: 2 cm;

}

css file



abd.html ← File

<html>

<head>

<title> CSS </title>

Link rel="stylesheet" href="abd.css"

</head>

<body>

<h1> welcome to our class </h1>

Friday 22

Wk - 21

Appointments

{h1} Computer Class {/h1}

{h1} Spoken classes {/h1}

{h1} Academic Education {/h1}

{/body}

{/html}

23

143-222

Saturday

May 2015

CSS Text Properties

color:

background-color: ✓

text-align: ✓ (left, right, centre, justify)

text-decoration: (overline, line-through, underline)

text-transform: (uppercase, lowercase, capitalise)

text-indent: (5px)

letter-spacing: ✓ (2px)

word-spacing: ✓ (10px)

24 ¹⁰⁴⁻²²¹ Sunday line-height: ✓ 60px

Whit Sunday (Pentecost) (France)

word-spacing: ✓

text-shadow: (5px 4px red)

2 `<html>`

3 `<head>`

4 `<title> Text Properties </title>`

5 `<style>`

6 `hi {`

7 `color: red;`
8 `background-color: yellow;`
9 `text-align: left;`
10 `text-decoration: overline;`
11 `text-transform: uppercase;`
12 `text-indent: 10px;`
13 `letter-spacing: 15px;`
14 `word-spacing: 10px;`
15 `line-height: 60px;`
16 `text-shadow: 10px 30px blue;`

