REQUEST HEADERS

1. **GET / HTTP/1.1** - GET method requests a representation of the specified resource. Requests using GET should only retrieve data.
2. **Host: makers-cats.herokuapp.com** - Domain name of the server (for virtual hosting), and (optionally) the TCP port number on which the server is listening.
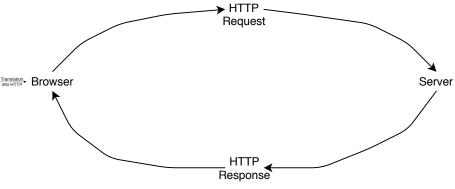3. **Connection: keep-alive** - Controls whether or not the network connection stays open after the current transaction finishes.
4. **Cache-Control: max-age=0** - Specify directives for caching both requests and responses.
5. **Upgrade-Insecure-Requests: 1** - Client's preference for an encrypted / authenticated response.
6. **User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_3) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/73.0.3683.86 Safari/537.36** - Allows the network protocol peers to identify the application type, operating system, software vendor or software version of the requesting software user agent.
7. **Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8** - Specifies certain media types which are acceptable for the response.
8. **Accept-Encoding: gzip, deflate** - Advertises which content encoding, usually a compression algorithm, the client is able to understand.
9. **Accept-Language: en-GB,en-US;q=0.9,en;q=0.8** - Advertises which languages the client is able to understand, and which locale variant is preferred. (natural language, i.e. English)

HTTP Request

Browser

Translation into HTTP

APIs (script)

UI-activity (browser)

HTML Forms (browser)

Config file (server)

Server

GENERAL

1. **Request URL:** http://makers-cats.herokuapp.com/
2. **Request Method: GET** - GET method requests a representation of the specified resource. Requests using GET should only retrieve data.
3. **Status Code: 200 OK** - Whether a specific HTTP request has been successfully completed. Responses are grouped in five classes: informational responses (1XX), successful responses (2XX), redirects (3XX), client errors (4XX), and servers errors (5XX).
4. **Remote Address: 52.206.54.179:80** - IP Address/hostname of the remote computer to which the connection is connected
5. **Referrer Policy: no-referrer-when-downgrade** - IP Address/hostname of the remote computer to which the connection is connected.

HTTP Response

RESPONSE HEADERS

1. **Connection: keep-alive**
2. **Content-Length: 219** - Indicates the size of the entity-body, in bytes.
3. **Content-Type: text/html;charset=utf-8** - Indicates the media type of the resource.
4. **Date: Tue, 14 May 2019 09:07:04 GMT**
5. **Server: WEBrick/1.3.1 (Ruby/2.3.4/2017-03-30)** - Information about the software used by the origin server to handle the request.
6. **Via: 1.1 vegur** - Added by proxies. It is used for tracking message forwards, avoiding request loops, and identifying the protocol capabilities of senders along the request/response chain. A proxy is a server that acts as an intermediary for requests
7. **X-Content-Type-Options: nosniff** - Marker used by the server to indicate that the MIME types advertised in the Content-Type headers should not be changed and be followed.-
8. **X-Frame-Options: SAMEORIGIN** - Indicate whether or not a browser should be allowed to render a page in a <frame>, <iframe>, <embed> or <object> . Sites can use this to avoid clickjacking attacks, by ensuring that their content is not embedded into other sites.
9. **X-Xss-Protection: 1; mode=block -** Feature of Internet Explorer, Chrome and Safari that stops pages from loading when they detect reflected cross-site scripting (XSS) attacks. Mainly redundant form of protection for users of older web browsers.