Web URL

- Web Uniform Resource Location (URL): Used to uniquely identify the specific web resource inside the web application

- Every web application should have its unique address in the form of URL

- URL is the one & only way to access web application via browser

- Max number of characters in the URL is 200

Syntax:

protocol://<domainName>:port/resourcePath?queryString#fragementId

EG: http://localhost:8888/index.php

http://google.com/search?q=iphone11

http://172.217.160.142/search?q=iphone11

```
protocal://<domainName>:port/resourcePath?queryString#fragementId
   optional      mandate      optional  optional    optional     optional
```

Protocol:

- When one application wants to communicate with another application (in our case browser & server), there needs to be a common language which both applications understand each other. Hence, we use protocol.

- Protocol is a common language where two application exchange information each other

- It is a set of rules & instructions.

- Browser always sends request & receives response via http protocol hence it is called http request / http response.

- It's an optional information & case insensitive.

- Types of Protocol

  ✓ http

  ✓ https

  ✓ ftp

  ✓ smtp etc.

Domain:

- Used to uniquely identify the specific computer/server in the network in which web application in present.

- Domain name might be computer name or IP address

- It's a mandatory information.

Example:

www.amazon.com   (commercial)

.org   (organization)

.edu   (education)

.gov.in (government)

Port number:

- Used to uniquely identify the specific software/application inside the computer

- In the URL this is an optional information

- Below table specify the default port number

	Tomcat	JBoss	WebLogic
http	8080	80	123
https	8443	443	456

Resource Path:

- Used to uniquely identify the specific web resource inside the application Server (web application)

- We know that web application is a collection of web resources, so it's a full path of web resource at web application side

Example:

http://localhost:8080/index.html

http://localhost:8080/login

Fragment ID:

- Used to uniquely identify the specific fragment/section in the webpage.
- It's an optional information in the URL.