17 `}`

18 `</style>`

19 `</head>`

20 `<body>`

21 `<h1> Honesty is the best policy </h1>`

22 `</body>`

23 `</html>`

26

146-219

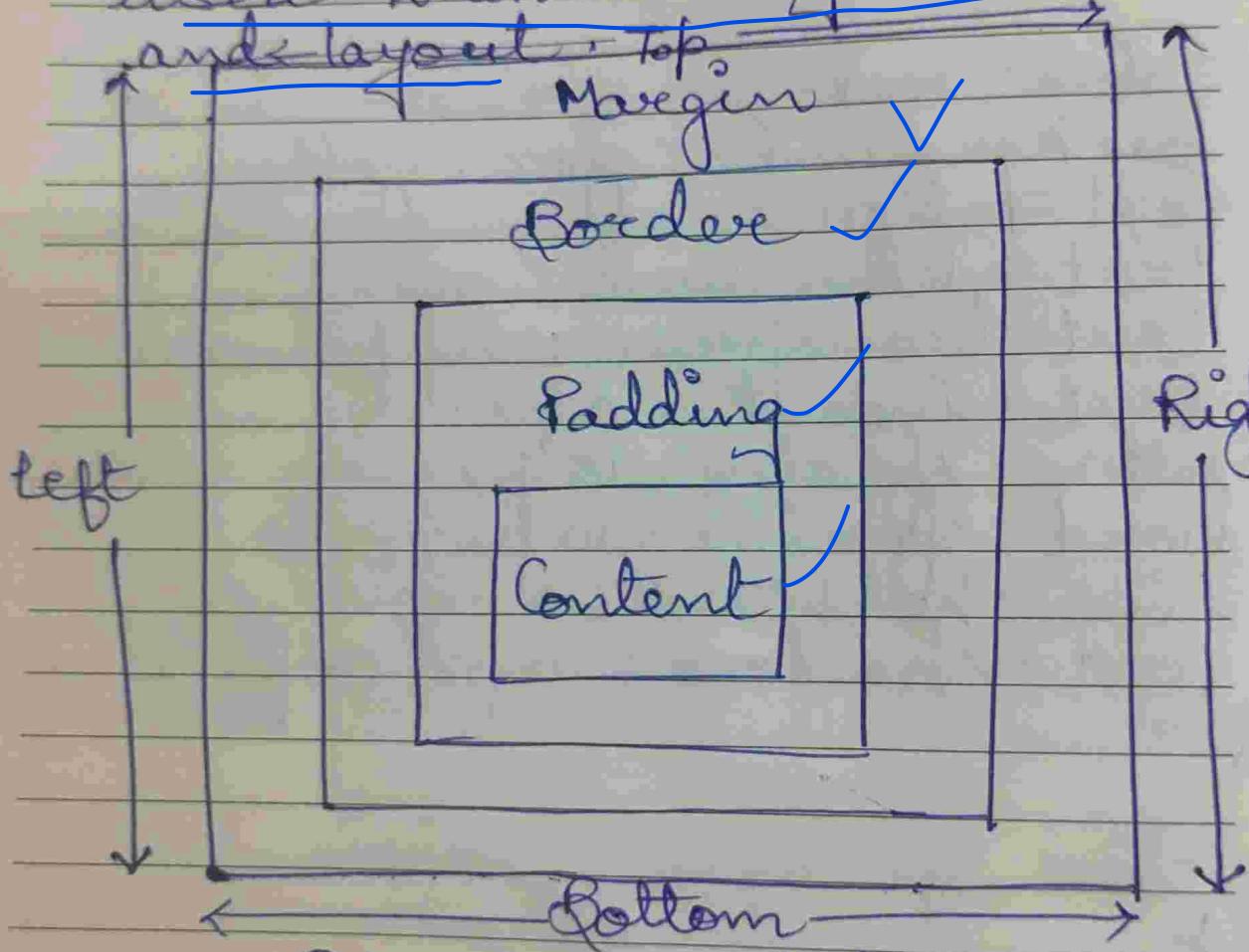
Tuesday

CSS Box Model

Wk - 22

Appointments

- All HTML elements can be considered as boxes. Each element means box and it has its own properties.
- In CSS, the term "Box Model" is used when talking about design and layout.



M

B

P

C

CSS Box Model
(Element Properties)

1. Content

Wk - 22

Appointments

It is the part that is defined by the Element. Content includes Text, Media etc. It is in the center of Box Model. It is Visible part in the Box Model which is always visible to the users provided it is not hidden.

2. Padding

The blank space around the content is Cld Padding. Padding shows outside the content and inside the border.

3. Border

Border declare is done around the Element content and Padding. Border shows around Padding and inside the Margin.

4. Margin

The free space inside the Browser window and outside the border is Cld Margin.

```
<html>
```

```
  <head>
```

```
    <style>
```

```
      div {
```

```
        height : 100 px;
```

```
        width : 100 px;
```

```
        background :  red;
```

```
        margin-top-bottom : 20 px;
```

```
        padding : 10 px;
```

```
        border : 10 px solid  black;
```

```
        outline : 10 px solid  blue;
```

```
      }
```

```
    span {
```

```
      height : 100 px;
```

```
      width : 100 px;
```

```
      background :  green;
```

```
      display : block;
```

```
}
```

```
  </style>
```

```
  </head>
```

```
<body>
```

```
  <div> Hey, I am box </div>
```

Content

```
  <span> </span>
```

```
  </body>
```

```
</html>
```

May 2015

149-216

Friday

29

Democracy Day (Nigeria)

Wk - 22

~~div~~

Appointments

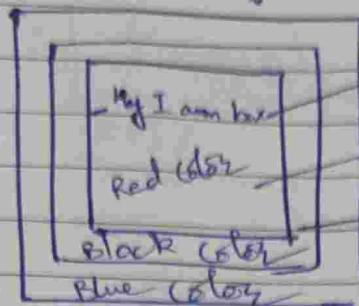
~~o/p:~~

Distance

b/w
two
elements

Margin-bottom

~~Span~~



Padding

Red color back
ground

border (Black
(color))

Outline

(Blue color)

Green color
background



Box Model manages the layout of
the web-page.

Margin 20

Border 10

Padding 10

20 10

10

160 x 100

10

20

10

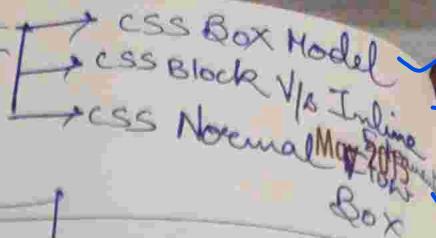
20

30

150-215

Saturday

Basic CSS Layouts (3 Types)



Normal Flow Box Layout:

File → index.html

<html>

<head>

<title> Box layout in CSS </title>

<link rel="stylesheet" href="style.css">

</head>

<body>

<div class="block-div"> Block Element 1 </div>

<div class="block-div" > Block Element 2 </div>

<div class="inline-div" > Inline Element 1 </div>

<div class="inline-div" > Inline Element 2 </div>

<div class="inline-block-div" > Inline-Block Element 1 </div>

<div class="inline-block-div" > Inline-Block Element 2 </div>

</body>

</head>

June

Mo	1	Block Vs Inline Elements CSS Layout
Tu	2	
We	3	
Th	4	index.html → file
Fr	5	
Sa	6	<head>
Su	7	<title> Basic layout in CSS </title>
Mo	8	
Tu	9	<link rel="stylesheet" href="style.css">
We	10	
Th	11	</head>
Fr	12	
Sa	13	<body>
Su	14	
Mo	15	<h1> This is a block-level element. </h1>
Tu	16	<p> This is also a block-level element </p>
We	17	 This is an inline-level element.
Th	18	 This is another inline-level element
Fr	19	
Sa	20	</body>
Su	21	
Mo	22	</html>
Tu	23	

Appointments

Wk - 23

Madaraka Day (Kenya), Foundation Day (Western Australia), Queen's Birthday (New Zealand), Vesak (Buddha Day) (Thailand, Malaysia), Bank Holiday (Republic of Ireland)

Monday

Style.css → File

8 style.css > h1

9 h1,
10 p {

11 } display: block;
12 background-color: red;

13 span {

14 display: inline;
background-color: lightblue;
padding: 5px;
margin: 5px;

15 }

16 ==

17 off: [This is block-level element.]

