진정원 WWW.WEBOOSTER.CO.KR

JAVASCRIPT

진정원

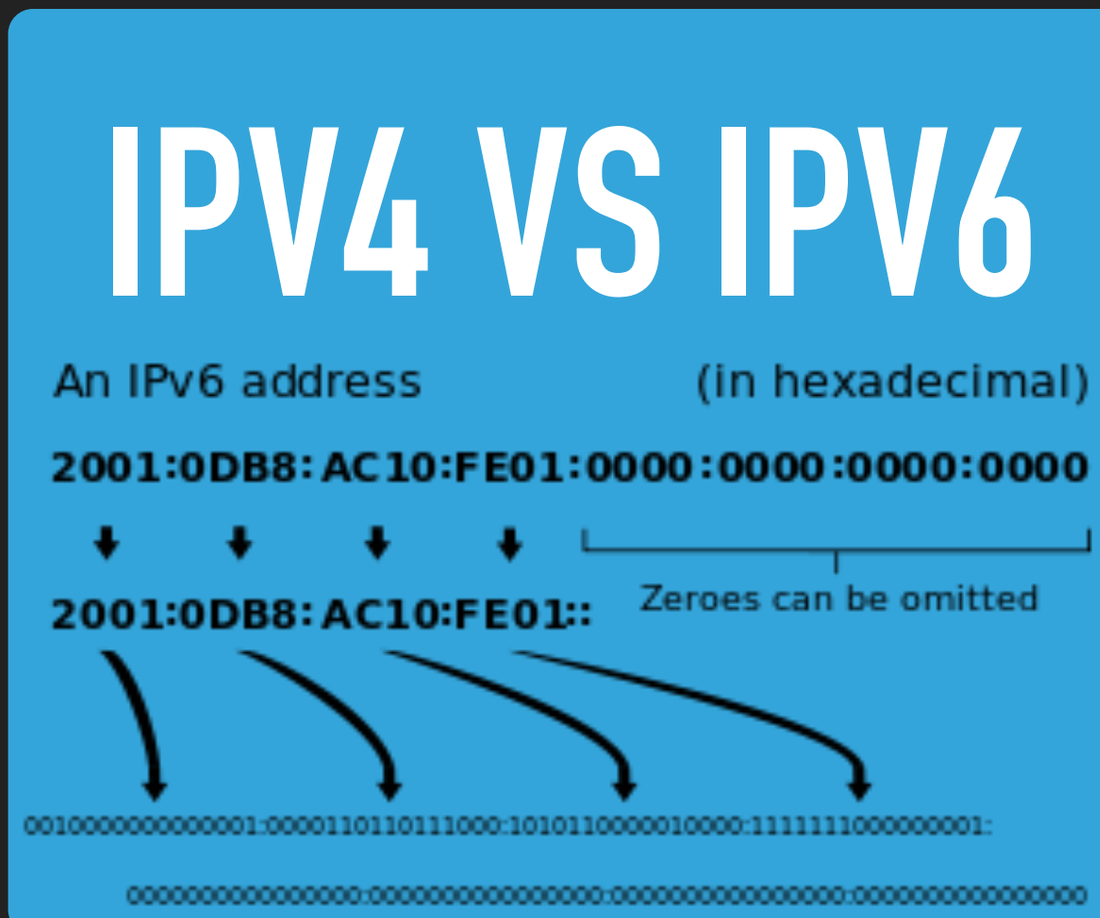
- embedded / mobile / server / db / web
- webooster.co.kr
- Meteor.js School / Startup
- 010-6617-6309 / ceo@webooster.co.kr

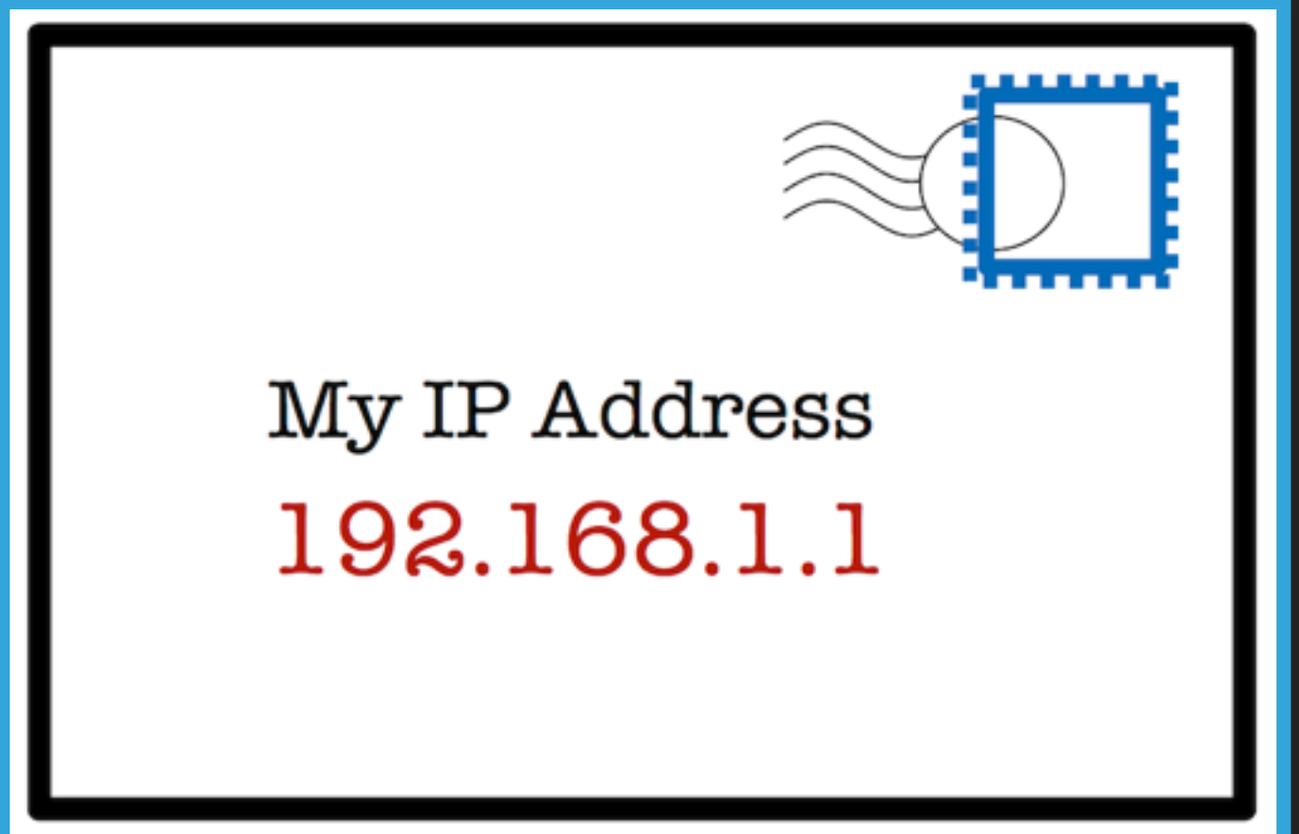
IT TERMS

facebook map

IOT, INTERNET OF THINGS

IPV4 VS IPV6



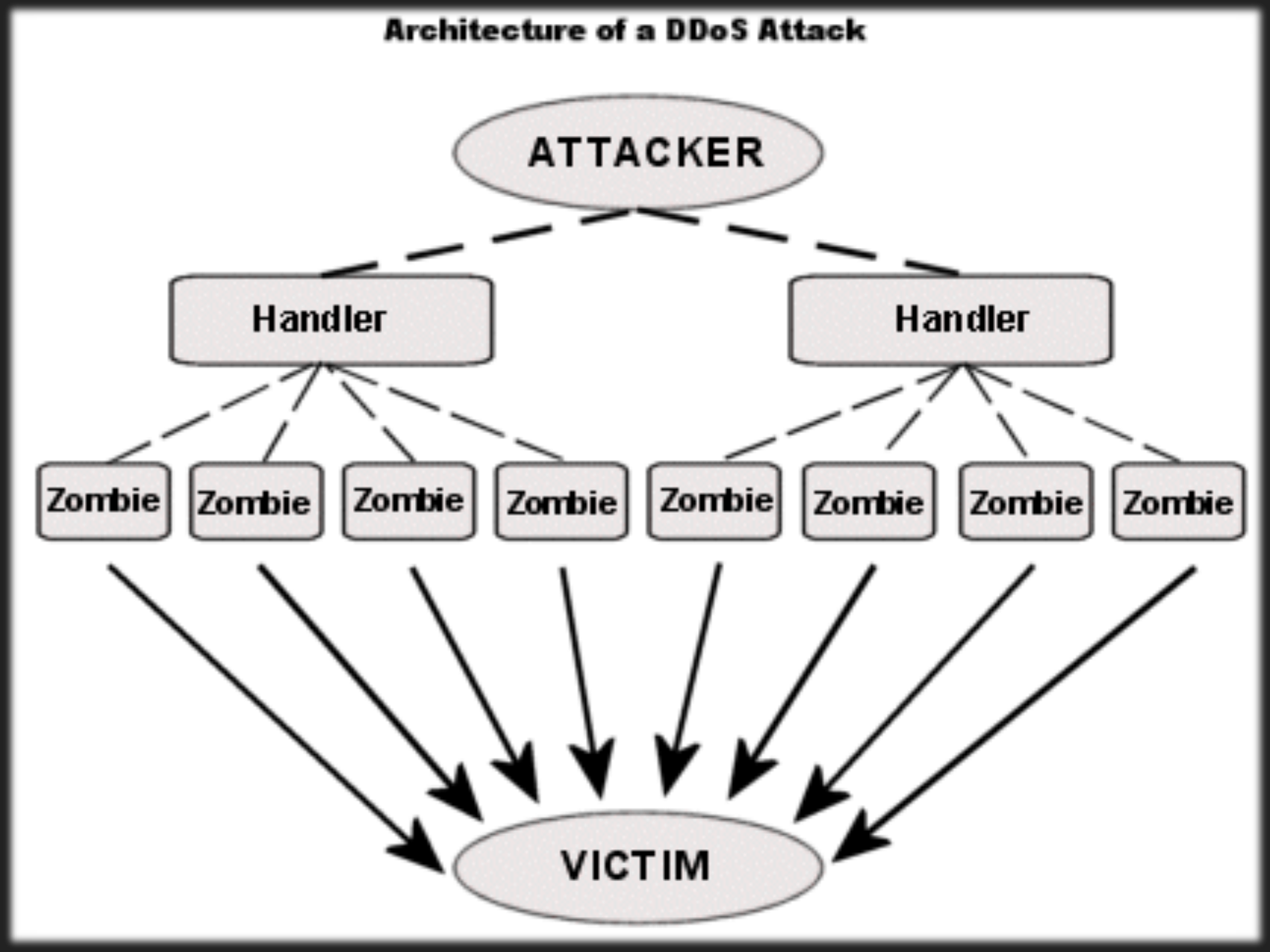


https://en.wikipedia.org/wiki/IPv6

I'M BOT!

