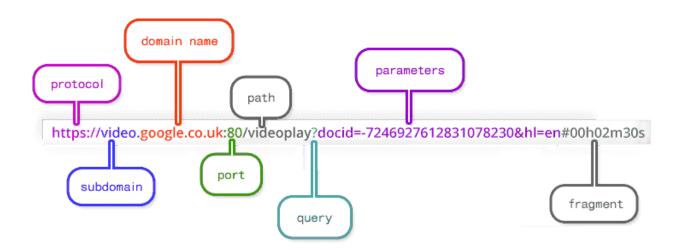
M-V-C paradigm

- Model:
 - o Core data to be stored for the application
 - o Databases; indexing for easy searching, manipulation;
- View:
 - o User-facing side of application
 - Interfaces for finding information, manipulating
- Controller:
 - o "Business logic" how to manipulate data

Hardly new: origins in Smalltalk language: 1979

User uses *controller ->* to manipulate *model ->* that updates *view ->* that user sees

URL BREAKDOWN



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CURL REQUEST



it's my favourite
way to make
HTTP requests

great for testing
APIs!

\$ curl wizardzines.com

curl

-H
is for header
good for POST requests:
-H "Content-Type: application/json"
allow compression:

JULIA EVANS @bork

--data
to POST data!

--data '{"name": "julia"}'

--data @filename.json

this way is WAY better
if you have a lot of data

-i show response headers

Show <u>only</u> response headers (HEAD request)

-X POST

send a POST request instead

of a GET (-X POT etc works to)

-V,-VV
verbose: show request headers etc

-H "Accept - Encoding: gzip"

insecure: don't verify SSL certificates

use a client certificate

* copy as curl *

to send!

Have something in your browser you want to download from the command line?

In Firefox / Chrome:

Developer Tools

Network tab
-> right click on the thing
-> copy as curl

Basic Structure

curl [options] [URL] (localhost:5000/login[defined route])

Key Components

- 1. **URL**: The endpoint you're making the request to
- 2. HTTP Method:
 - -X: Specifies the HTTP method (e.g., GET, POST, PUT, DELETE).
 - o **Example**: -X POST
- 3. **Headers**:
 - -H: Adds a header to the request.
 - Example: -H "Content-Type: application/json"
- 4. Data:
 - -d: Sends data in a request body (useful for POST or PUT).
 - o Example: -d '{"key":"value"}'

Example Request

```
curl -X POST -H "Content-Type: application/json" -d '{"name":"John"}'
https://api.example.com/users
```

This example sends a POST request to https://api.example.com/users with a JSON body {"name":"John"} and sets the Content-Type header to application/json.

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MIME TYPE: A MIME type (Multipurpose Internet Mail Extensions type) is a standardized way to indicate the nature and format of a file or data being transmitted over the internet. MIME types are used in various internet protocols like HTTP to describe the content of web pages, email attachments, and other forms of media.

HTTP STATUS CODES

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200, 201, 404, 400, 405

200-when it sends the response successfully

201-let's say i want to create a new user and i am sending a post request server creates a new user and sends this 201 code

404-url not found server can't find the url that user is visiting

405-Method not Allowed

400-Bad request

Refer to the IMAGE BELOW

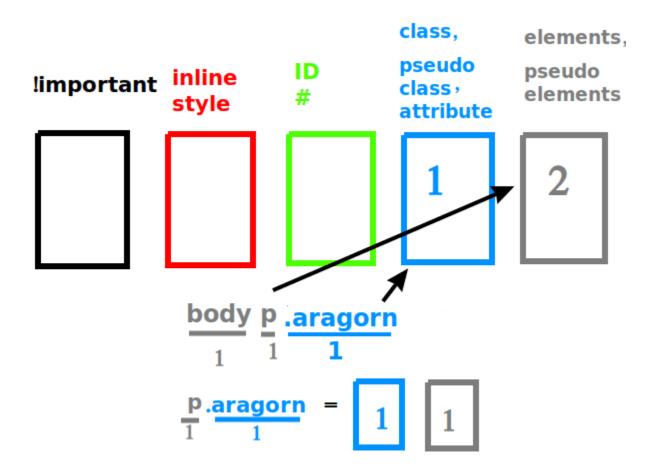
Methods

https://developer.mozilla.org/en-US/docs/Web/HTTP/Methods

1XX Informational Requests	100 Continue 101 Switching Protocols 102 Processing
2XX Successful Requests	200 OK 201 Created 202 Accepted 203 Non-Authoritative Information 204 No Content 205 Reset Content 206 Partial Content 207 Multi-Status 208 Already Reported
3XX Redirects	300 Multiple Choices 301 Moved Permanently 302 Found 303 See Other 304 Not Modified 305 Use Proxy 307 Temoprary Redirect 308 Permanent Redirect
4XX Client Errors	400 Bad Request 401 Unauthorized 402 Payment Required 403 Forbidden 404 Not Found 405 Method Not Allowed 407 Proxy Authentication Required 408 Request Timeout 409 Conflict 410 Gone 412 Precondition Failed 416 Request Range Not Satisfaible 417 Expectation Failed 422 Unprocessable Entity 423 Locked 424 Failed Dependency 426 Upgrade Required 429 Too Many Requests 431 Request Header Fileds Too Large 451 Unavailable for Legal Reasons
5XX Server Errors	500 Internal Server Error 501 Not Implemented 502 Bad Gateway 503 Service Unavailable 504 Gateway Timeout 505 HTTP Version Not Supported 506 Variant Also Negotiates 507 Insufficient Storage 508 Loop Detected 510 Not Extended 511 Network Authentication Required



HTML & CSS



Left to Right Descending Left has highest Priority

- 1. Read the code thoroughly don't rush
- 2. !important is the most important
- 3. UL & OL
- 4. SPAN is a big SCAM—(Let's go to Onenotes[display:block])

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Accessibility section week 3

JINJA & STRING

One-note is best!!!!

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Template Inheritance

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SYS.ARGV (Command Line Arguments)

```
C:\Users\Vanshi\cd Desktop\python com.py 1 2 3 4
C:\Users\Vanshi\Desktop\python com.py 1 2 3 4
This is the name of the program: com.py
Argument List: ['com.py', '1', '2', '3', '4']
C:\Users\Vanshi\Desktop\_
```

- 1. "{{SPACE}}" is considered as a separator.
- 2. Python will not be considered as an argument
- 3. Easiest questions

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FLASK ROUTES

- 1. Routes
- 2. How we read parameters from the routes
- 3. Parser
- 4. parameters (?) & how do we read them
- 5. Error handler

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Sql-alchemy

- 1. Why do we use it
- 2. ORM
- 3. Add remove objects (session)
- 4. Relationships
- 5. Creating and filtering objects

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REST-ful API

- 1. How do we use it
- 2. Add resources
- 3. Methods as functions

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