18 This is also a block-level element.]

19 This is an inline-level element]

This is another inline-level element]

January 2015

Sublime → javascript
jsf.html

029-336

29

Java Script

Appointments

Timeline ^{Thursday} ~~date~~ (body)
↳ Deffered (head)
(define first, execute later)

Example:

<html>
<head>
<title>

document
script embedded
with HTML

Testing Java Script

</title>

</head> <script type = "Text/javascript"
function test() // Deffered Scripting

; Thanks for visiting <h3> alert document.write ("<h3>
<script> </head>"); </script>

<body>

<h2> Using JavaScript </h2>

<script language = "JavaScript">
document.write (welcome to the
journey of scripting);

</script>

<h3> Printing my name 5 Times </h3>
<script type = ("text/javascript")>

var a;

for (a=1; a<=5; a++) // Immediate
Scripting

{ document.write (" ^{Kritika} Anyale
");

}

test();

</script>

</body>
</head>

30 030-335

Friday

O/p:

Using Java Script

Wk - 5

Appointments

welcome to the journey of Scripting
Printing my name 5 Times

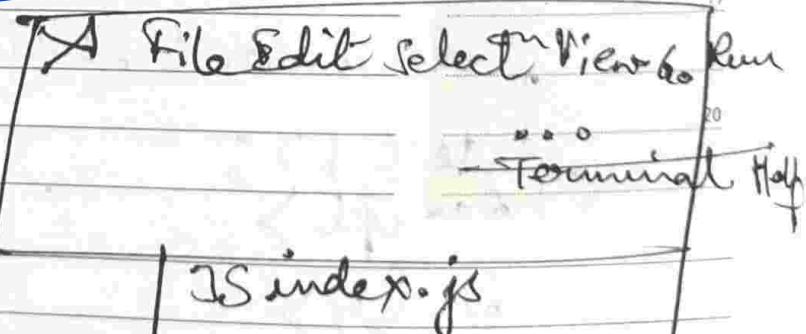
Kritika
Kritika
Kritika
Kritika
Kritika

To run the JS code

(i) Go to terminal → New Terminal

PS C:\Users\91989\Desktop\javascript>
node filename

→ Then enter → Then enter



Jan/Feb 2015
Goal:

Node JS

f. console.log('tech abc')

alert('tech abc') → shows alert box

Prob. o/p

Debug
Console

Terminal

PS C:\Users\asus\Desktop\javacode -> node index.js
(file name)

o/p: Tech abc.

Install Node JS

↳ Search Node JS in Google

Wk - 5

032-333

1

↳ 1st link download for Windows 64

Sunday

Abolition of Slavery Day (Mauritius)

✓ 14.16.1 LTS
Recommended
for Most Users

16.0.0 Current
Latest Features

→ Then open Visual Studio Code

File → open Folder → Desktop

Make a
file in

JavaScript
folder

← (Java
Script)

Folder
Name

make New
Folder

index.js
(file)

OK!

Monthly Planner

February

Su

Mo

2

Tu

3

We

4

Th

5

Fr

6

Sa

7

Su

8

Mo

9

Tu

10

We

11

Th

12

Fr

13

Sa

14

Su

15

Mo

16

Tu

17

We

18

Th

19

Console.log ("Hello everyone");
<script> ✓ Comment
var a = 30;
var b = 40;
var c = a + b;
Console.log (c);
</script> // ----- Single line
comment

→ Pure JS → need to install node.js
for html Coding (Extensions)
→ i) Code Runner ✓
→ iii) JavaScript (ES6) Code ✓
→ (iii) Live Server ✓
→ iv) prettier code. ✓

February 2015

Java Script after 1995 → Java Script is invented
(by Netscape Corporation)
Java + Script 936-332

Java Script / client side, event based ✓ Monday 2
Appointments
Condolence Day (Purification of Virgin Mary)

- 1) It is an interpreted programming language with object oriented capabilities.
- 2) It is a dynamic Programming lang.
(oops concepts of Java script)
Multiple inheritance does not support in Java Script
- 3) client - side scripting ✓
- 4) Browser → JavaScript Engine.
(JavaScript programs are run by an interpreter built into the user's web browser.) ✓
- 5) It is case sensitive, JS ignores whitespace.
You can use white space in your program. ✓
- 6) Java Script is not Java.

