

This assignment is due by the date on the dropbox. Submit your document in .docx or .pdf format.

**HTTP Methods:**

1-5 ) Read the following and answer questions based on the reading.

<https://www.tutorialspoint.com/http/http_methods.htm>

Briefly describe the following types of HTTP Requests

GET – Retrieves information from a given server using a given URI

HEAD – Same as GET, but only transfers the status line and header section

POST – Used to send data to the server

PUT – Replaces all current representations of the target resource with the uploaded content

DELETE – Removes all current representations of the target resource given by a URI

1. Read the following and answer the questions based on the reading.

<http://www.w3schools.com/TAGS/ref_httpmethods.asp>

|  |  |  |
| --- | --- | --- |
| Functionality | GET | POST |
| *Back Button* | Harmless | Data will be resubmitted |
| *Bookmarked* | Can be bookmarked | Cannot be bookmarked |
| *Cached* | Can be cached | Cannot be cached |
| *Encoding Type* | application/x-www-form-urlencoded | application/x-www-form-urlencoded or multipart/form-data. Use multipart encoding for binary data |
| *History* | Parameters remain in browsing history | Parameters are not saved in browser history |
| *Data Length* | When sending data, the GET method adds the data to the URL and the max length of a URL is limited to 2048 characters | No restrictions |
| *Data Type* | Only ASCII characters allowed | No restrictions, binary data is also allowed |
| *Security* | Less secure because data is sent as part of the URL | A little safer than GET because the parameters are not stored in browser history or in web server logs |
| *Visibility* | Data is visible to everyone in the URL | Data is not displayed in the URL |

----------- More on the next page ----------

**Note:** For the remaining questions, read the ***responses*** section of the following and answer questions based on it. <https://geemus.gitbooks.io/http-api-design/content/en/responses/>

* 1. When do we the following status codes?

200 – Request succeeded for a GET, POST, DELETE, or PATCH call that completed synchronously, or a PUT call that synchronously updated an existing resource

201 – Request succeeded for a POST, or PUT call that synchronously created a new resource. It is also best practice to provide a 'Location' header pointing to the newly created resource. This is particularly useful in the POST context as the new resource will have a different URL than the original request.

202 – Request accepted for a POST, PUT, DELETE, or PATCH call that will be processed asynchronously

206 – Request succeeded on GET, but only a partial response returned

401 – “Unauthorized” Request failed because user is not authenticated

403 – “Forbidden” Request failed because user does not have authorization to access a specific resource

422 – “Unprocessable Entity”: Your request was understood, but contained invalid parameters

429 – “Too Many Requests”: You have been rate-limited, retry later

500 – “Internal Server Error”: Something went wrong on the server, check status site and/or report the issue

1. What do we do with UUIDs (universally unique identifier)?

We give each resource a UUID

1. What timestamps do we include when possible?

“created\_at” and “updated\_at”

1. Why do we nest objects that reference other objects (foreign keys)?

It makes it possible to add more information about the related resource without having to change the structure of the response.

1. Which three fields do we include in errors when possible?

A machine readable error id, a human readable error message and a uri pointing to further information about the error and possibly how to resolve it.

1. What do we do with JSON in responses **and** why?

We keep it minified to keep it from being larger than necessary.

**Rubric**

|  |  |  |  |
| --- | --- | --- | --- |
| DESCRIPTION | | SCORE | VALUE % |
|  |
|  | **Each answer is correct.** |  | **5 points each** |
|  | **Not submitted in a .docx or .pdf** |  | **-30%** |
|  |
|  | **TOTAL** |  | **100%** |

**Submission:**

By the due date please submit a .docx or .pdf of your answers for this assignment.   
Do **NOT** submit in a zip. Please submit the raw .docx or .pdf file.