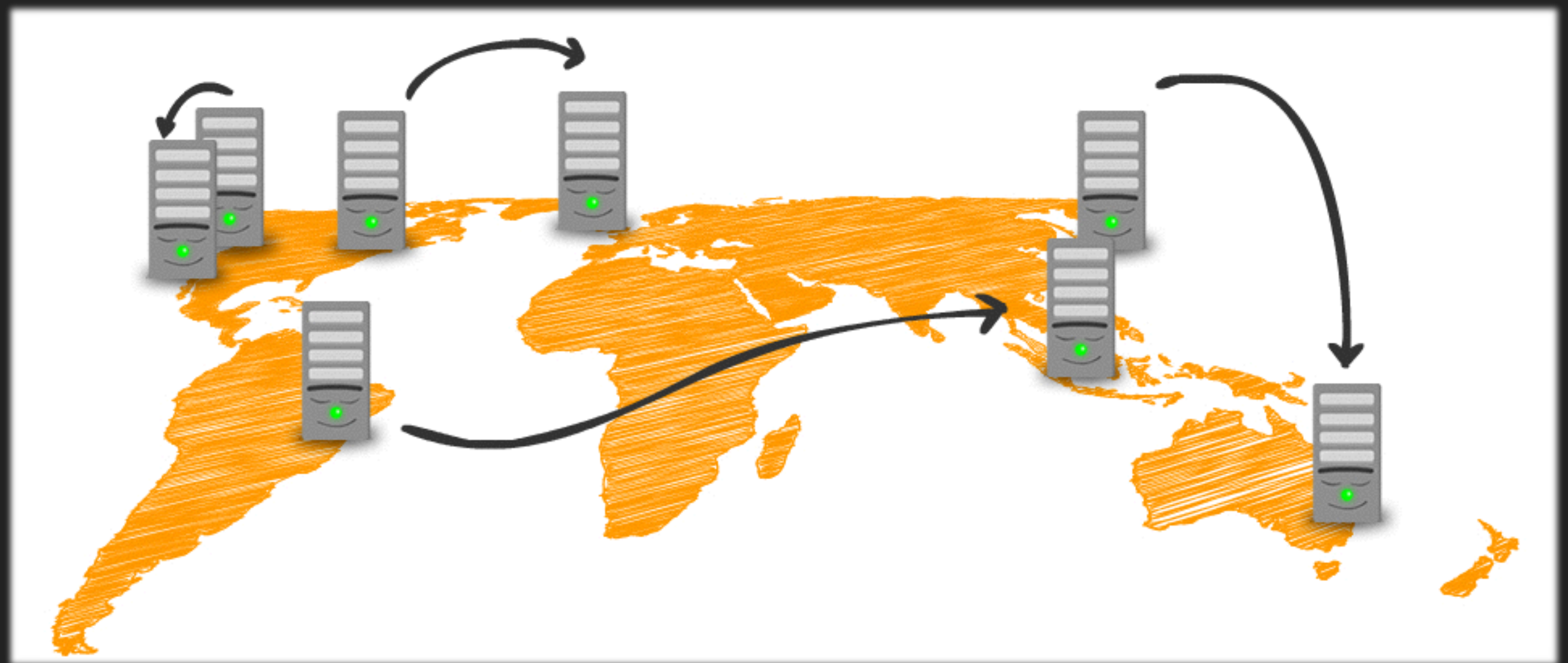
http://www.filothea.com/blog/google-tips-how-to-call-googlebot-to-index-your-new-website-blog-quickly/

DDOS ATTACKING



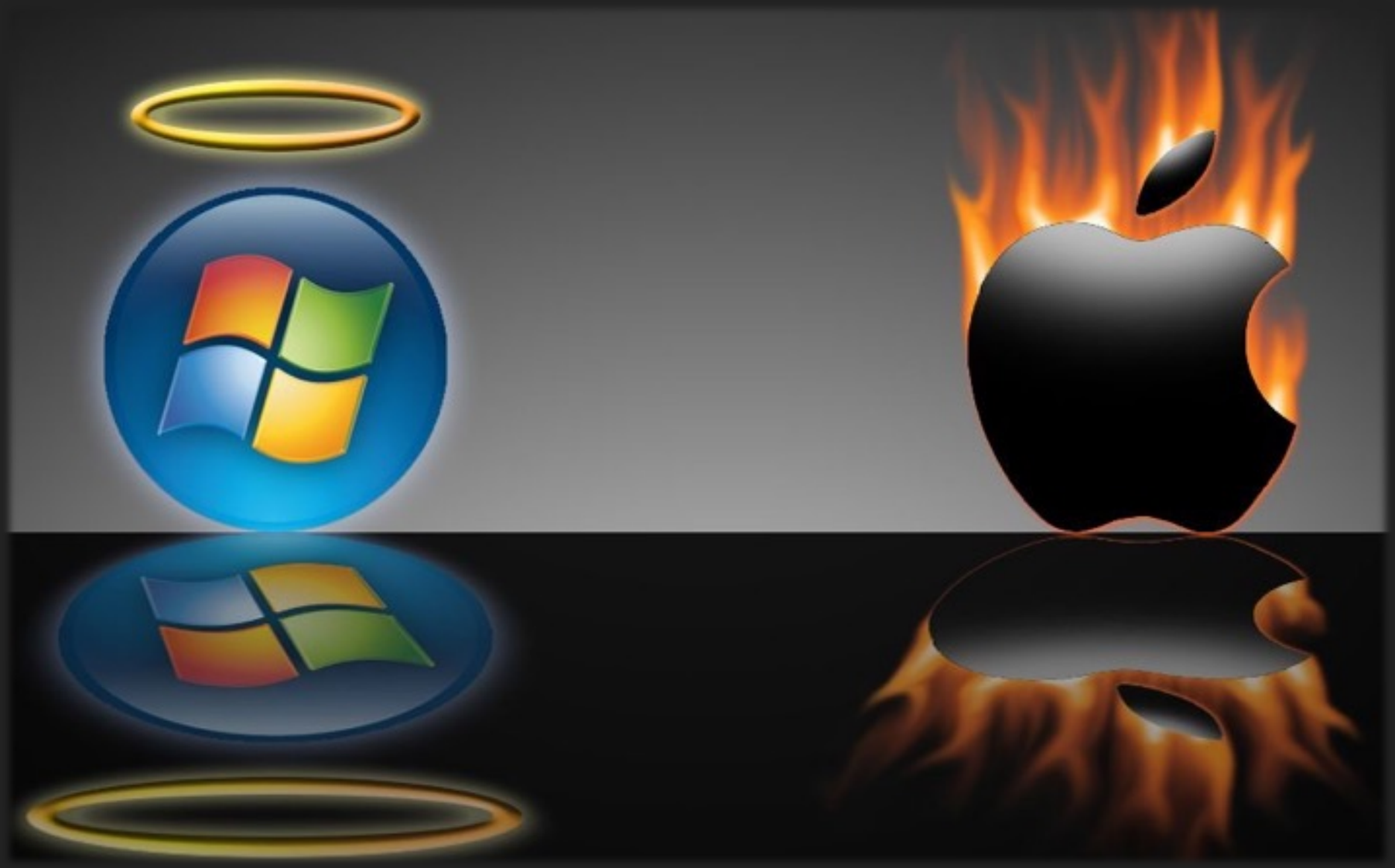
Johnny Appleseed

CLOUD COMPUTING



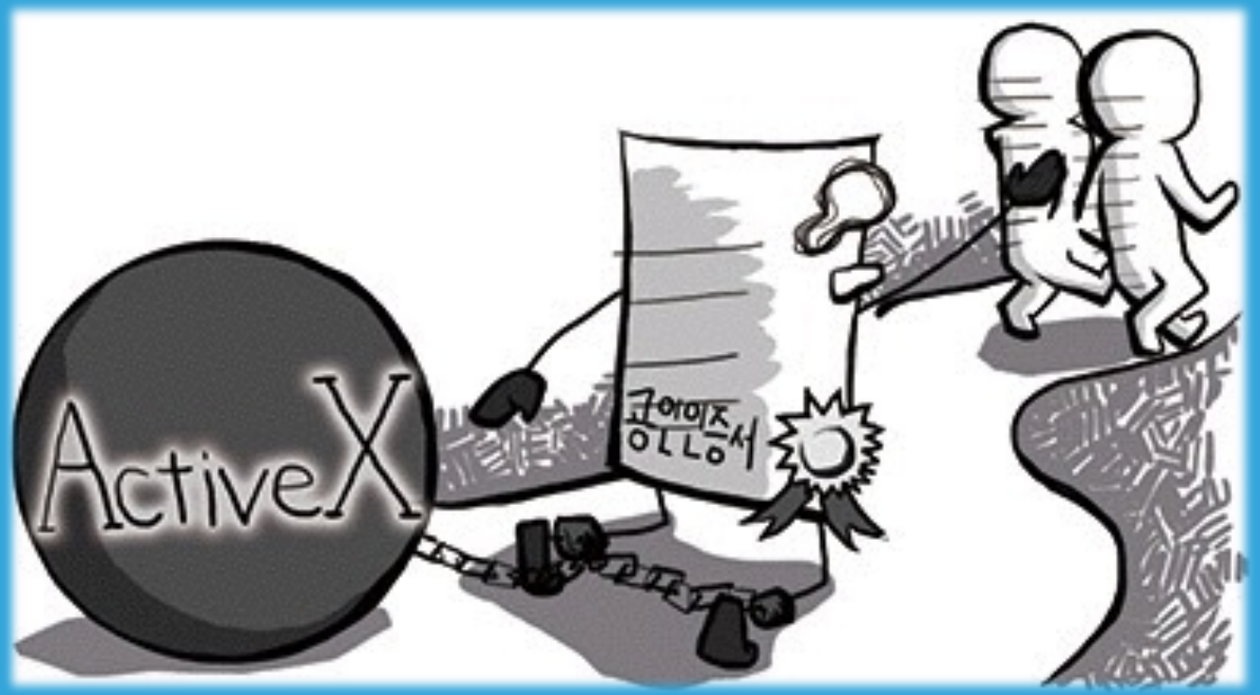
http://blog.takipi.com/aws-olypmics-speed-testing-amazon-ec2-s3-across-regions/