What can Java Script do?

- 1) It can modify an HTML Page. ✓
- 2) It can validate user i/p ✓
- 3) It can be used to create cookies. ✓
- 4) It is a Everything you'll ever need is on the other side of fear. George R.R. Martin free feature rich programming language. ✓

3

034-331

Tuesday

February 2015

- 5) If user interaction does not require any communication with the server

What makes Java Script unique?

Supported by all major browsers & enabled by default

Complex things are done simply

Full integrated with HTML/CSS

Java Script Frameworks & Libraries

1. Angular
(Framework)

3. J Query
(Library)

5. Ext.js

7. Node.js

9. Aurelia

J
A
V
A

S
C
R
I
P
T

2. React
(Framework)

4. Vue.js

6. Ember.js

8. Polymer

10. Backbone.js

Basic Syntax of Java Script

Wednesday

National Day Sri Lanka

two types

Type I

<script type = "text/javascript">

document.write ("Education for you");

</script>

* And

<script>

alert ('Welcome to JS');

</script>

Type II

<script language = "Javascript">

document.write ("Education for you");

</script>

The script tag contains two important attributes

language: This attribute specifies what language you are using. Typically its value is Javascript.

Type: It indicates which script language you are using with type attribute:

February 2015

5 036-329 ~~Semicolons~~:

→ In Java Script, Semicolons terminate the statement. It is optional. For good programming you should use semicolons.

Comments: It is the same like as in C++ and any other languages.

[Java Script]: Two types of Pop-up boxes
(return true) (return false)

(i) Confirm Box → OK or cancel

(ii) Pop-up Box → OK

(iii) Prompt Box → OK or cancel

In box return the if value

↓
the box return null.

OK).

variables, Data , Data Types, Literals

February 2015

12

042-322

Thursday

Last Quarter

Wk. 7

Java Scripts

1. console.log ("Hello World");

↳ always expect a string

Data

value) console.log (type of "Hello World");

{ • Number → 7, 72, 42.5 ✓

• String → "abc 123" ✓

• Boolean → True / False ✓

• Null / Undefined ✓

↓ (no value)

variable define kia hai par
(usne koi value nahi hai)

• BigInt → 123n ✓

• Symbol }

Console.log (2.234)

Console.log (type of 2.234)

Appointments
my JS.js

0/k

Hello World!
String

array
object

→ 0/k
2.234
→ number

true
boolean

Console.log (true)

Console.log (type of true)

Console.log (123n)

Console.log (type of 123n)

123n
bigint

iterate

Program mai direct value ko use karneko ba lateral holtto hai.

February 2015

Rohit Sharma ; rohit.Sharma

044321

Friday

13

null
(grey muted type text)

Console.log(null)

Appointments

Console.log(234+456) → literal value

690

Console.log("A" * "A")

NaN
(Not a number)

[Variables]

Var USD conversionRate
(keyword)

Console.log(100 * USD)

Var USD; → Variable declare
USD = 83.16 → Initialise the variable value
83.22

Console.log(1250 * USD)

Console.log(199 * USD)

104025

16560.78

Var USD // variables name will start from -, letter, \$.

// Var usdconversionrate → usdConversionRate

// Var usd-conversion-rate → camelCase

Var USD;

Console.log(USD)

USD = 83.22;

Off

Undefined

February 2015

049-316

New Moon

Wednesday

18

Wk - 8

Appointments

Function Syntax in Java Script

✓ `function functionName()`

{ Statement

};

→ Function Definition
(function declaration)

✓ `functionName();` ← Function Calling

Ex: <head>
 <title> Function of JS </title>

<script>

function myIntro() {
 document.write('I am Shyam');
 document.write('
');
 document.write('I am an Animation
Specialist');
 document.write('
');

}; ✓



function calling ← myIntro();
 myIntro();

o/p:
 ≠

I am Shyam
I am an Animation
Specialist

<script>
</body> </body> </head>

I am Shyam
I am an Animation
Specialist

Person who never made a mistake never tried anything new. - Albert Einstein

19 Thursday

Chinese Lunar New Year (Indonesia, Malaysia, Mauritius, Hong Kong)

Function with Parameters

```
function sum (a,b) {  
    document.write (a+b);  
}
```

```
sum (10,20);
```

```
sum (20,40);
```

Or

```
function functionName (parameter1, parameter2);
```

Statement

```
functionName (argument1, argument2);
```

Syntax

Wk - 8
Appointments
9
10
11
12
13
14
15

Wk - 8
Appointments
9
10
11
12
13
14
15
051-314
Friday 20
Second day of Chinese Lunar New Year (Singapore)
var a = 10;
var b = 20;
document.write (a+b);
...
var a = 30;
var b = 40;
document.write (a+b);
...
var a = 25;
var b = 55;
document.write (a+b);
Difference b/w console.log & document.write
↓
Console for
o/p show-hai
hai
↓
Web page for
o/p show-hai hai

21 Saturday

Object array → Advance level of Array objects

The object is a collection of properties & a property is an association b/w a name (or key) & a value. A property's value can be a function, in which case the property is known as a method. In addition to objects that are predefined in the browser, you can define your own object.

var fees = { } OK!

