no third party tool.

web workers-

multithreading- multiple tasks simultaneously

cockies- keeps track of browsing history.(light weight data- storied in client)

web storage- more powerful than cockies

offline application

geo location- tracking current position.

<header>

<nav>

<section>

<article>

</section>

<aside>

<figure> <img></figure>

<footer>

optimum<low - values in low range are more desrirable

semantic tags- logical tags

progress tag -

output tag- semantic tag(can be used for result)

time tag

<details>-

<summary> - these are used together

modernizr

build- download

<input type="week">

type="datetime"

type="datetime-local"

type="url"

type="tel"//pop up number keypad in mobile

range: type="file"

<select>

<option>india</option>

</select>

select from available or add your own:

<input type="text" list="countries"/>

<datalist id="countries">

<option>india</option>

</datalist>

global attributes, common among different html elemnts:

<p hidden>

<p contenteditable="true" spellcheck="true">

<p dir="rtl">// global attributes, common among different html elemnts

right to left alignment.

custom atttributes:

<p id="p1" data-color="red" data-size="4"></p>

<script>

fieldset and legend

database is on the server side.

<form method="POST" action="<url>">

<form novalidate>

<form formmethod="GET" formaction="<url>">

selectors: element selector, id selector, class selector,multielement selector.

among element selector abd id selector - id selector has more preference,similarly class.

**Border:**

**Border** consumes height and width.

Style,width,color,radius.

Border-left-radius- applies to specific side.

Border-image:url() 30 stretch. Or 30 repeat.

**Selectors:**

Sibling selector: it will select all <p>s which are placed after div. (div~p)

Div+p – it will select first <p> type of sibling of div placed after div.

Child selectors(ul>li)

**P:first-of-type{**

**} // it will select first occurrence of <p> type of child element for any parent.**

P:first-child

P:last-child

P:only-of-type- for any parent if it has single child of <p> type of element it will be selected

div:hover{}

a:link{color:red;}

a:visited{color:blue ;}

a:hover{color: darkgrey;}

p::first-letter{

font-size:30px;

color: red;

}

P::first-line{}

**H1::before{**

**Content:url(‘’);**

**}**

**Font:**

Font-size-adjust: to get almost same height for the characters belonging to diff font family.

Column-count:3 = divide content into columns

Column-rule: dotted 2px red;

Rgba: alpha controls transparency

Hue: it is similar to color wheel

Hsla(hue,saturation,lightness ,alpha)

Lightness 0 to 100%

0%-black, 50%-normal,100%-white.

Alpha is transparency factor(0 to 1) 0-complete transparent color,1:complete color

120- green

240- blue

Saturation: 0-100

0% is complete gray scale

100% is fully saturated

**Background:**

Background-attachment:fixed;

Background-repeat:no-repeat

Background-image: url(‘’)

**Position property:**

**Static:** static positioned elements are not effected by top,bottom,left and right.

By default elements are static.

**Relative:** with respect to its normal position.

**Absolute:** with respect to parent.

**Fixed:** positioned with respect to browser window. It always stays in the same place even if the browser is scrolled.

**Sticky:** toggles between relative and fixed.

**Transform:**

Translate(50px,50px) rotateX(30deg) rotateY(30deg)

Scale(1.5,2)

Skew(20deg,10deg)

Transition:

Transition-property:all; (by default) //we can mention specific property to apply transition to only that property.

Transition-duration:3s;

Transition-delay:2s;

**Preprocessors:**

Reuse code,modularity.

LESS(Learners style sheet)

Based JS

Npm install -g less

Preprocessor code css

Create .less file

Convert less .css file

Lessc source.less dest.css

Scss file.

We cannot compile the scss file directly. It is meant to be used with the other file.

Web storage:

We can store more data as compared to cookies

In case of cookies data is exchanged between client and server every time

Whereas in web storage its not required

Local storage: data is stored permanently for a given browser.

“userid”:”aman”

Localstorage.setItem(“userid”,”aman”)

Localstorage(“userid”)

Sessionstorage: data is stored for a given session only.