WINDOWS VS MAC



first item of google search: windows vs mac

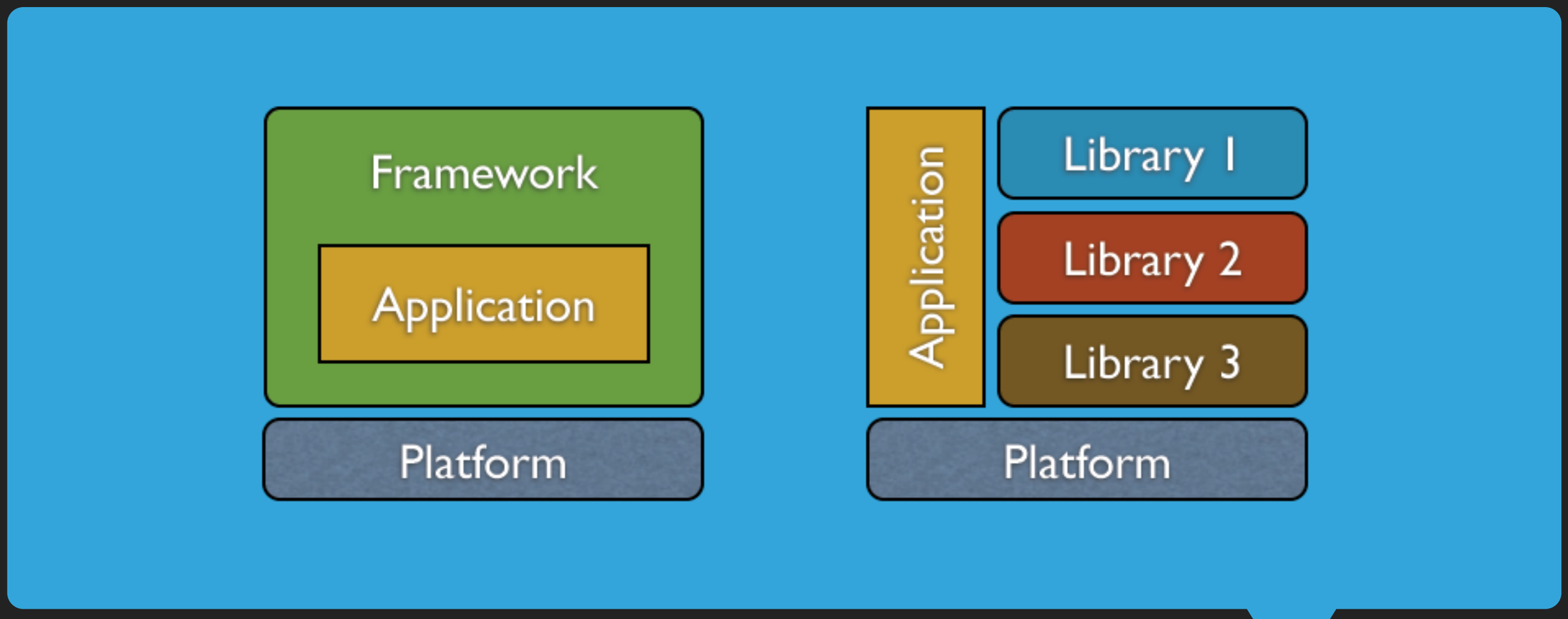
EXPLORER & ACTIVE-X & 공인인증서



http://uncyclopedia.kr/wiki/%EC%9C%A0%EC%8B%9D

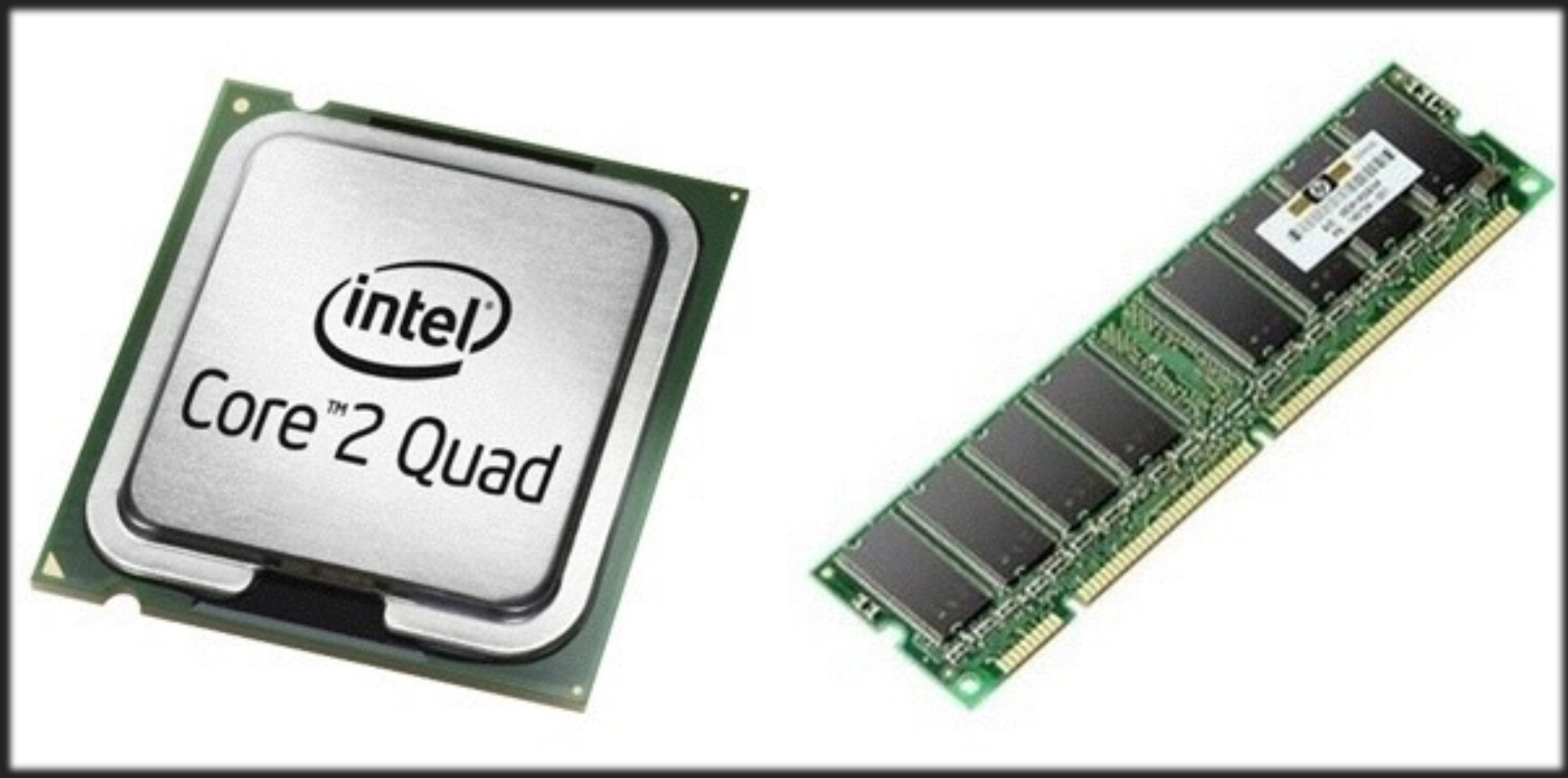
http://times.kaist.ac.kr/news/articleView.html?idxno=2628