Rishabh: 100,
Sunit: 200,
Rohan: 300,

Total: function() { return (100+200+300); }

22 Sunday

object console.log(fees); Method →
to document.write(fee.Rohan); → 300
Types of Objects: 4 Types

ix User-defined objects - These are custom objects created by the programmer to bring structure & consistency to a particular programming task.

February 2015
OK!

February 2015

Jump

Monday 23

(i) Native objects: These are provided by the JS lang. itself like String, Number, Boolean, Function, Date, Object, Array, Math, RegExp, Error, as well as Object that allow creation of user-defined objects & composite types.

(ii) Host Object: These objects are not specified as part of the JS lang. but are supported by the most host environments typically browsers like window, navigator.

(iii) Document Objects: These are part of the Document Object Model (DOM), as defined by the W3C. These objects present the programmer with a structured interface to HTML & XML documents. Access to the document objects is provided by the browser via the document property of the window object (window.document).

24 055-310
Tuesday

DOM

Document Object Model: It is a Application Programming Interface (API) for HTML & XML documents.

- With the DOM, programmers can create & build documents, navigate their structure, & add, modify, or delete elements & content.
- DOM is a obj. oriented representation of the web page, which can be modified with a scripting lang. such as JS.
- DOM represents a document with a logical tree.
- Acc. to DOM, every HTML tag is an object. Nested tags are children of the enclosing one.
- All operate on the DOM start with the document object. From it we can access any node.
- The DOM can be used with any programming lang.

It does not matter how slowly you go as long as you do not stop.

February -

Appointments

DOM Levels

056-309
Wednesday 25

- DOM Level 0: It supports the common document obj. collect - form[], image[], anchor[], link & applet[]. This is also known as classic or traditional JS obj. Model.
- DOM Level 1: It provides the ability to manipulate all elements in a document through a common set of functions. In this level all elements are exposed & parts of the page can be read & written to at all times.
- DOM Level 2: It provides further access to page elements primarily related to CSS & focuses on combining Level 0 & Level 1 while adding improved support for working with XML documents.
- DOM Level 3: Enhanced Level of Level 2 & added support for XML & keyboard event handling.
- DOM Level 4: Enhanced year 2015 (Latest DOM Level)

It is never too late to be what you might have been. - George Eliot

26

057-308

Thursday

January 2015

Categories of DOM

Wk - 9

Appointments

- DOM Core: It specifies a generic model for viewing & manipulating a marked up document as a tree structure.
- DOM HTML: It specifies an extension to the core DOM for use with HTML & this represents DOM Level 0 with capabilities for manipulating all of the HTML element objects.
- DOM CSS: It specifies the interfaces necessary to manipulate CSS rules programmatically.
- DOM Events: It adds event handling to the DOM.
- DOM XML: It specifies an extension to the core DOM for use with XML.

DOM Tree

Document
root (html)

OK!

element : <head>
element : <title>
Text: 'New Website'

Get
Set
Delete
Add
HTML element

element : <body>
element : <nav>
Text: 'Welcome'
attribute
attribute
attribute
attribute

Remember that not getting what you want is sometimes a wonderful stroke of luck. - Dalai Lama

[Array in Java Script]

array: A Group of variables. An array can hold many values under a single name. If you can access the values by referring to an index number.

Multiple variable declaration

1. doctype html >

2. <html>

3. <head>

4. <title> Array </title>

5. </head>

6. <body>

7. <script type = "text/javascript">

8. /* let sub1 = 'Math' ;

9. let sub2 = 'Phys.' ;

10. let sub3 = 'Chem' ;

11. let sub4 = 'Bio' ;

o/p:

→ Maths

12. document.write(sub1);

13. document.write(sub4);

→ Bio

14. Multiple variables ~~as~~ agar
15. ek place par declare kar do
16. thi use Array kehtai hai.

20 Saturday

Wk - 9

{ let subject = new Array ('Math',
'Physics');
document.write(subject); } O/P:
Maths
Physics

New
Way
Modern,

let subject = ['Math', 'Physics'];
document.write(subject); } O/P:
Maths
Physics

1 060-305
let subject = ['Math', 'Physics', 'Chemistry',
'Bio']; } O/P:

Update
Sunday
St. David's Day (Wales)

subject[3] = 'English'; } O/P:
Physics

document.write(subject[1]); } → Physics

document.write(subject[3]); } → English } 11

{ /script }
{ /body }
{ /head } } 12

`var a = 10;` ✓

`var a = 10, 20, 30;` ✓ → Error

`var a = "10, 20, 30";` → String

0 1 2 ← index no.

