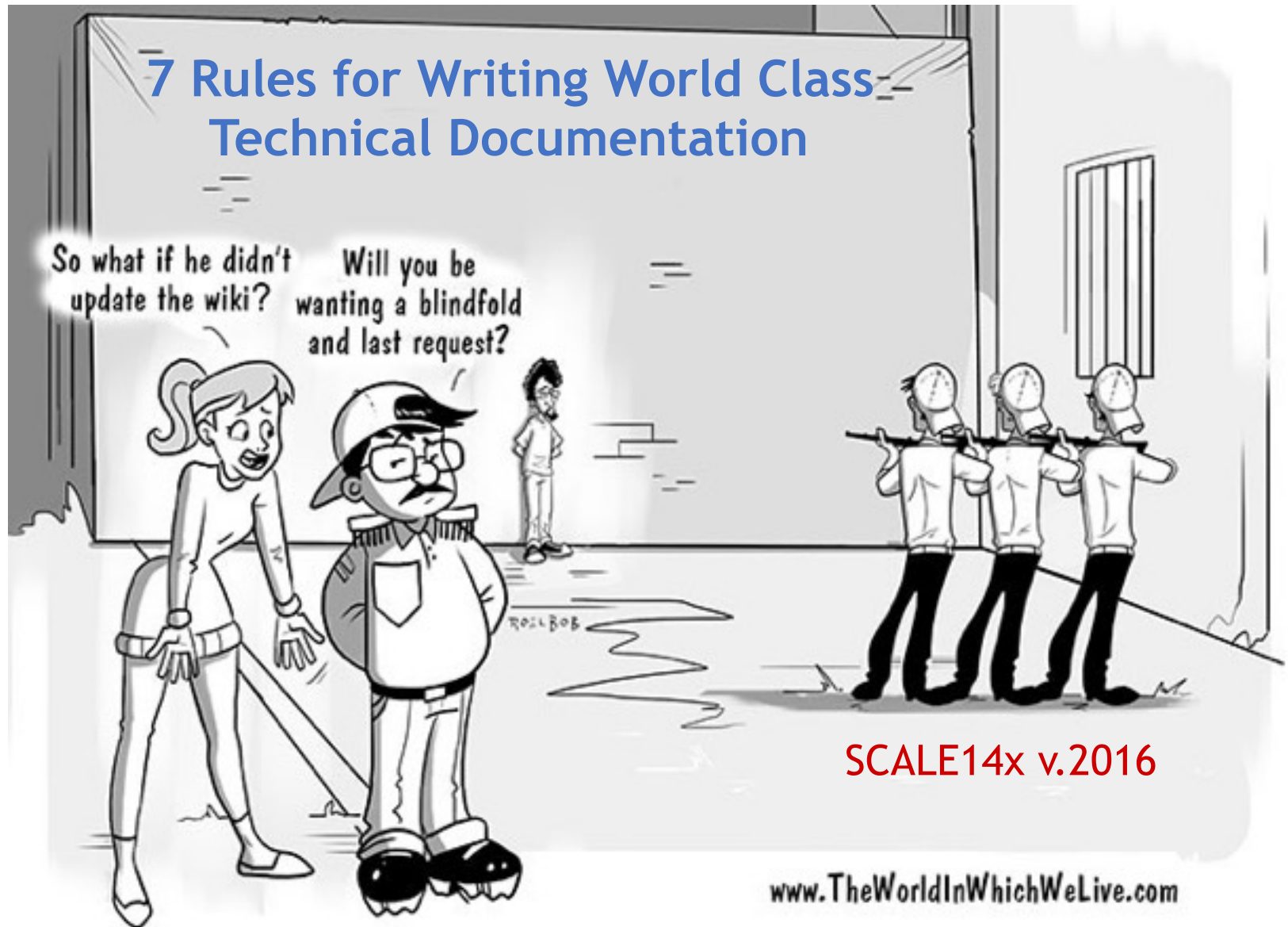


# 7 Rules for Writing World Class Technical Documentation



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[reselbob@gmail.com](mailto:reselbob@gmail.com)  
@reselbob

# Agenda

- Introduction
  - What you'll be able to do at the end of this
  - Who are you?
  - Who am I?
  - Why am I here?
- Getting Down to Business
  - Defining World Class Technical Documentation
  - The 7 Rules
  - Real World Examples
  - Video

# What you'll be able to do at the end of this

When this is over, you will have a methodology to create technical documentation that is:

- easier to understand
- more engaging
- becomes more accurate over time
- clearer in purpose

Who are you?

# Who am I?



Shameless self-promotion

Shameless self-promotion

# Who am I?



# The Dirty Little Secret

It's all hard, even the  
easy stuff!