LIBRARY & FRAMEWORK & PLATFORM



http://stackoverflow.com/a/30744433/2762215

COMPUTER, CPU & MEMORY

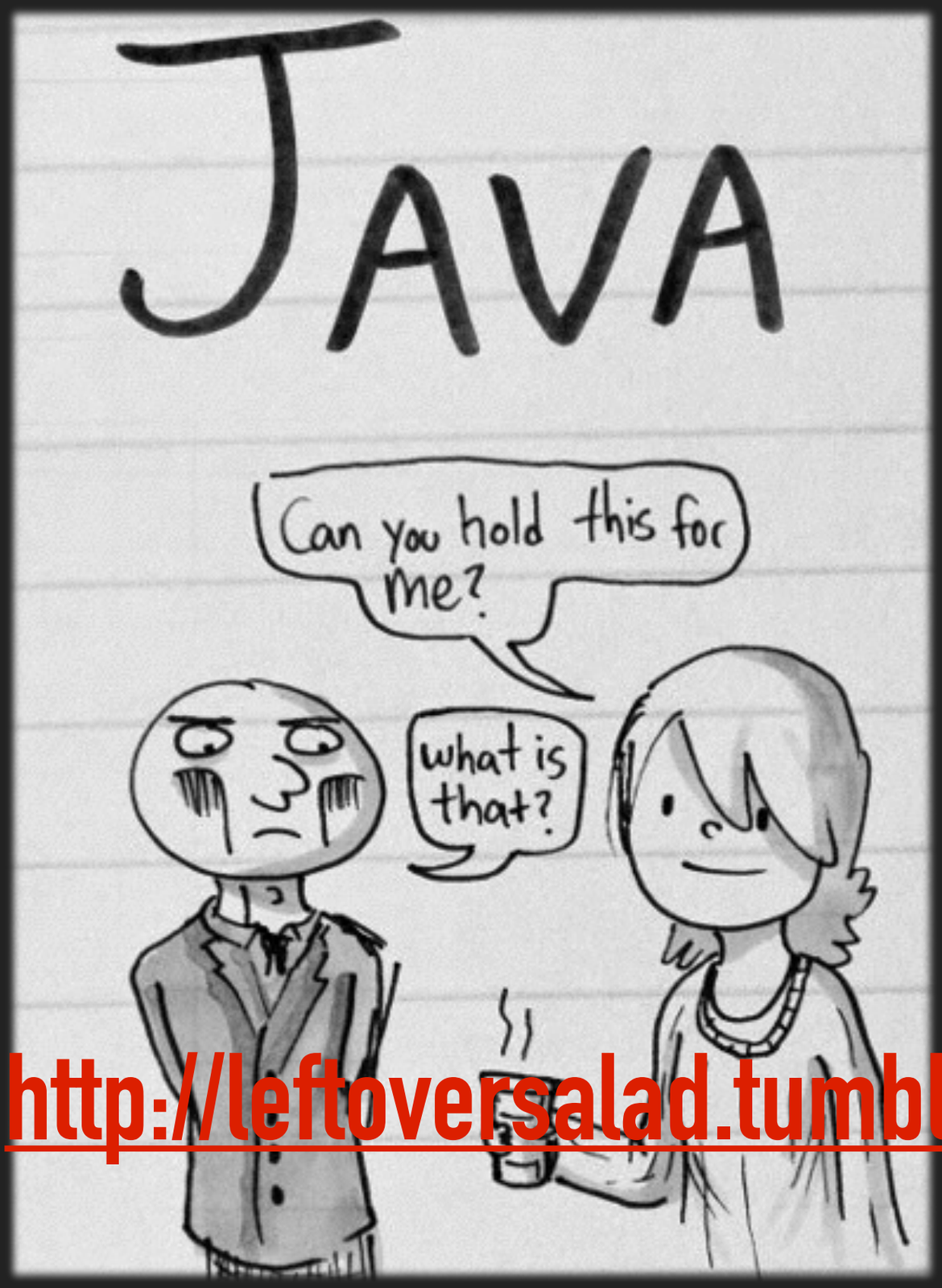


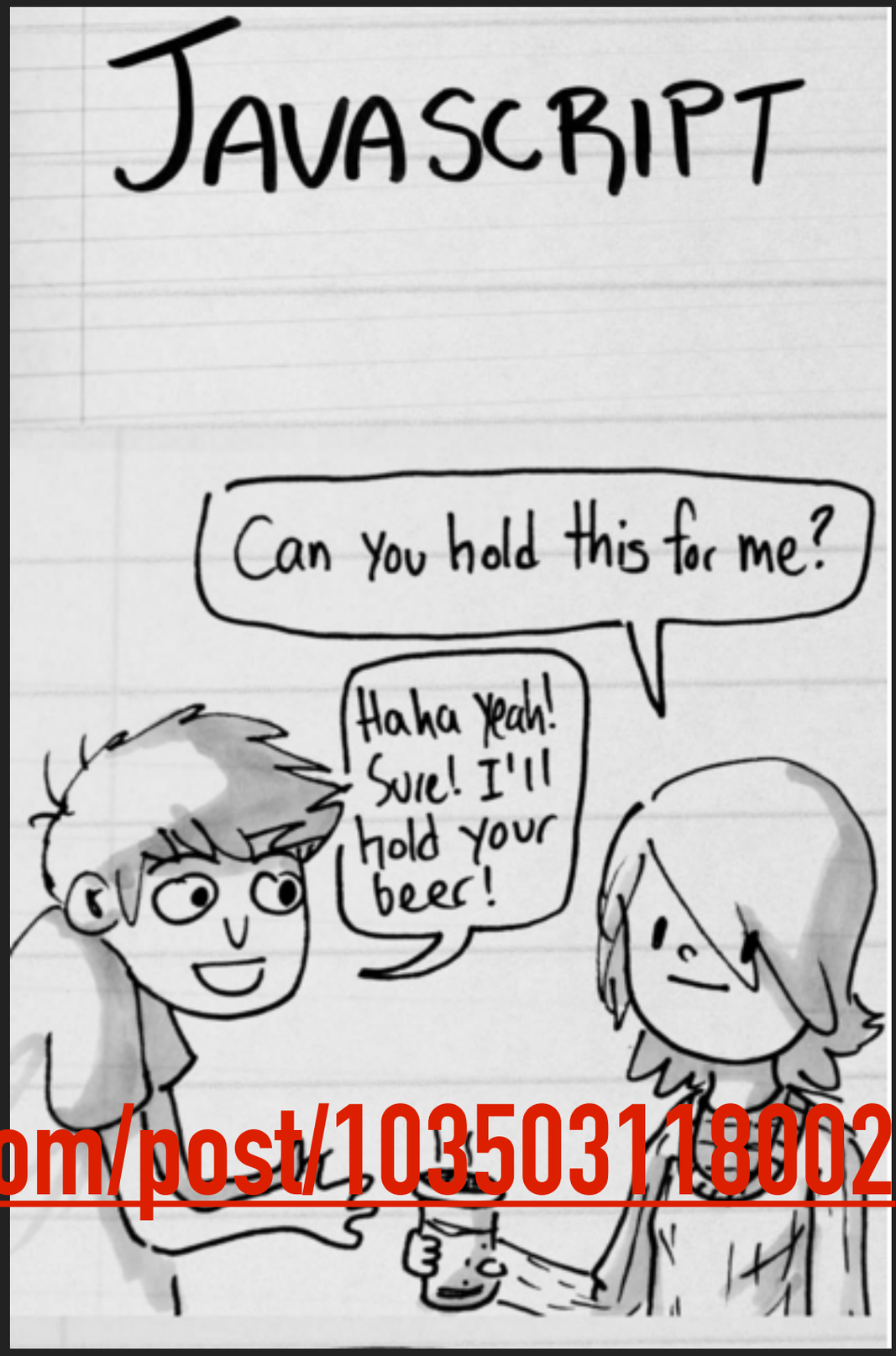
http://vsphere-land.com/news/understanding-cpu-memory-management-in-vsphere.html

PROGRAMMING LANGUAGES

http://blog.gaerae.com/2015/06/website-run-execute-code-online.html

JAVA & JAVASCRIPT





COFFEESCRIPT

```coffeescript
class Animal
  constructor: (@name) ->

  move: (meters) ->
    alert @name + " moved #{meters}m."

class Snake extends Animal
  move: ->
    alert "Slithering..."
    super 5

class Horse extends Animal
  move: ->
    alert "Galloping..."
    super 45

sam = new Snake "Sammy the Python"
tom = new Horse "Tommy the Palomino"

sam.move()
tom.move()
```

```javascript
var Animal, Horse, Snake, sam, tom,
  __hasProp = {}.hasOwnProperty,
  __extends = function(child, parent) { for (var key in parent) { if
(__hasProp.call(parent, key)) child[key] = parent[key]; } function
ctor() { this.constructor = child; } ctor.prototype =
parent.prototype; child.prototype = new ctor(); child.__super__ =
parent.prototype; return child; };

Animal = (function() {
  function Animal(name) {
    this.name = name;
  }

  Animal.prototype.move = function(meters) {
    return alert(this.name + (" moved " + meters + "m."));
  };

  return Animal;

})();

Snake = (function(_super) {
  __extends(Snake, _super);

  function Snake() {
    return Snake.__super__.constructor.apply(this, arguments);
  }

  Snake.prototype.move = function() {
    alert("Slithering...");
    return Snake.__super__.move.call(this, 5);
  };

  return Snake;

})(Animal);

Horse = (function(_super) {
  __extends(Horse, _super);

  function Horse() {
    return Horse.__super__.constructor.apply(this, arguments);
  }
```

GAHHHHH! MY EYES!

http://blog.gruffdavies.com/

CONTINUES FOR ANOTHER PAGE...

OPENSOURCE

http://headwayscareer.com/what-is-open-source-technology/

DATABASE, RDBMS VS NOSQL(JSON) VS XML

Microsoft Access - [Individual : Table]

File Edit View Insert Format Records Tools Window Help

IndividualId	FirstName	EmailAddress
1	Homer	homer@quackit.com
2	Barney	barney@quackit.com
3	Ozzy	ozzy@quackit.com
4	Fred	fred@quackit.com
(AutoNumber)		

Record:

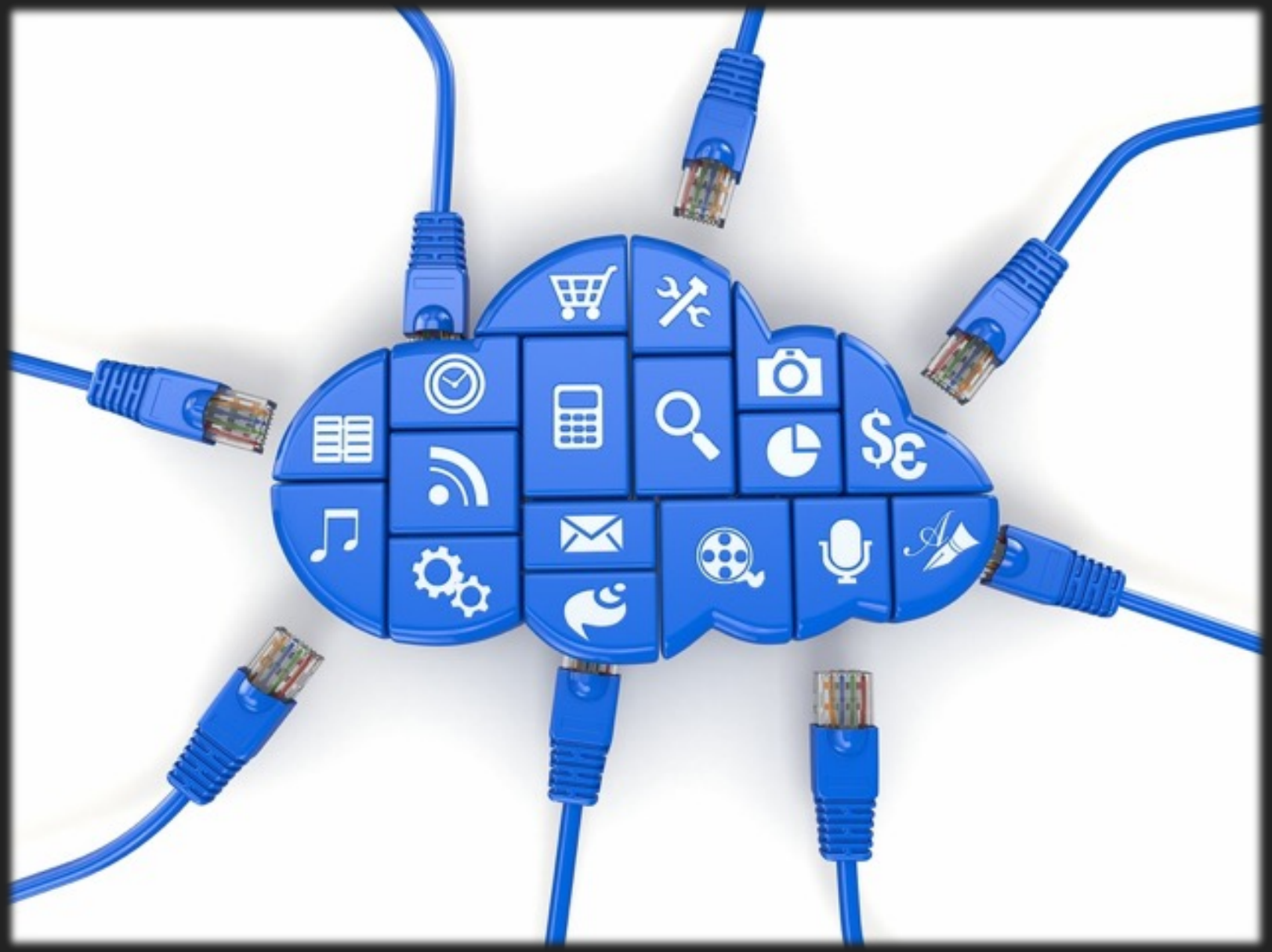
Datasheet View


```
{
    "key라부르고": "value라읽지요",
    "키는열쇠": "밸류는내용물",
    "저장하고": "꺼내씁니다"
};
```

BIGDATA & DATA MINING, DATA ANALYST

http://www.rsc.org/chemistryworld/News/2011/May/23051103.asp

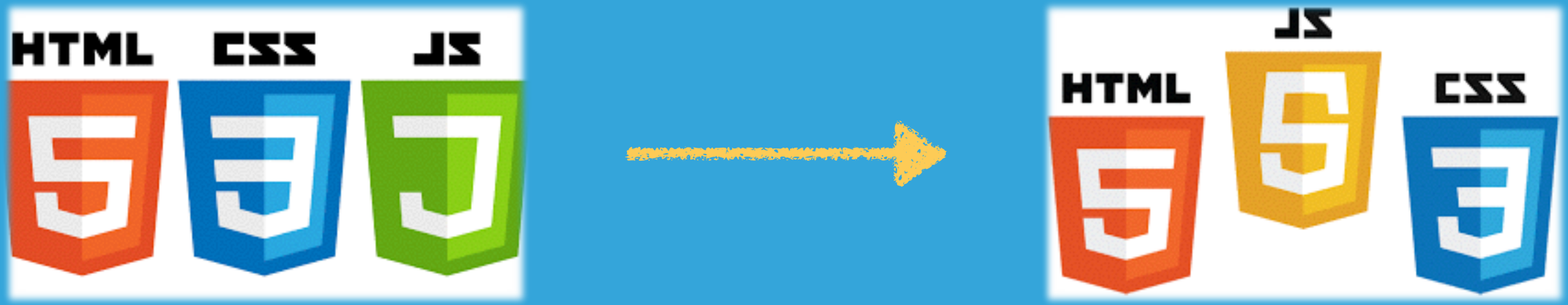
INTERFACE & PROTOCOL, API



http://www.clicdata.com/blog/automate-your-reporting-and-data-imports-with-an-api/