`var a = [10, 20, 30];` → Array

✓
keyword ↓
variable name

↑
array
starts from 0 index

<!DOCTYPE html>

<html>

<head>

<title> Array </title>

<script>

0 1 2 3 4 ← index

`var arr = [10, 20, 30, 40, 50];` | o/p

`document.write(arr);`

→ 10, 20, 30, 40, 50

`document.write(arr[2]);`

→ 30

`document.write(arr[4]);`

→ 50

`document.write(arr[5]);` → Undefined

→ `for (var a=0; a<=4; a++)` ✓

o/p

{ `document.write(arr[a] + "
");`

10

}

20

</script>

30

</head> <body> </body> </html>

40

50

O/P

- 10
- 20
- 30
- 40
- 50

Total sum = 150

Monthly Planner

March

Su	1	<script>	var arr = [10, 20, 30, 40, 50]; for (var sum = 0; sum < arr.length; sum++) { sum += arr[i]; }	10 20 30 40 50 Total sum = 150
Mo	2			
Tu	3		document.write ("");	
We	4		for (var a = 0; a < 5; a++) { document.write ("" + arr[a] + ""); }	
Th	5			
Fr	6			
Sa	7		document.write (""); sum = sum + arr[a]; document.write ("" + arr[a] + ""); document.write ("Total Sum: " + sum);	
Su	8			
Mo	9			
Tu	10			
We	11		✓ document.write (""); ✓ document.write ("Total Sum: " + sum);	
Th	12			
Fr	13			
Sa	14	<script>		
Su	15			
Mo	16			
Tu	17	<script>		
We	18		var arr = [10, "Harvey", "Sarah", true, null]; for (var a = 0; a < arr.length; a++) { document.write (""); document.write ("" + arr[a] + ""); }	
Th	19			
Mixed data types can be added in one variable	20			
21				
22				
23				
24				
We	25			
Th	26		document.write (""); <script>	o/p
27				
Sa	28			
Su	29			
Mo	30			
Tu	31			

- 10
- Harvey
- Sarah
- true
- Null

3

062-303

Tuesday

2015

Nested Array

in Java Script
Appointments

other array in array.

animals [cat | dog | hawk | eagle]

birds.

o

*

z

animals = ["cat", "dog", ["hawk", "eagle"]]

(Accessing)
eagle animals [2][1]

→ Eagle

animals [2][0] → Hawk

var cities = ["Delhi", "Mumbai",
"Chennai", ["a", "b", "c"]],

console.log(cities)

console.log(cities[3][0])

of b

"Delhi"
"Mumbai"
"Chennai"
["a", "b", "c"]

b

March 2015

5

064-301

Thursday

Full Moon

Wk - 10

Appointments

<body>

object

<script>

/* let person = ['Istakar', 'Hussain', 40]

*/

let person = {

firstName: 'Rohit',

secondName: 'Sharma';

age : 60 ;

}

console.log(person);

document.write(person.age),

</script>

</body>

O/P

first Name : Rohit

second Name : Sharma

age : 60

60

March 2015

065-300

Friday

6

Holi (India), Independence Day (Ghana)

Diff b/w var, let, const

var, functional scope

```
function () {
    if (true) {
        var a = 12;
    }
    console.log(a);
}
```

let, Block scope

```
function () {
    if (true) {
        let a = 12;
    }
    console.log(a);
}
```

Nearest function,
it is accessed anywhere

const:

Block scope

```
function () {
    if (true) {
        const a = 12;
        a = 6; // ✗
    }
}
```

access
within
this (nearest)
brace

10

Tuesday

Java Script Event Handling

- Event Handling is a JS routine that processes actions such as key stroke & mouse movements.
- It is the receipt of an event at some event handler from an event procedure & subsequent procedure processes.
- Functions of Event Handling
- Event handling identifies where an event should be forwarded.
- It makes the forward event.
- It takes some kind of appropriate action in responses such as writing to a log, sending an error or recovery routine, or sending a message.
- The event handler may ultimately forward the event to an event consumer.

Event Handler

Descriptions

On Abort

It executes when the user aborts loading an img.

Don't find fault, find a remedy - Henry Ford

Appointments

Wednesday

11

On Blur

it executes when the if focus leaves the field of a text, textarea or a select option.

On change → onclick, on error, on focus, on load, on reset, on select, on submit, on unload.

