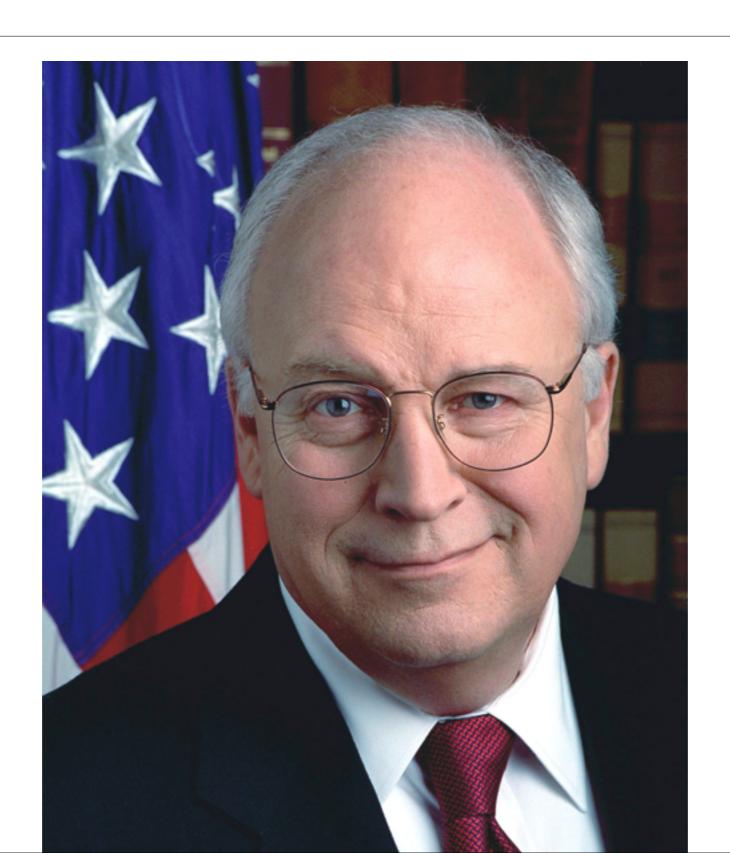


website that uses information from Wikipedia

# Who?



#### Set Up

- Use Wikipedia as a source
- Write a general python script that takes a name and checks if person is:
  - Dead
  - Alive
  - · Ambiguous name / Not a Person / Not a wikipedia page
- Write a specific python script for Cheney

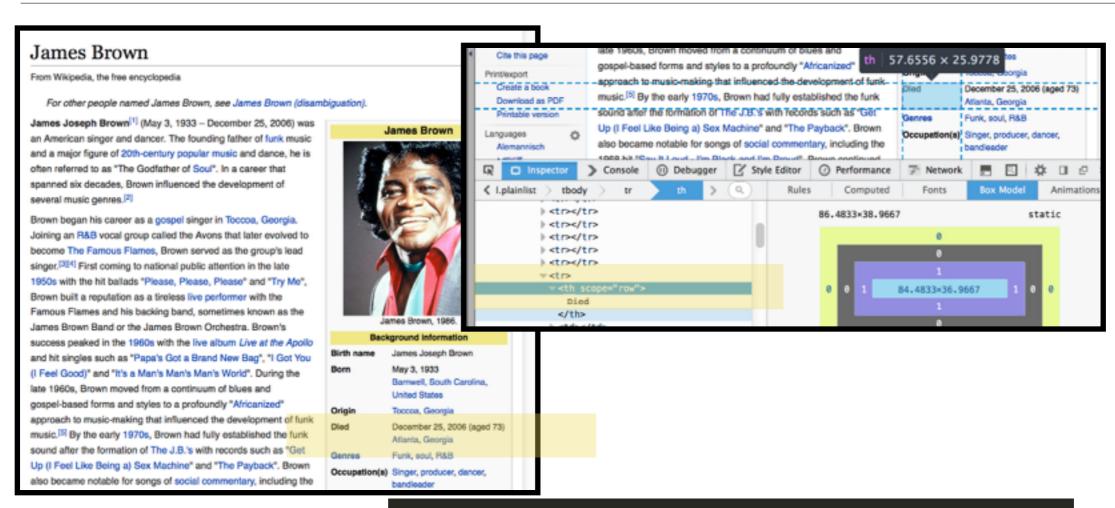
#### Getting information from Wikipedia

- Get content from Wikipedia
- First (naive) Approach get HTML and parse HTML (use Requests Module and Beautiful Soup)
- Second Approach use API and get JSON file