# The false assumption about assumptions

Through most of the years when silver dollars and smaller denominations were minted in actual silver, the melt value of the silver was substantially less than their face value. As a result, their monetary value was based on government fiat rather than on the commodity value of their contents, and this became especially true following the huge silver strikes in the West, which further depressed the silver price. From that time until the early 1960s the silver in United States dimes, quarters, halves, and silver dollars was worth only a fraction of their face values.



# The false assumption about assumptions

melt value

face value

monetary value

commodity value

huge silver strikes

depressed the silver price

government fiat



# Define World Class Technical Documentation

- Increasingly Accurate
- Engaging
- Purposeful
- Easy to Understand

# The 7 Rules

1. If you don't want to read it, don't write it
2. Don't confuse and don't abuse
3. Before you start, be clear about what you want the reader to do after you end
4. Write to an outline, always
5. clarity = illustrations + words
6. Watch the pronouns
7. Embrace revision

1. If you don't want to read it, don't write it!

## 2. Don't confuse and don't abuse

- The currency of the future is human attention
- *“Attention economics is an approach to the management of information that treats human attention as a scarce commodity, and applies economic theory to solve various information management problems.”* - wikipedia
- You need to get and keep the reader's attention
- You have a lot of competition

## 2. Don't confuse and don't abuse

- Use graphics
  - More about this later
- Use examples generously
  - More about this later
- Use analogies when possible
- Reiterate but don't repeat
  - Bad dog: *Use the jack to jack up your car.*
  - Good dog: *Use the jack to elevate your car.*

### 3. Before you start, be clear about what you want your reader to do after you end

- Technical documentation is about subsequent behavior
- There is always an expected result
  - *You will be able to make a batch of cookies.*
  - *You will be able to do a heart transplant.*
- Be clear: state at the beginning what the reader will be able to do at the end
- Keep mystery in the mystery novels

### 3. Before you start, be clear about what you want your reader to do after you end

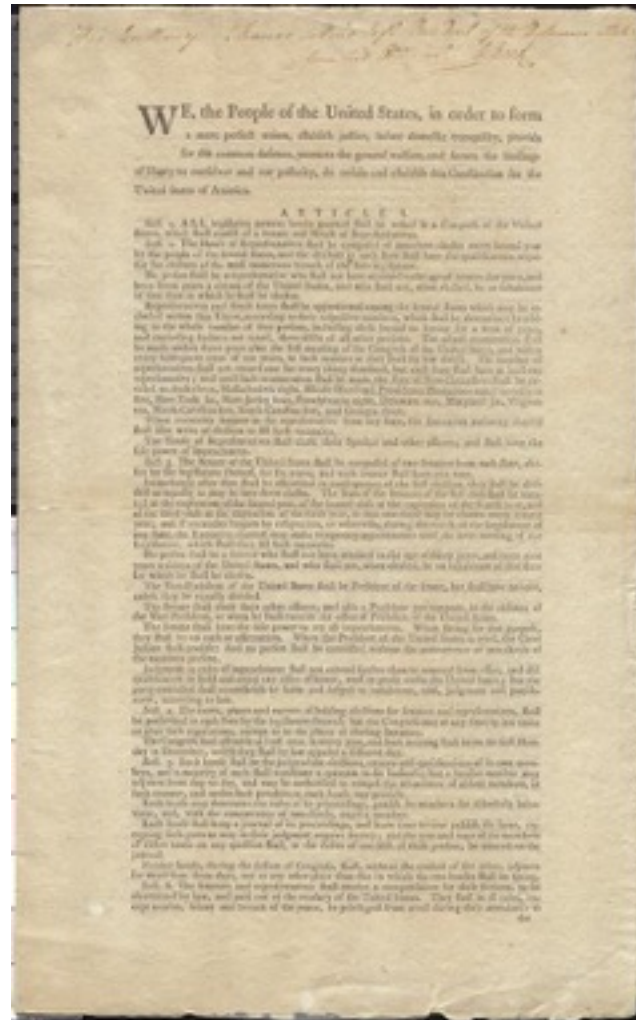
- Plan your reinforcements
- The minimum is 3 reps
  - Tell 'em what you going to tell 'em
  - Tell 'em
  - Tell 'em what you told them



## 4. Write to an outline, always



# 4. Write to an outline, always



# 4. Write to an outline, always

## Preamble

**We the People** of the [United States](#), in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

■ [/Preamble Annotations](#)

## Article I



Listen to this text ([help](#) | [file info](#) or [download](#))

### Section 1

All legislative Powers herein granted shall be vested in a [Congress of the United States](#), which shall consist of a Senate and House of Representatives.

