

Types of applications:

1. Single user application

This is the application which runs on one machine. The application need to be deployed on the same machine on which you want to run.

2. Web application

These are 3 tier application. Such type of applications is deployed on web server and used via browser. Output of these application is in the text or HTML format

3. Mobile application

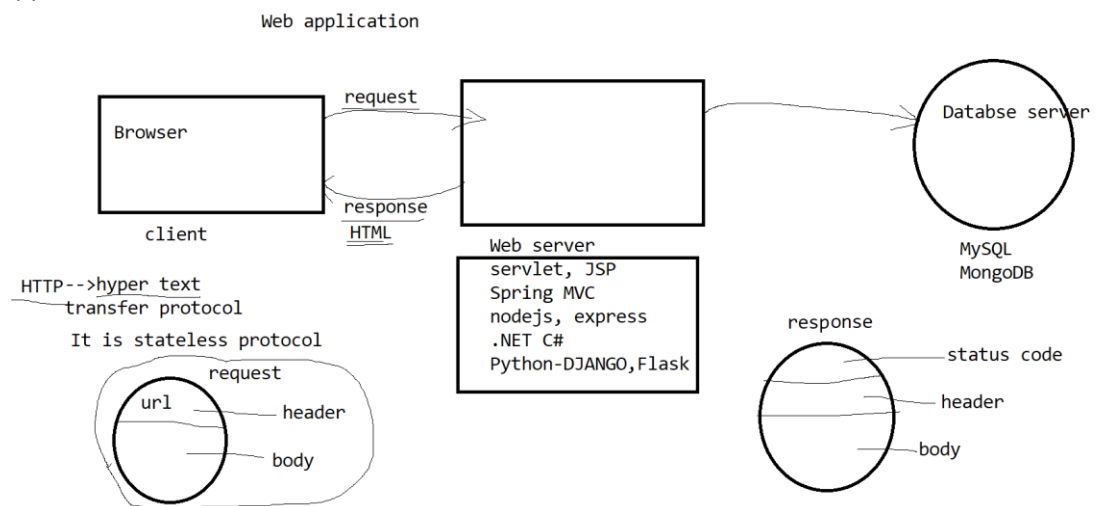
These are applications which runs on mobile.

4. Web service

These are applications which connects to database, and return only data, in XML format, JSON format, or it can be text.

HTML,CSS,Javascript,JQuery, bootstrapjs, nodejs, expressjs, ReactJs

Web applications



Http is a protocol used to communicate between client and web server.

1. Client uses browser, to send the request to the server, and server sends response to the client.

2. Request object has 2 parts

a. Header --> header sends URL, querystring(data), parameters, meta information to the server.

b. Body--> data which is securely transferred to the server, or if data is huge.

3. Request object can be sent to the server by using different methods, are called as Request methods

a. GET--> this method indicates that data is going to server via querystring, or parameters. (it means data is going via header, hence request body is empty.)

b. POST--> this method indicates that data is going to server via body of request object.

c. PUT--> this method indicates that data is going to server via body of request object.

- d. DELETE→ this method indicates that data is going to server via header of request object.

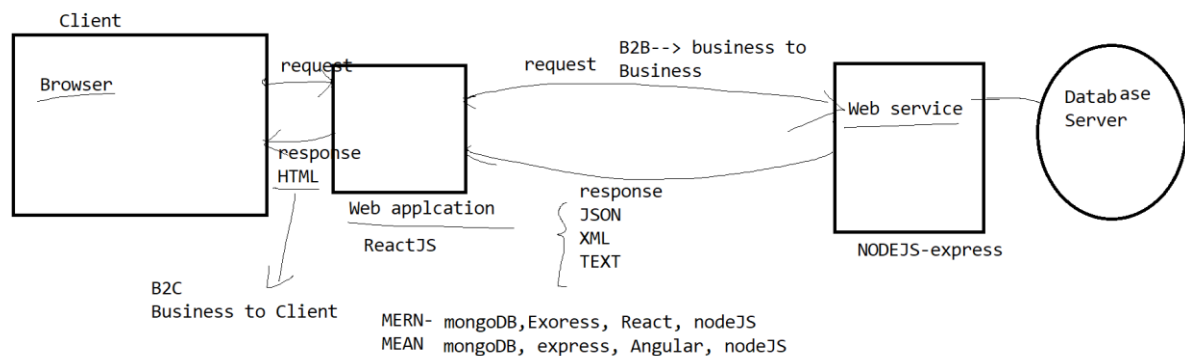
Out of these 4 methods, only 2 methods i.e GET and POST is used by web application

And all 4 methods are used by Web service.