#### Get and Parse HTML

```
(test)₩ nono ~ python
Python 2.7.10 (default, Jul 13 2015, 12:18:59)
[GCC 4.2.1 Compatible Apple LLVM 6.0 (clang-600.0.57)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> import requests
>>> from BeautifulSoup import BeautifulSoup
>>> url = 'https://en.wikipedia.org/wiki/Dick_Cheney'
>>> r = requests.get(url)
>>> soup = BeautifulSoup(r.text)
>>> SOUD
<!DOCTYPE html>
<html lang="en" dir="ltr" class="client-nojs">
<meta charset="UTF-8" />
<title>Dick Cheney - Wikipedia, the free encyclopedia</title>
<meta name="generator" content="MediaWiki 1.26wmf14" />
<\link rel="alternate" href="android-app://org.wikipedia/http/en.m.wikipedia.org/wiki/Dick_Cheney" />
<link rel="apple-touch-icon" href="/static/apple-touch/wikipedia.png" />
<link rel="shortcut icon" href="/static/favicon/wikipedia.ico" />
<link rel="search" type="application/opensearchdescription+xml" href="/w/opensearch_desc.php" title="Wikipedia (en)" />
</p
<link rel="copyright" href="//creativecommons.org/licenses/by-sa/3.0/" />
<link rel="canonical" href="https://en.wikipedia.org/wiki/Dick_Cheney" />
<-link rel="stylesheet" href="//en.wikipedia.org/w/load.php?debug=false&amp; lang=en&amp; modules=ext.visualEditor.viewPageTarget.noscript%7Cext.wikihiero%7Cmediawiki.legacy.commonPrint%2Cshared%7C</li>
mediawiki.sectionAnchor%7Cmediawiki.skinning.interface%7Cmediawiki.ui.button%7Cskins.vector.styles%7Cwikibase.client.init&only=styles&skin=vector&*" />
<meta name="ResourceLoaderDynamicStyles" content="" />
<\link rel="stylesheet" href="//en.wikipedia.org/w/load.php?debug=false&amp;lang=en&amp;modules=site&amp;only=styles&amp;skin=vector&amp;*" />
<style>a: lang(ar),a: lang(kk-arab),a: lang(mzn),a: lang(ps),a: lang(ur) {text-decoration:none}
/* cache key: global:resourceloader:filter:minify-css:7:delab5287c9076b96eedd3f97a84a7b6 */</style>
<script src="//en.wikipedia.org/w/load.php?debug=false&amp;lang=en&amp;modules=startup&amp;only=scripts&amp;skin=vector&amp;*"></script>
<script>if(window.mw){
mw.config.set({"wgCanonicalNamespace":"","wgCanonicalSpecialPageName":false,"wgNamespaceNumber":0;"wgPageName":"Dick_Cheney","wgTitle":"Dick_Cheney","wgCurRevisionId":671354046,"wgRevisionId":671354046,"wgArti
cleId":5058628, "wgIsArticle":true, "wgIsRedirect":false, "wgAction": "view", "wgUserName":null, "wgUserGroups": ["*"], "wgCategories": ["Pages using duplicate arguments in template calls", "Pages containing links to su
bscription-only content", "All articles with dead external links", "Articles with dead external links from August 2014", "Wikipedia indefinitely semi-protected biographies of living people", "Wikipedia articles wi
th VIAF identifiers", "Wikipedia articles with LCON identifiers", "Wikipedia articles with GND identifiers", "Use mdy dates from April 2012", "Good articles", "Dick Cheney
","1941 births","Living people","20th-century American writers","21st-century American writers","American chief executives","American Enterprise Institute","American male writers","A
merican memoirists", "American Methodists", "American people of English descent", "American people of Huguenot descent", "American people of Welsh descent", "Cheney family", "Ford
 Administration personnel", "George H. W. Bush administration cabinet members", "George W. Bush Administration personnel", "Members of the United States House of Representatives from Wyoming", "Organ
 transplant recipients", "People from Casper, Wyoming", "People from Lincoln, Nebraska", "Presidential Medal of Freedom recipients", "Republican Party (United States) vice presidential
al nominees", "Republican Party Vice Presidents of the United States", "United Methodists", "United States congressional aides", "United States Secretaries of Defense", "United States vice-presidential candidates,
2000", "United States vice-presidential candidates, 2004", "University of Wisconsin-Madison alumni", "Vice Presidents of the United States", "White House Chiefs of Staff", "Wyoming Re
publicans", "Republican Party members of the United States House of Representatives", "Writers from Nebraska", "American political writers"], "wgBreakFrames": false, "wgPageContentLanguage": "e
n", "wgPageContentModel": "wikitext", "wgSeparatorTransformTable": ["", ""], "wgDigitTransformTable": ["", ""], "wgDefaultDateFormat": "dmy", "wgMonthNames": ["", "January", "February", "March", "April", "May", "June", "July", "A
ugust", "September", "October", "November", "December"], "wgMonthNamesShort": ["", "Jan", "Feb", "May", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"], "wgRelevantPageName": "Dick_Cheney", "wgRelevantArticleId": 585
8628 "unTcDrohabluEditable": false "unDestrictionEdit": ["autoconfirmed"] "unDestrictionMove": ["autoconfirmed"] "unDestrictionMove": ["autoconfirmed"] "unDestrictionEdit": ["autoconfirmed"] "unDestrictionMove": ["autoconfirmed"] "unDestrictionEdit": [
```