Simple program Onload() Event handler

```

11
12 <html>
13   <head>
14     <script>
15       function type()
16         var d = new Date();
17         var ty = d.getHours() + ":" + d.getMinutes()
18         + ":" + d.getSeconds();
19         document.getElementById("time").value = ty;
20         SetInterval(E("time"), 1000)
21     </script>
22   </head>
23 <body>= on
  
```

Remember no one can make you feel inferior without your consent. - Eleanor Roosevelt

12 071-294

Thursday

Independence / National Day (Mauritius)

```

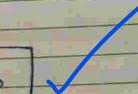
<body onload = "time()" >
<center><h2> Display Time </h2>
<form name = "frmy" >
<input type = "text" name = "time" size = "8" >
</form>
</center> </body> </html>

```

o/p:-

Display Time

18: 45: 30



Java Script Basic Events

✓ click (onclick)	• key Press (onkeypress)	It works in browser body tag
✓ Double click (ondoubleclick)	• Key Up (onkeyup)	
✓ Right click (oncontextmenu)	• Load (onload)	
✓ Mouse Hover (onmouseover)	• Unload (onunload)	windows
✓ Mouse Out (onmouseout)	• Resize (onresize)	event
✓ Mouse Down (mousedown)	• Scroll (onscroll)	
✓ Mouse Up (mouseup)		work

072-293

Friday

13

Wk - 11

Last Quarter

Appointments

```

<html>
<head>
<title> JS </title>
<script>
function hello() {
document.write("Hello Everyone");
}
</script>
</head>
<body>
<button onclick = "hello()" > Click Me </button>
</body>
</html>

```

o/p
on web page

Click Me → After clicking
Hello Everyone

Click me on

14 Saturday 073-292
Modifying Element Style in JS

Syntax:
`document.getElementById("id").style.property = new style`

```
<html>  
<body>  
<h1 id="hid">ISS </h1>  
<script>  
document.getElementById("hid").style.
```

15 color = "Red";

Sunday

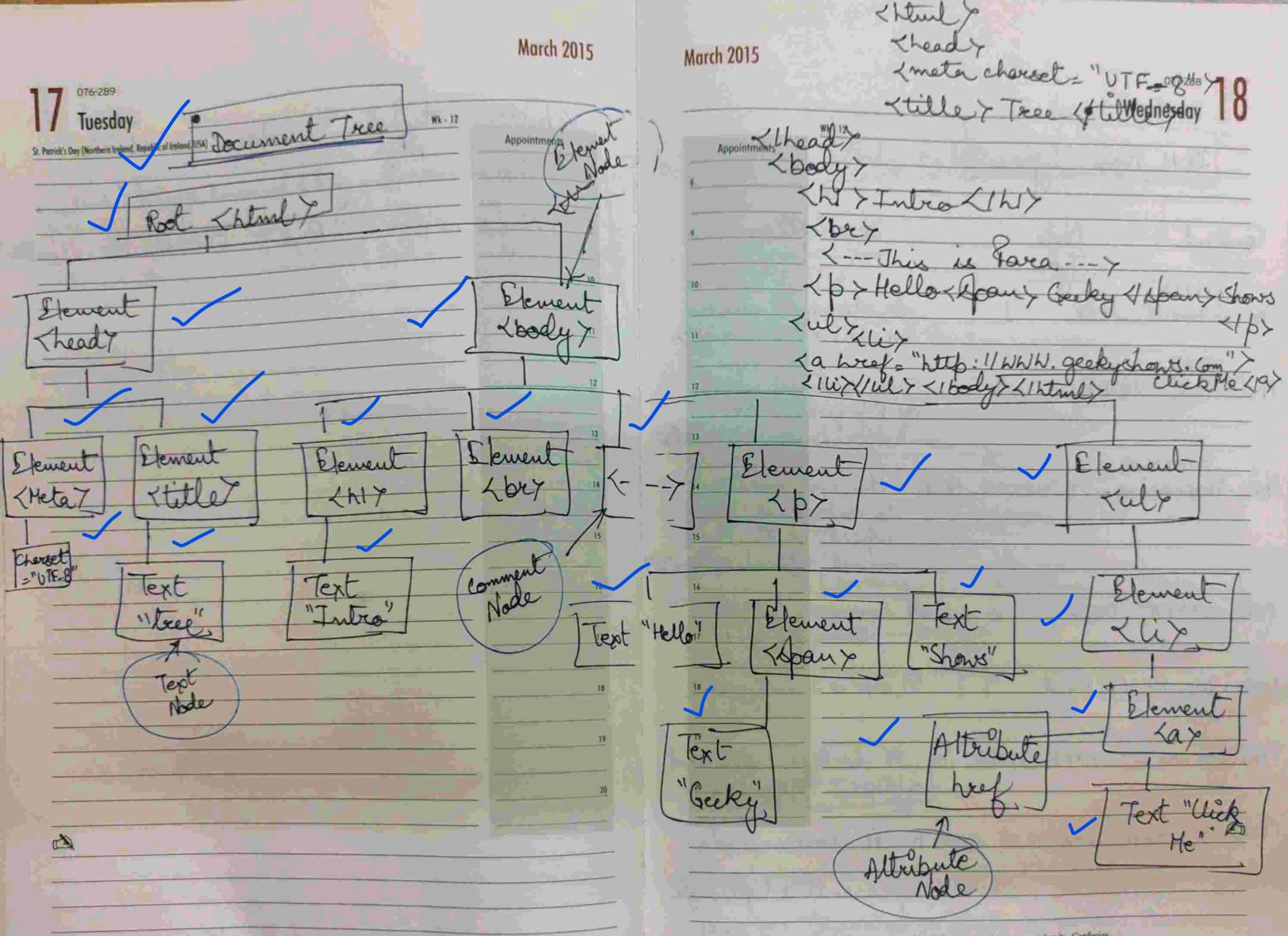
```
<script>
```

```
<body> </html>
```

