

Q. → What is HTTP?

- Hypertext Transfer Protocol [HTTP] is a protocol for transmitting hypermedia documents, such as HTML.
- It is the foundation of any exchange on the Web & it is a client-server protocol, which means requests are initiated by the recipient, usually the Web browser.
- A complete document is reconstructed from the different sub-documents fetched, for instance, text, layout description, images, videos, scripts & more.
- Client & servers communicate by exchanging individual messages.
- The messages sent by the client, usually a Web browser, are called requests and the messages sent by the server as an answer are called responses.

Q. What are different HTTP Methods?

- 
- HTTP defines a set of request methods to indicate the desired action to be performed for a given resource.
  - The different HTTP methods are:-
    - 1) GET:- The GET method requests a representation of the specified resource.
      - Request using GET should only retrieve data.
    - 2) POST:- The POST method submits an entity to the specified resource, often causing a change in state or side effects on the server.
    - 3) HEAD:- The HEAD method asks for a response identical to a GET request, but without the response body.
    - 4) PUT:- The PUT method replaces all current representation of the target resource with the request payload.
    - 5) DELETE:- The DELETE method deletes the specified resources.



- 6) **CONNECT** :- • The CONNECT method establishes a tunnel to the server identified by the target resource.
- 7) **OPTIONS** :- • The OPTIONS method describes the communication options for the target resource.
- 8) **TRACE** :- • The TRACE method performs a message loop-back test along the path to the target resource.
- 9) **PATCH** :- • The PATCH method applies partial modifications to a resource.

Q. What are different HTTP Status Code ranges & their meaning?

→ An HTTP status code is a server response to a browser's request.

\* Common HTTP Status code classes:-

- **1xxs - Informational responses**  
It means the request has been received & the process is continuing.
- **2xxs - Success!**  
The request was successfully completed & the server gave the browser the expected response.
- **3xxs - Redirection**  
It means further action must be taken in order to complete the request.
- **4xxs - Client Error**  
It means the request contains incorrect syntax or cannot be fulfilled.
- **5xxs - Server Error**  
It means the server failed to fulfill an apparently valid request.

→



\* The most important status codes are:-

- 1) **200 - OK** :- The request is OK [this is the std. response for successful HTTP requests]
  - A 200 response is cacheable by default.
- 2) **301 - Move Permanently** :- A requested page has moved to a new URL.
- 3) **302 - Temporary Redirect**
  - It indicates that the resource requested page has moved temporarily to a new URL.
- 4) **404 - NOT Found** :- The requested page could not be found but may be available again in the future.
- 5) **410 - Gone** :- The requested page is no longer available i.e. permanently the page is gone.
  - A 410 response is cacheable by default.
- 6) **500 - Internal Server Error** :- The request was not completed. The server met an unexpected condition.
- 7) **503 - Service Unavailable** :- The server is currently unavailable. The server is temporarily overloading or down.



Q. What is Pod?

- 
- Pod means third party library which is installed in our application
  - Cocoapods is a dependency manager which is used to include third party libraries in iOS & mac projects.
  - All the libraries that you want to include in project are added in a Podfile. & then we can simply run a pod command on the terminal to install the added dependencies in the podfile.

Q. How to install pod?

→ Steps to installed pod files:-

1. Open terminal
2. Command on terminal: `sudo gem install cocoapods`
3. Set project path on terminal
4. Command: `pod init`
5. go to pod file of project & adding pod which you want to install
6. added in pod file:
7. Command: `Pod install`
8. Close project of Xcode
9. open Project from terminal
10. Command: `open PodDemos.xcworkspace`

Q. Give Examples of Pods:-

→ Pod 1 → SDWebImage

Pod 2 → Kingfisher

Both pods are third party library, is used to extraction of Images.