# Finding the right information in Soup



```
def not_exist(name):
    return name.find("div", {"class" : "noarticletext"})

def is_dead(name):
    return name.find("th", text="Died")

def is_ambiguous(name):
    return name.find("a", text="disambiguation")
```

#### Running the script - Ouch

```
(test) nono dead_yet python dead_html.py
Please enter a name (e.g. "James Brown" or "Mark E. Smith"
Scraping HTML with BS took 3.40938568115e-05 seconds
(test) nono dead_yet python dead_html.py dick cheney
Dick Cheney is still alive
Scraping HTML with BS took 1.26621294022 seconds
(test) nono dead_yet python dead_html.py james brown
James Brown is dead
Scraping HTML with BS took 0.954394102097 seconds
(test) nono dead_yet python dead_html.py madonna
Name is ambiguous
Scraping HTML with BS took 0.165064811707 seconds
(test) nono dead_yet python dead_html.py james clown
I don't know this person
Scraping HTML with BS took 0.34019613266 seconds
```

#### Specific script - Ouch

```
def dick_dead():
    r = requests.get('https://en.wikipedia.org/wiki/Dick_Cheney')
    soup = BeautifulSoup(r.text)
    if is_dead(soup):
        print "Yes, Dick is dead!"
    else:
        print "Not yet..."
```

```
(test) nono dead_yet python dick_dead_html.py
Not yet...

Scraping HTML with BS took 0.774477005005 seconds
(test) nono dead_yet python dick_dead_html.py
Not yet...

Scraping HTML with BS took 0.787503004074 seconds
(test) nono dead_yet python dick_dead_html.py
Not yet...

Scraping HTML with BS took 0.79307103157 seconds
(test) nono dead_yet python dick_dead_html.py
Not yet...

Scraping HTML with BS took 0.786529064178 seconds
```

# Using the Wikipedia API

Whole Page:

```
https://en.wikipedia.org/w/api.php?
action=query&titles=<<name>>&prop=revisions&rvprop=content
t&format=json
```

```
"batchcomplete": "",
    "query": {
        "pages": {
            "15766": {
                "pageid": 15766,
                "ns": 0,
                "title": "James Brown",
                "revisions": [
                        "contentformat": "text/x-wiki",
                        "contentmodel": "wikitext",
                        "*": "{{other people | James Brown}}\n{{Use mdy dates | date=December 2013}}\n{{Infobox
musical artist\n|background
                                 = solo singer\n|image
                                                                 = JamesBrown1986Pic.jpg\n | image size
<!-- if smaller than 220px, otherwise leave blank -->\n caption = James Brown, 1986.\n birth name
                                    = {{birth date | 1933 | 5 | 3}}\n|birth place
= James Joseph Brown\n|birth date
                                                                                   = [[Barnwell, South
                                                = [[Toccoa, Georgia]]\n|death date
Carolina]], [[United States]]\n|origin
                                                                                        = {{death date and
age|2006|12|25|1933|5|3}}\n|death_place = [[Atlanta]], [[Georgia (U.S. state)|Georgia]]\n|genre
= [[Funk]], [[soul music|soul]], [[Rhythm and blues|R&B]]\n|occupation
                                                                            = [[Singer]], [[Record
producer|producer]], [[dancer]], [[bandleader]]\n|instrument
                                                                  = [[Vocals]], [[drums]], [[percussion]],
[[organ (music)|organ]], [[keyboards]]\n|years active = 1954\u20131988; 1991-2006\n|label
[[Federal Records|Federal]], [[King Records (USA)|King]], Dade, [[Try Me Records|Try Me]], [[Smash
Records | Smash]], [[People Records | People]], [[Polydor Records | Polydor]], [[Scotti Brothers Records | Scotti
Bros.]]\n|associated acts = [[The Famous Flames]], [[The J.B.'s]], [[The Dapps]], [[Bobby Byrd]], The Soul
Generals, [[Lyn Collins]], [[Bobby Bennett (The Famous Flames) | Bobby Bennett]], [[Bootsy
                            = {{URL | www.jamesbrown.com/}}\n}\n'''James Joseph Brown'''<ref name=jbbirthname/>
Collins]]\n|website
(May 3, 1933&nbsp:\u2013 December 25, 2006) was an American singer and dancer. The founding father of [[funk]]
```