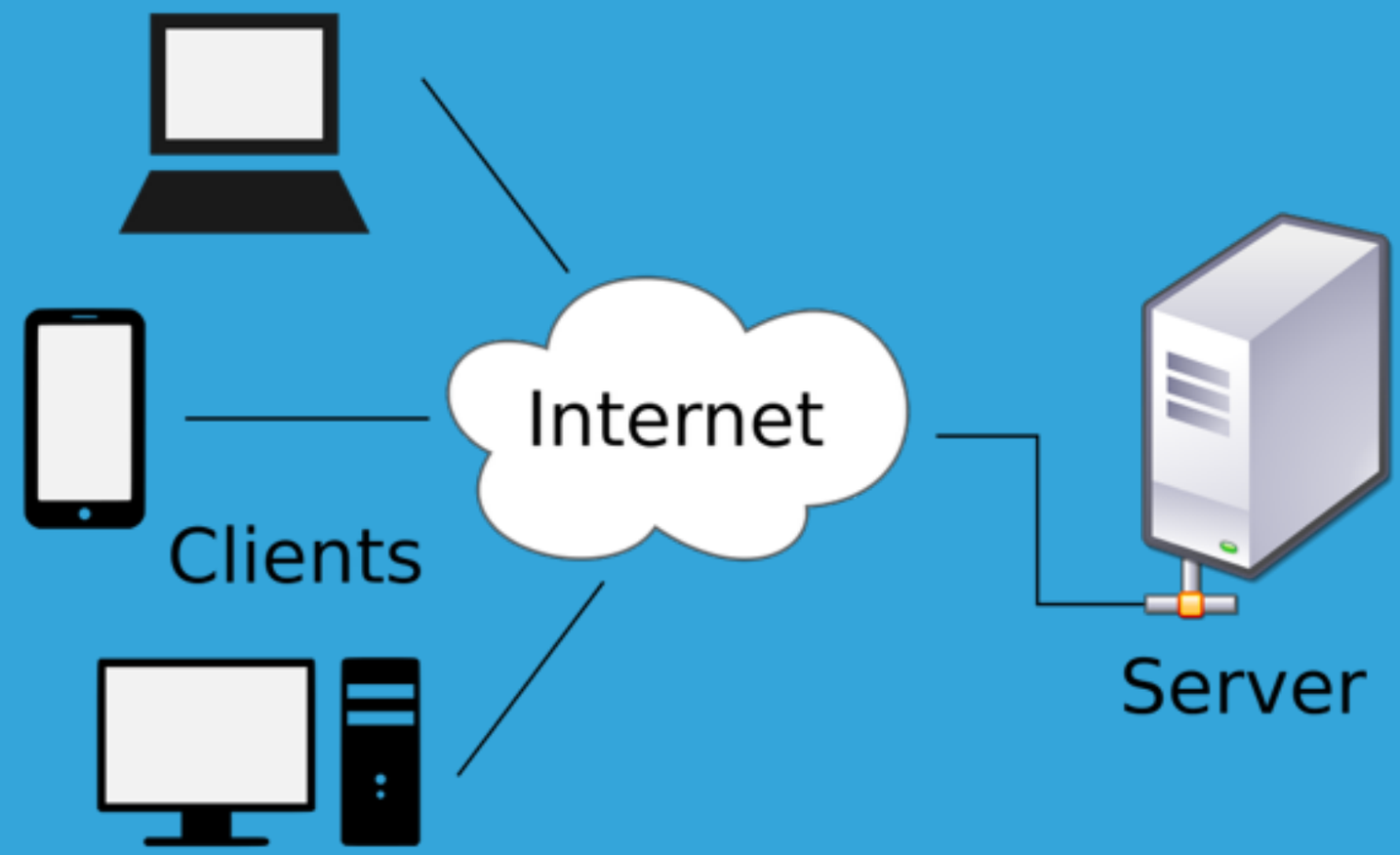
SYNC & ASYNC

DO EVERYTHING YOU WANT



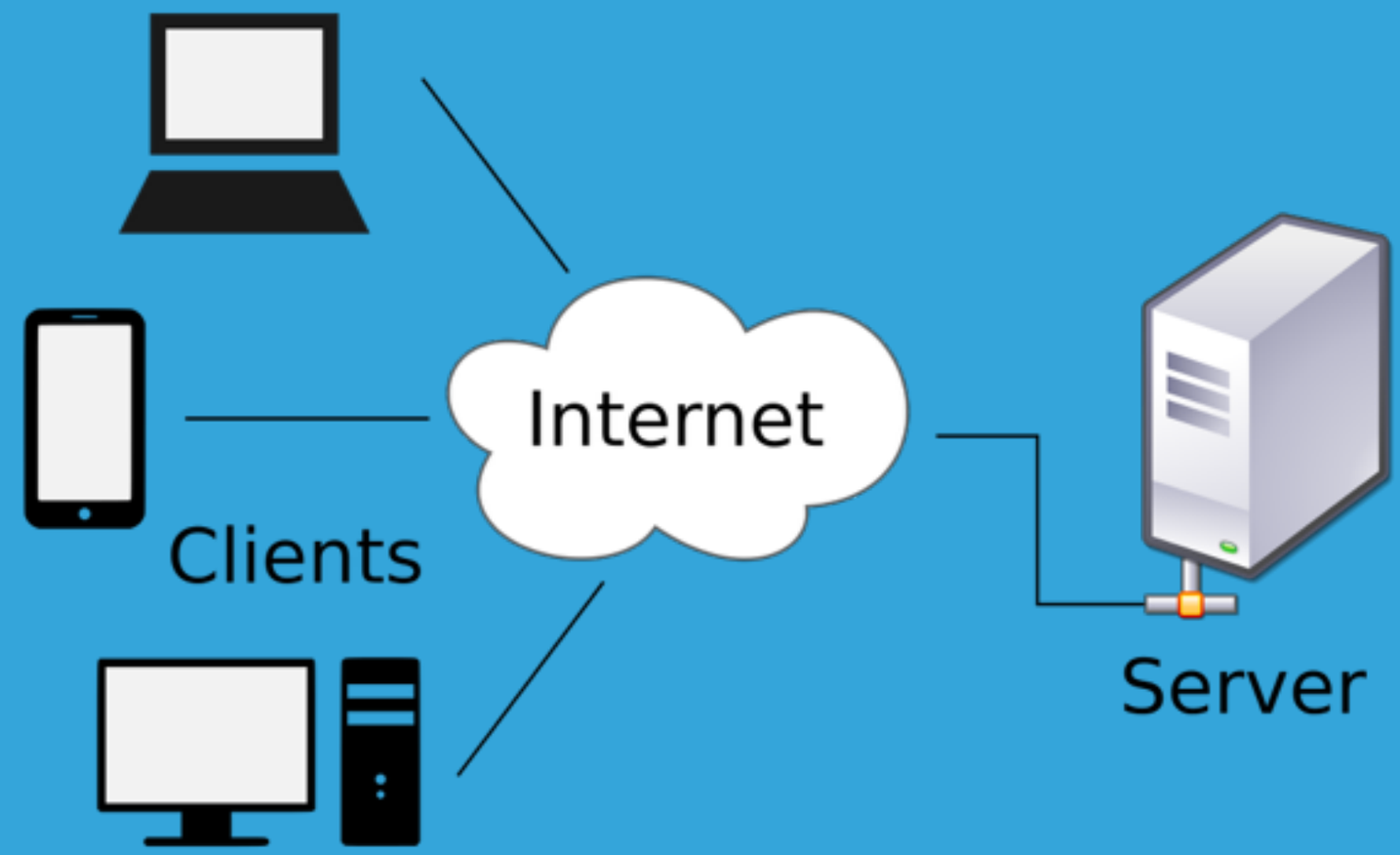
believe or not

CLIENT TO SERVER



web page with html, css, JAVASCRIPT

CLIENT TO SERVER



web page with html, css, JAVASCRIPT

JAVASCRIPT

JAVASCRIPT HISTORY

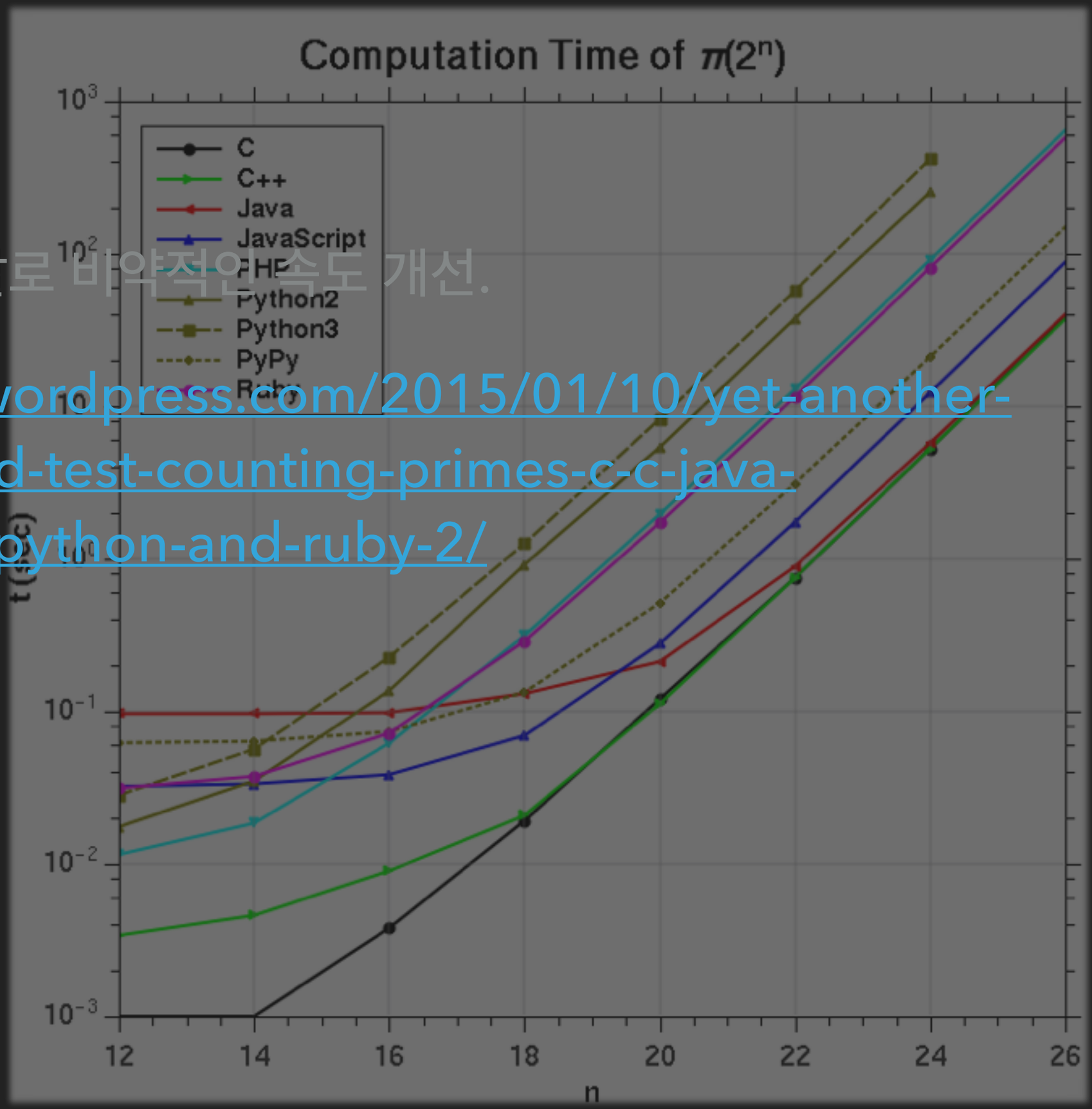
- JavaScript는 넷스케이프 커뮤니케이션즈 코퍼레이션의 브렌던 아이크(Brendan Eich)가 처음에는 모카(Mocha)라는 이름으로, 나중에는 라이브스크립트(LiveScript)라는 이름으로 개발하였으며, 최종적으로 JavaScript라는 이름으로 발표되었다.
- JavaScript는 객체 기반의 스크립트 프로그래밍 언어이다. 이 언어는 웹브라우저 내에서 주로 사용한다.
- 프로그래밍 언어로서 저평가 받는 시기도 있었으나 리치 콘텐츠(Rich Content)를 작성할 수 있는 AJAX(Asynchronous JavaScript + XML)의 등장으로 인해 JavaScript의 가치는 재검토되었다.
- HTML5에서 HTML5의 API 로 JavaScript를 공식 채택함으로써 JavaScript는 세계에서 가장 인기 있는 프로그래밍 언어 중 하나로 자리 잡아가고 있다.

JAVASCRIPT의 오해

- javascript는 단순하다.
  - 웹 브라우저 상의 간단한 기능을 위해 심플한 코드들이 주로 사용되면서 생긴 오해. 자유로운 문법의 js는 Server/DB 등에서 이미 널리 사용되고 있다.
- 런타임(Run-time) 실행 환경은 버그가 많다.
  - 모든 프로그램은 개발 시 무수한 테스트를 요한다. 느슨한 타입 정책과 런타임 실행으로 인해 예상 가능한 기능의 오류나 버그는 여타의 언어와 마찬가지로 테스트를 통해 극복 할 수 있다.

JAVASCRIPT의 오해

- js는 느리다.
  - V8 엔진 등의 개발로 비약적인 속도 개선.
  - https://bjpelc.wordpress.com/2015/01/10/yet-another-language-speed-test-counting-primes-c-c-java-javascript-php-python-and-ruby-2/



JAVASCRIPT의 오해

- 스크립트(script) 언어는 진정한 언어가 아니다.
  - 대표적인 스크립트 언어 Python, Perl, Ruby
  - 프로그래밍의 논리적 흐름을 서술 할 수 있다면 그 자체로 이미 언어

JAVASCRIPT RANK BY GITHUT

http://www.sitepoint.com/whats-best-programming-language-learn-2015/

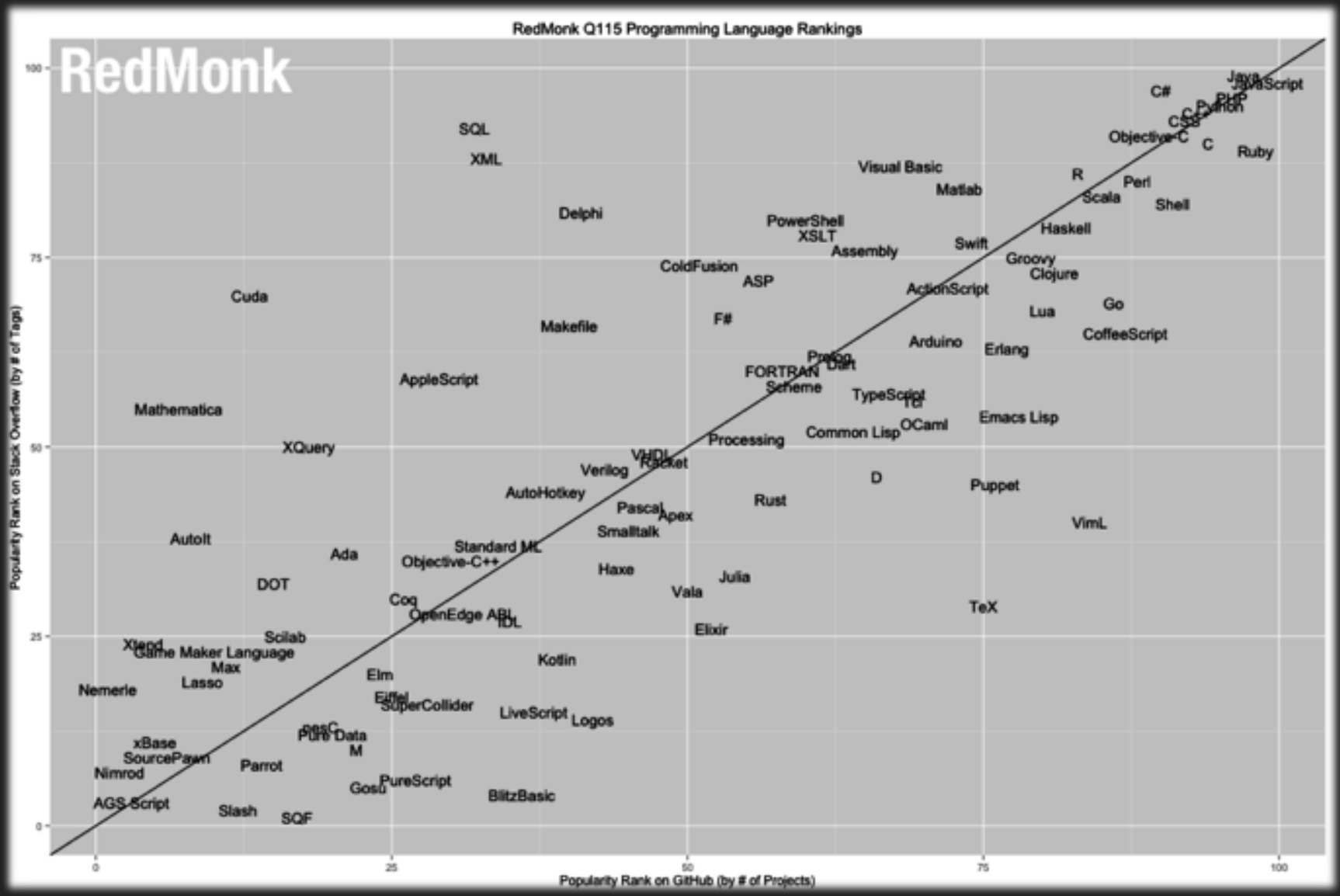
- GitHut is a relatively new resource which analyzes 2.2 million active repositories on GitHub.