4. Response object has 3 parts.

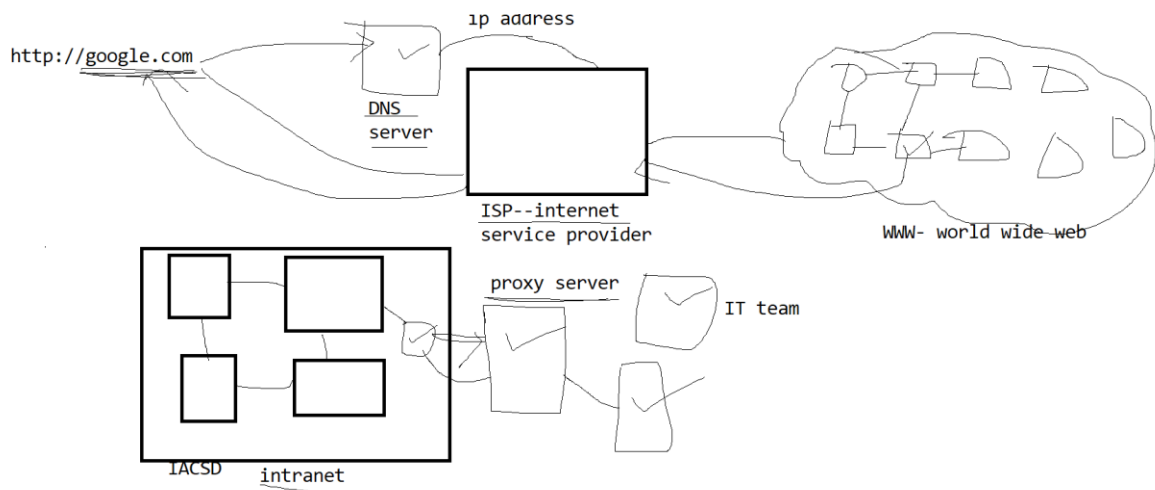
- a. Status code- It is a 3 digit number, which represents the status of how the request is handled by server
 - i. If status code starts with 2 then it indicates success, example 200, 203
 - ii. If it starts with 4 then it indicates that there is error in URL, examples 404, 403
 - iii. If it starts with 5, then it indicates there is error at server-side code, example 500, 501
- b. Header→ header gives extra information to browser about contents in the request object, example content-type, or content-length.
- c. Body---this is used to store data to transfer to the client.

Web Service



Any web application which returns data in JSON or XML or TEXT format is called as Webservice, it is back end

Any Web Application which returns data in HTML format, it is called as web application, It is frontend



HTML (Hypertext markup language)

Web application is a collection of web pages, linked with each other, these web pages are either static web page, or dynamic web page.

Static web page--→ if all the users are able to see same contents, then it is called as static web page.

Example, tutorials, blogs, new apers

Dynamic web pages --→ if all users are able to see different contents based on users i/p, then it is called as dynamic web page.

To design only static pages, we use HTML

URL

<http://google.com/gmail?nm=jhfjkh&choice=dmfnm&idcode=34342>

Query string is a string which has key=value pairs separated by &

HTML

1. Download user installer x64 visual studio code, from following URL.
<https://code.visualstudio.com/download>
2. Add live server extension
View>extension>search for live server> install the extension
View> explorer > select file > right click > open with live server
3. There are 6 header tags in HTML h1 , h2, h3, h6
4. Lists
 - a. Ordered list
 - b. Unordered list
 - c. Data list

Ol	It shows the list with numbers. You may add tags, li stands for list items Attributes => type values 1,A,a,l,i , start= any number
ul	It shows bulleted list You may add tags, li stands for list items Attributes => type values square, disc, circle by default -> disk
dl	It is data list. You may add <dt>--- data term <dd>----data definition

Nesting of lists is possible

Anchor tag—it helps to link the pages

Using anchor tag we can link different pages, or different sections of same page

Attributes in anchor tag

target	Values → _self, _blank, _parent, _top, default value is _self
href	Value can be another file, or another url, or some portion of the page If value starts with # then it stays on the same page
name	You can assign any string to name, this name can be used with href, to bring the portion in visible area.
href	Value can be <a href="mailto:<email id>">mailto:<email id> it will open blank mail with email id typed into it

Table tag

<table>

<thead>

<tr>

<th> Product Id </th><th> Name </th><th> price </th><th> Quantity </th>

</tr>

</thead>

<tbody>

<tr>

<td>1</td><td>chair</td><td>3456</td><td>34</td>

</tr>

</tbody>

</table>

Product Details			
Product Id	Name	Price	Quantity
1	Chair	3456	34
	Relaxing chair	4567	67

<table>	Used to display table in browser Attributes bgcolor, cellpadding → gap between 2 cells, cellspacing → gap between border and text, width, height, border
<caption>	It is heading assigned to the table,

	Attributes align--→ top,bottom
<thead>	Enclose all the rows which are headers
<tbody>	Enclose all rows which represents data
<tr>	Represents one row in table Attributes-→ bgcolor, align(Horizontal align)-→ left, right,center, valign(vertical align)-→top, bottom,center
<th>	Represents heading in the table, text will appear bold Attributes-→ bgcolor, align, valign, rowspan, colspan
<td>	Represents data in the table Attributes-→ bgcolor, align, valign, rowspan, colspan

Image display

Attributes in img tag

width	This is width of image, if given in pixel then it is static, if given in % then it is relative to screen size
height	This is height of image, if given in pixel then it is static, if given in % then it is relative to screen size
hspace	Horizontal space between image and text
vspace	Vertical space between image and text
Style="float:left"	To display image on the left side, and text on the right side

Body tag

It represents the entire web page.

Attributes in body tag

bgcolor	To change the background color of the page
background	To display the image as background
text	To change the text color
Link	To assign default link color
Vlink	To assign color to visited links
Alink	To assign color to active links

Horizontal rule

To display horizontal line in the page

Attributes

width	How much portion of the screen to occupy
size	It represents thickness of the line
color	Color of the line
align	To align the position, possible values-→ left , right, center, the default value is center