# Using the Wikipedia API - Categories

```
"continue": {
   "clcontinue": "15766 All_articles_with_unsourced_statements",
   "continue": "||'
"query": {
   "pages": {
       "15766": {
           "pageid": 15766,
                                               "title": "James Brown",
           "ns": 0,
           "title": "James Brown",
                                               "categories": [
           "categories": [
                   "ns": 14,
                                                          "ns": 14,
                   "title": "Category
                                                          "title": "Category:1933 births"
                                                    },
                   "ns": 14,
                   "title": "Category
                                                          "ns": 14,
               },
                                                          "title": "Category:2006 deaths"
                   "ns": 14,
                                                    },
                   "title": "Category
               },
                                                          "ns": 14,
                   "ns": 14,
                                                          "title": "Category: 20th-century American singers"
                   "title": "Category
               },
                   "ns": 14,
                   "title": "Category:African-American composers"
               },
                   "ns": 14,
                   "title": "Category:African-American male dancers"
               },
                   "title": "Category:African-American male singers"
               },
                   "title": "Category: African-American rock musicians"
               },
                   "ns": 14,
                   "title": "Category:African-Americans' civil rights activists"
               },
                   "ns": 14,
                   "title": "Category: All articles with dead external links"
```

# Using the API - 3

- Dead people have a category XXXX deaths
- Living people have got at XXXX births category but not a XXXX deaths category
- If there is an ambiguous category, name is ambiguous (will not have birth or death category)
- If there isn't a birth category I'm assuming it's not a person
- Non existing page will not have categories

# Using the Api - selecting categories

```
def categories(response):
        return response.json()["query"]["pages"].values()[0]["categories"]
 8
    def is_ambiguous(dic):
 9
10
        for item in dic:
11
            if 'disambiguation' in item["title"]:
12
                 return True
13
        return False
14
    def is_dead(dic):
15
16
        for item in dic:
            if 'deaths' in item["title"]:
17
18
                 return True
19
        return False
20
21
    def was_born(dic):
22
        for item in dic:
23
            if 'births' in item["title"]:
24
                return True
25
        return False
26
```

# Running general script

```
(test) nono dead_yet python dead_json.py dick cheney
Dick Cheney is alive
Calling Wikipedia API took 0.119389057159 seconds
(test) nono dead_yet python dead_json.py james brown
James Brown is dead
Calling Wikipedia API took 0.113177061081 seconds
(test) nono dead_yet python dead_json.py madonna
Not sure who you're talking about
Calling Wikipedia API took 0.141903877258 seconds
(test) nono dead_yet python dead_json.py james clown
Person/Wikipediapage does not exist
Calling Wikipedia API took 0.131882190704 seconds
```

# Specific script

```
def dick_dead_json():
    r = requests.get('https://en.wikipedia.org/w/api.php?action=query&titles=Dick%20
    text = r.json()["query"]["pages"].values()[0]["categories"][1]
    if 'deaths' in text["title"]:
        print "He's dead!"
    else:
        print "Not yet!"
```

```
(test) nono dead_yet python dick_dead_json.py
Not yet!
Using JSON API took 0.121052980423 seconds
(test) nono dead_yet python dick_dead_json.py
Not yet!
Using JSON API took 0.113301992416 seconds
(test) nono dead_yet python dick_dead_json.py
Not yet!
Using JSON API took 0.113208055496 seconds
(test) son.py
```

was 0.75!

# Making it into a website

- Create a flask app
- Deploy to Heroku
- Add custom domain

#### Flask - single page

- Flask is a python microframework
  - (http://flask.pocoo.org/)
- Single HTML Page

#### Flash App

```
from flask import Flask, render_template
    import requests
    from wiki_request import categories, is_dead
 4
 5
    app = Flask(__name__)
 6
    @app.route('/', methods=['GET', 'POST'])
8
    def index():
        result = "Test"
 9
10
        url = 'https://en.wikipedia.org/w/api.php?action=query&titles=Dick
        r = requests.get(url)
11
12
        d = categories(r)
        if is_dead(d):
13
            name = "dead"
14
15
            result = "Dick Cheney is Dead!"
16
        else:
17
            name = "alive"
18
            result = "Dick Cheney is not dead yet..."
        return render_template('index.html', name=name, result=result)
19
20
21
    if __name__ == '__main__':
22
        app.run()
```

#### Heroku

- · simple deploy with heroku updating easy as using git
- added custom domain (<u>http://www.isdickdeadyet.xyz/</u>)