JAVASCRIPT
JAVA
PYTHON
CSS
PHP
RUBY
C++
C
SHELL
C#

JAVASCRIPT RANK BY REDMONK

http://www.sitepoint.com/whats-best-programming-language-learn-2015/

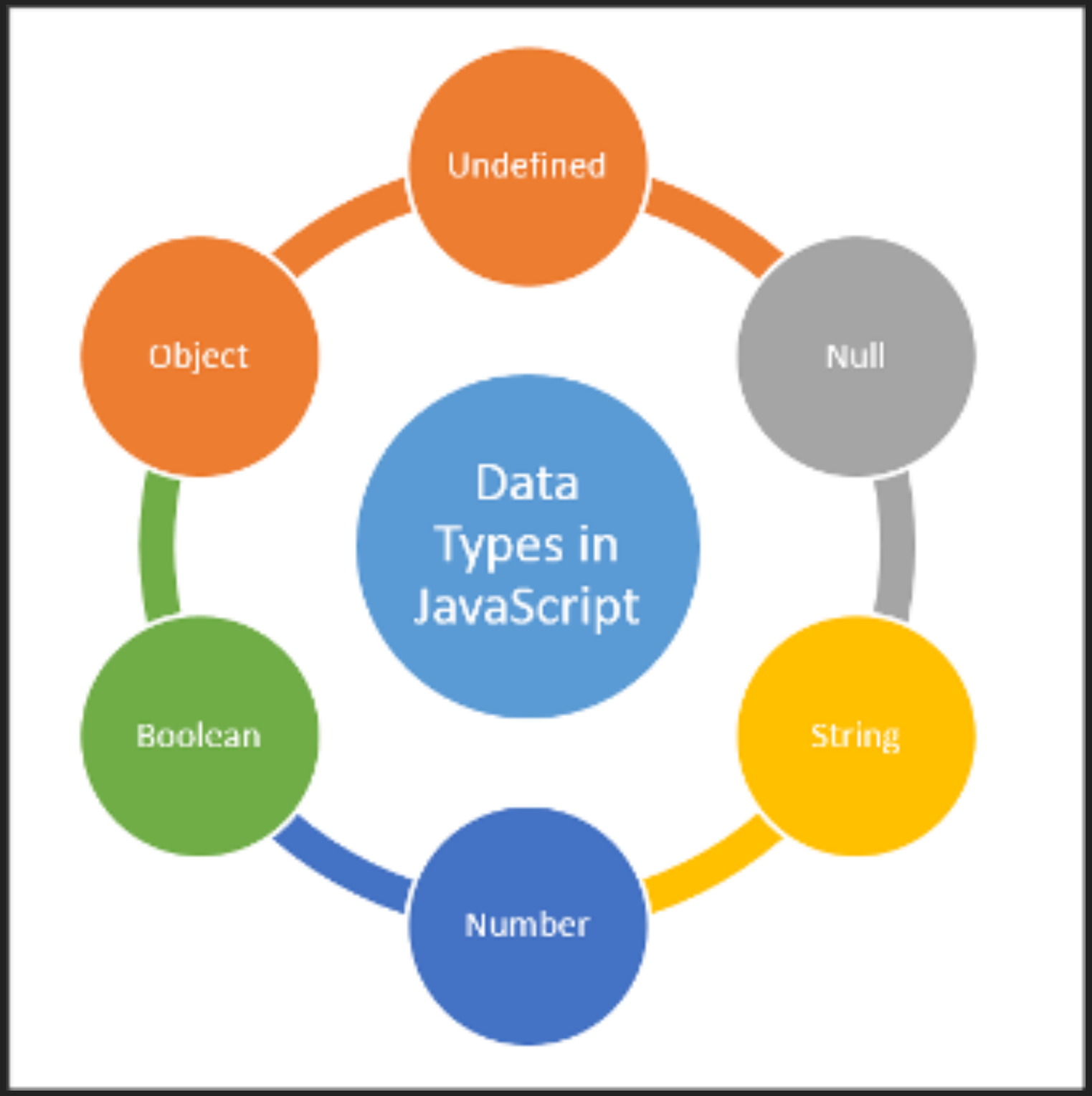
- RedMonk's language ranking for 2015 determines popularity by analyzing activity on both GitHub and StackOverflow.



JAVASCRIPT
JAVA
PHP
PYTHON
C#
C++
RUBY
CSS
C
OBJECTIVE-C

TYPE

- Object
- String
- Number
- Boolean
- Null
- Undefined



OPERATION

- +, -, *, /, %, ++, --
- <, >, <=, >=, ==, ===, !=, !==
- =, +=, -=, *=, /=, %=
- &&, ||, !, ?(3항연산자)
- &, |, ^, <<, >>

STATEMENTS

- for
- if-else
- switch
- while / do-while
- try-catch-finally
- break
- continue
- var
- function
- debugger
- return
- delete

ARRAY

- var arr = []; or var arr = new Array();
  - 오브젝트의 리스트로 구성된 객체
  - 가변적 크기
  - Methods
    - push() / pop() / shift() / unshift()
    - slice(start, end) / splice(position, number, [items…])
    - length
    - toString() / join() / concat()
    - arr[index]
    - delete
    - sort() / reverse()

FUNCTION

- function name(parameter1, parameter2, ...) {
  code to be executed
  return;
  }

- var name = function (parameter1, parameter2, ...) {
  code to be executed
  return;
  }

- name();

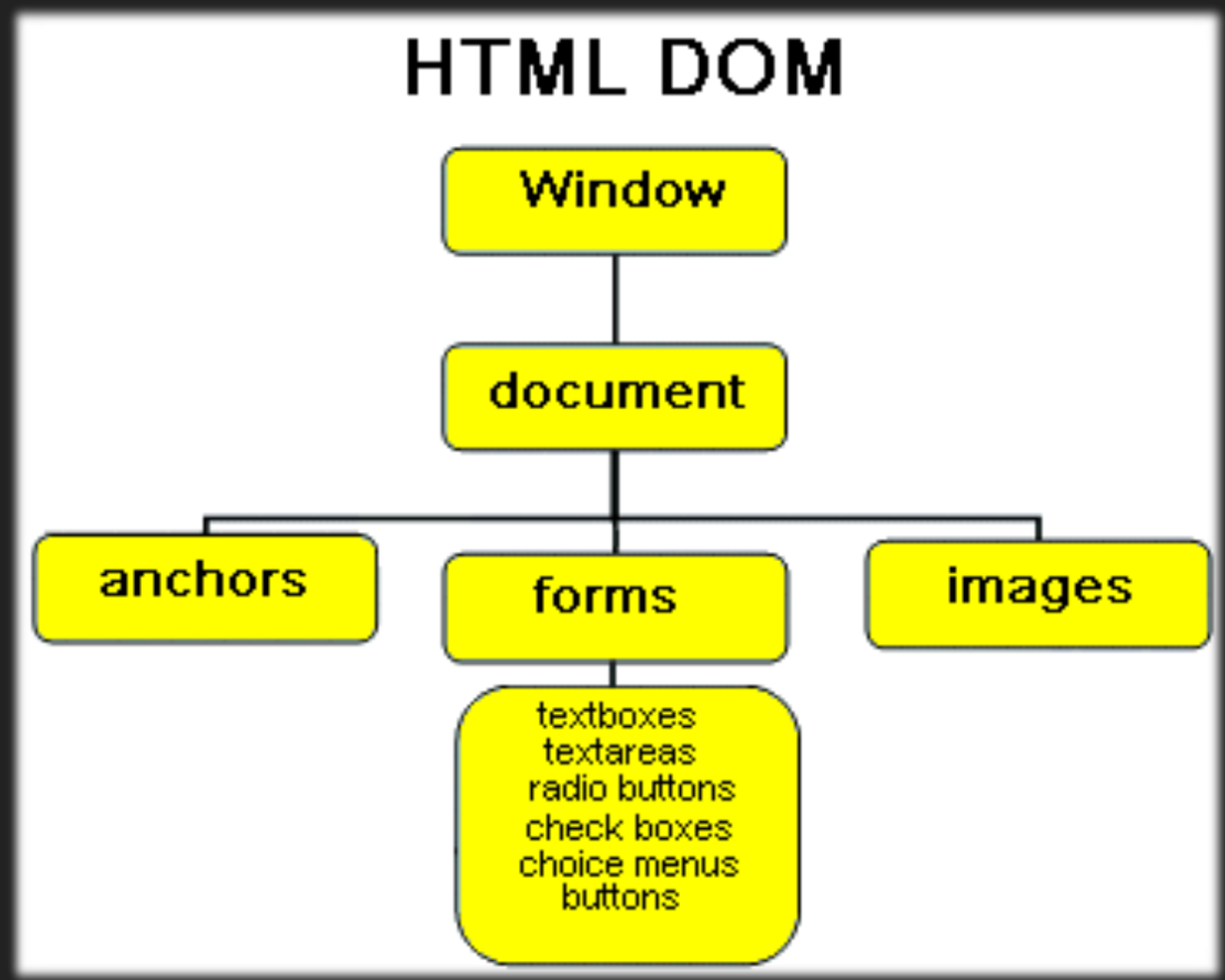
OBJECT

- var person = {
  firstName:"John", lastName:"Doe", age:50,
  fullName: function() {return this.firstName + " " +
this.lastName;}
  };