Events → clicking a button ✓
→ If field is changed ... ✓
→ so on.

16 Monday

```
<button type="button" onclick="document.getElementById("hid").style.color = "Red"> Click Me </button>
```



March 2015

19 Thursday

DOM Node Types

Constant

Node Type

Description

ELEMENT
Node.Element.Node 1

An element such as `<h1>` or `<div>`

TEXT
Node.Text.Node 3

The actual Text of Element or Attribute ex:- "Hello"

PROCESSING-INSTRUCTION-NODE 7
An instruction to a parser on aspect of the document `<?xml version="1.0"?`

Node.COMMENT-NODE 8 A comment such as `<!-- Something -->`

Node.DOCUMENT-NODE 9 A document node

Node.DOCUMENT-TYPE-NODE 10 A doctype statement `<!DOCTYPE html>`

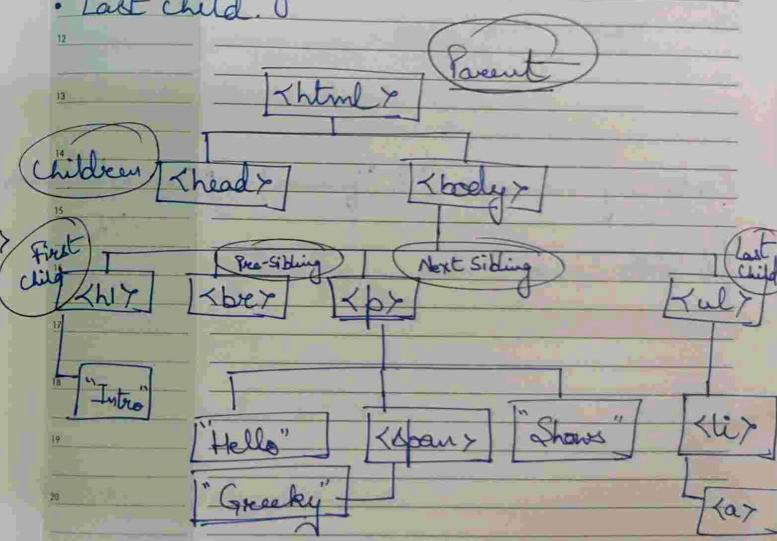
Node.DOCUMENT-FRAGMENT-NODE 11 A document fragment, which represents a lightweight structure to hold a collection of DOM nodes for manipulation or insert.

March 2015

079-286 20 Friday

Node Relationships

- Parent
- Children
- First child
- Previous sibling
- Next sibling
- Last child



You can't stop the waves, but you can learn how to surf. - Jon Kabat-Zinn

Getting Started with React App

21

080-285

After installing Node JS
on cmd

March 2015

Ugadi (India, Mauritius), Independence Day (Namibia), Human Rights Day (South Africa)

Wk - 12

cmd node -v // to check the version
npm create vite@4.1.0 | btest
npm (create-react-app)
cd react-app
npm install /i
code i.
npm run dev

March 2015

index.js

082-283

Monday

23

Template Literals

Appointments

```
import React from "react";  
import ReactDOM from "react-dom";
```

```
const fname = " Vinod" ;
```

```
const lname = " Thapa" ;
```

```
ReactDOM.render(
```

```
  <h1>{my name is {fname + " " + lname}}</h1>
```

```
  <p> my lucky number is {5+5} </p>
```

```
  </div>,
```

```
  document.getElementById("Root")  
);
```