- person.firstName;
- person[“firstName”];
- person.fullName();

DOM, DOCUMENT OBJECT MODEL

- html문서를 트리 구조로 변경하여 원하는 Object를 선택/조작 할 수 있도록 함.
- 부모/자식 관계를 따라 추적
- Element의 Attribute를 통한 추적
- 최상위 window 객체에 포함



DOM CONTROL

- DOM에서 특정 element를 선택한다.
- document.getElementsByTagName('태그명')
- document.getElementById ('id속성값')
- document.getElementsByClassName('class속성값')
- document.querySelector('찾고자 하는 Dom 객체에대한 CSS 선택자')
- document.querySelectorAll('찾고자 하는 Dom 객체에대한 CSS 선택자')

DOM CONTROL

- element를 활용한다.
- element.value
- element.textContent
- element.appendChild()
- element.insertBefore()
- element.replaceChild()
- element.removeChild()
- element.cloneNode()
- element.setAttribute('name', 'val')
- element.removeAttribute('name')

DOM EVENT

- Event Driven Model
- type별 event handler에 function을 등록
  - load, click
  - mousedown, mousemove, mouseover, mouseup
  - keydown, keypress, keyup
  - change, reset, submit

DOM EVENT

- <input type="button" value="다이얼로그 표시" onclick=“btn_onclick()“>

- window.onload = function() { … };

- window.addEventListener('load', function() { … });

JQUERY

- 2006, John Resig
- DOM -> jQuery Object로 변환하여 조작
- Cross Browsing
- Effect / Animation
- AJAX
- Plug-in

SELECTORS

Basics
*
.class
element
#id
selector1, selectorN, ...

Hierarchy
parent > child
ancestor descendant
prev + next
prev ~ siblings

Basic Filters
:animated
:eq()
:even
:first
:gt()
:header
:lang()
:last
:lt()
:not()
:odd
:root
:target

Content Filters
:contains()
:empty
:has()
:parent

Visibility Filters
:hidden
:visible

Attribute
[name|="value"]
[name*="value"]
[name~="value"]
[name$="value"]
[name="value"]
[name!="value"]
[name^="value"]
[name]
[name="value"][name2="value2"]

Child Filters
:first-child
:first-of-type
:last-child
:last-of-type
:nth-child()
:nth-last-child()
:nth-last-of-type()
:nth-of-type()
:only-child
:only-of-type()

Forms
:button
:checkbox
:checked
:disabled
:enabled
:focus
:file
:image
:input
:password
:radio
:reset
:selected
:submit
:text

ATTRIBUTES / CSS

Attributes
.attr()
.prop()
.removeAttr()
.removeProp()
.val()

CSS
.addClass()
.css()
jQuery.cssHooks
.hasClass()
.removeClass()
.toggleClass()

Dimensions
.height()
.innerHeight()
.innerWidth()
.outerHeight()
.outerWidth()
.width()

Offset
.offset()
.offsetParent()
.position()
.scrollLeft()
.scrollTop()

Data
jQuery.data()
.data()
jQuery.hasData()
jQuery.removeData()
.removeData()

MANIPULATION

Copying
.clone()

DOM Insertion, Around
.wrap()
.wrapAll()
.wrapInner()

DOM Insertion, Inside
.append()
.appendTo()
.html()
.prepend()
.prependTo()
.text()

DOM Insertion, Outside
.after()
.before()
.insertAfter()
.insertBefore()

DOM Removal
.detach()
.empty()
.remove()
.unwrap()

DOM Replacement
.replaceAll()
.replaceWith()

TRAVERSING

Filtering
.eq()
.filter()
.first()
.has()
.is()
.last()
.map()
.not()
.slice()

Miscellaneous Traversing
.add()
.andSelf()
.contents()
.each()
.end()

Tree Traversal
.addBack()
.children()
.closest()
.find()
.next()
.nextAll()
.nextUntil()
.parent()
.parents()
.parentsUntil()
.prev()
.prevAll()
.prevUntil()
.siblings()

EVENTS

Browser Events

.error()
.resize()
.scroll()

Document Loading

.holdReady()
.load()
.ready()
.unload()

Event Handler Attachment

.bind()
.delegate()
~~.die()~~
~~.live()~~
.off()
.on()
.one()
.trigger()
.triggerHandler()
.unbind()
.undelegate()

Form Events

.blur()
.change()
.focus()
.select()
.submit()

Keyboard Events

.keydown()
.keypress()
.keyup()

Mouse Events

.click()
.dblclick()
.focusin()
.focusout()
.hover()
.mousedown()
.mouseenter()
.mouseleave()
.mousemove()
.mouseout()
.mouseover()
.mouseup()
~~.toggle()~~

Event Object

event.currentTarget
event.data
event.isDefaultPrevented()
event.isImmediatePropagationStopped()
event.isPropagationStopped()
event.namespace
event.pageX
event.pageY
event.preventDefault()
event.relatedTarget
event.result
event.stopImmediatePropagation()
event.stopPropagation()
event.target
event.timeStamp
event.type
event.which

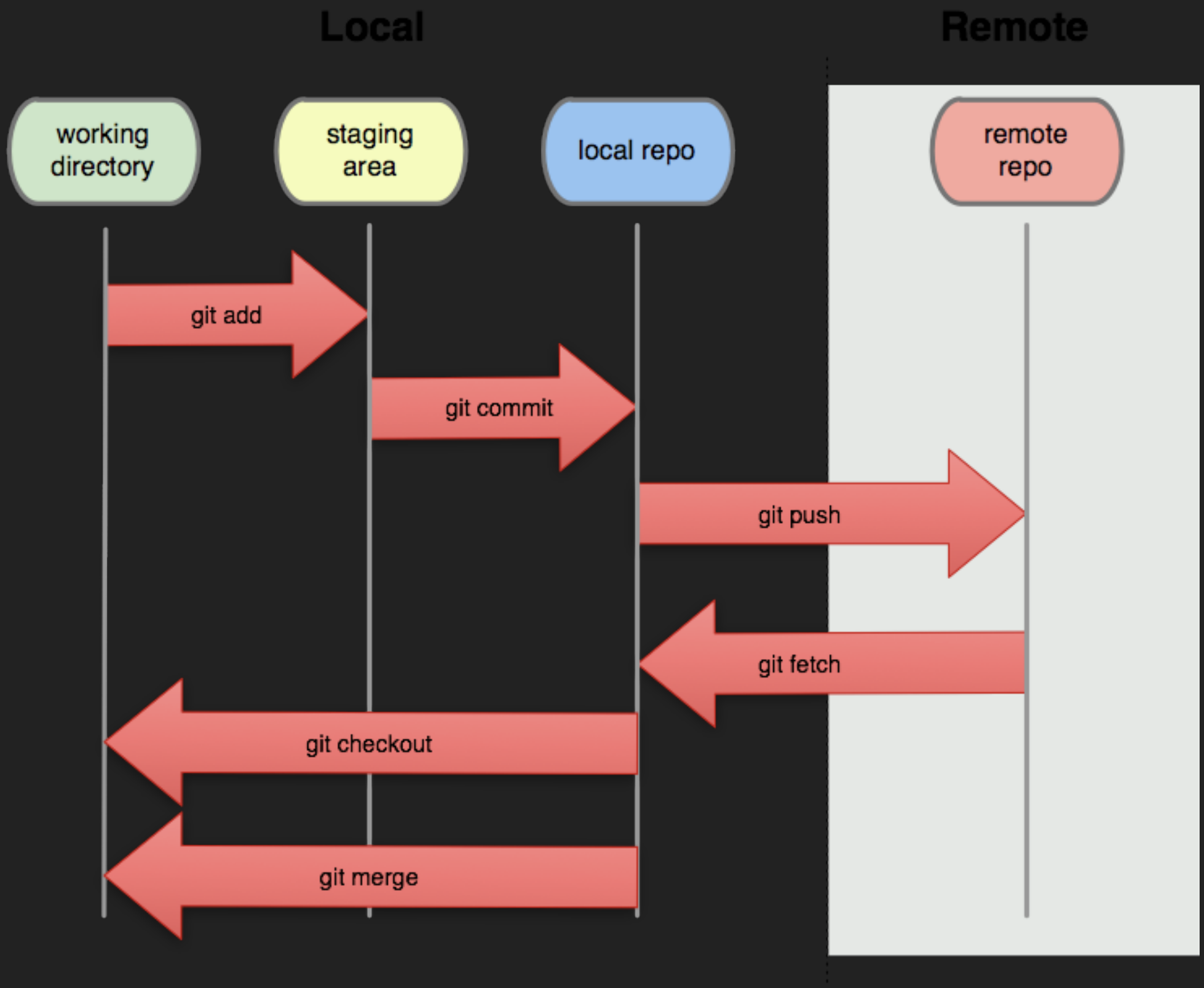
GIT

GIT

- 형상관리도구, Configuration Management Tool
- SourceCode 변경 history를 넘나드는 타임머신
- 분산 / 병렬 개발의 필수 요소

- Repository / Clone
- Branch / Checkout
- Commit / Push
- Tag
- Fetch / Pull
- Merge

GIT


Local
Remote
working directory
staging area
local repo
remote repo
git add
git commit
git push
git fetch
git checkout
git merge

GIT DOWNLOAD & CLONE

- git 설치
  - https://git-scm.com/download/win
  - http://git-scm.com/download/mac

- repository clone
  - git clone http://url