■ [/Article I, Section I Annotations](#)

### Section 2

The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

No Person shall be a Representative who shall not have attained to the Age of twenty five Years and been seven Years a Citizen of the United States and who shall not when elected be an

## Contents [\[hide\]](#)

### 1 Preamble

### 2 Article I

#### 2.1 Section 1

#### 2.2 Section 2

#### 2.3 Section 3

#### 2.4 Section 4

#### 2.5 Section 5

#### 2.6 Section 6

#### 2.7 Section 7

#### 2.8 Section 8

#### 2.9 Section 9

#### 2.10 Section 10

### 3 Article II

#### 3.1 Section 1

#### 3.2 Section 2

#### 3.3 Section 3

#### 3.4 Section 4

### 4 Article III

#### 4.1 Section 1

#### 4.2 Section 2

#### 4.3 Section 3

### 5 Article IV

#### 5.1 Section 1

#### 5.2 Section 2

## 4. Write to an outline, always

- Use the basic rules of outlining
- In case you were sleeping in 8<sup>th</sup> Grade:
  - You must have at least 2 sub levels to a level.
  - You must have at least 2 sentences in every level.

The 2 Sentence Rule is very, very, very important!!!

# 4. Write to an outline, always

## Bad Dog!

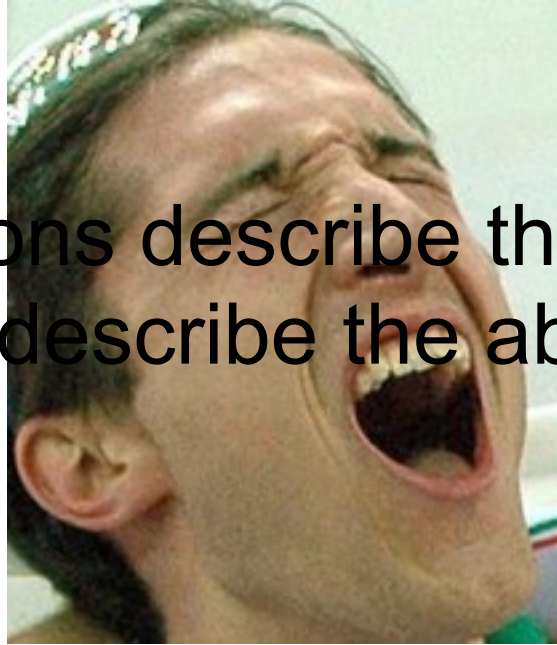
- Assumed Knowledge
  - How to write Java code
  - How to use Maven at the command line
  - Know how to write Web Apps
  - Know about the file system of a web app
    - WEB-INF should have meaning
  - Know how to run Jetty
  - Know MVC
    - “Controller” has meaning
    - “View” has meaning

## Good Dog!

- Assumed Knowledge
  - How to write Java code
  - How to use Maven at the command line
  - Know how to write Web Apps
    - Know about the file system of a web app
    - WEB-INF should have meaning
  - Know how to run Jetty
  - Know MVC
    - “Controller” has meaning
    - “View” has meaning

# 5. clarity = illustrations + words

Illustrations describe the instance.  
Words describe the abstraction.



Is this man in agony or ecstasy?

# 5. clarity = illustrations + words

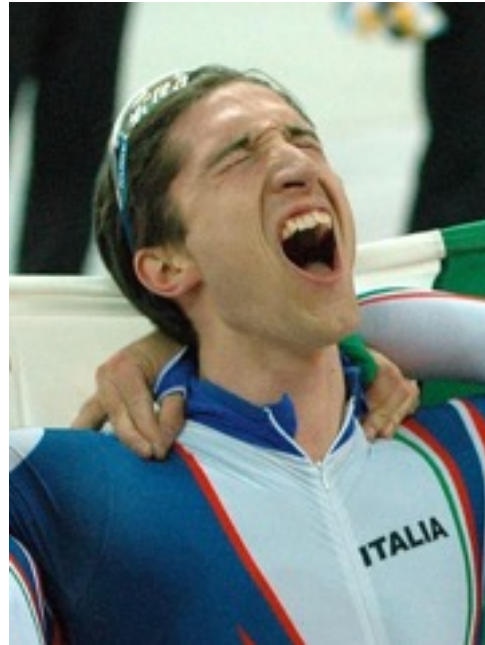


Figure 1: Enrico Fabris celebrating his first gold at the 2006 Winter Olympics in Torino.

**5. clarity = illustrations + words**



[illegible]

[illegible]

# 5. clarity = illustrations + words

- The reader's attention is usually drawn to the illustration first
- Write around the illustration
- 1 Concept = 1 Illustration
- Number captions
  - Figures
  - Tables
  - Listing
- Always value add to figure captions
- Reference your captions in the copy

# Creating Context

I \*will\* rule the world!



# 5. Clarity = illustrations + words

lineups. The act originally featured Moe Howard (born Harry [Moshe] Moses Horwitz), brother Shemp Howard (born [Shmuel] Samuel Horwitz[1]), and longtime friend Larry Fine (born Louis [Levi] Feinberg). Shemp was later replaced by brother Curly Howard (born Jerome Lester [Yehudah-Leib] Horwitz) in 1933. (Please see Figure 2)

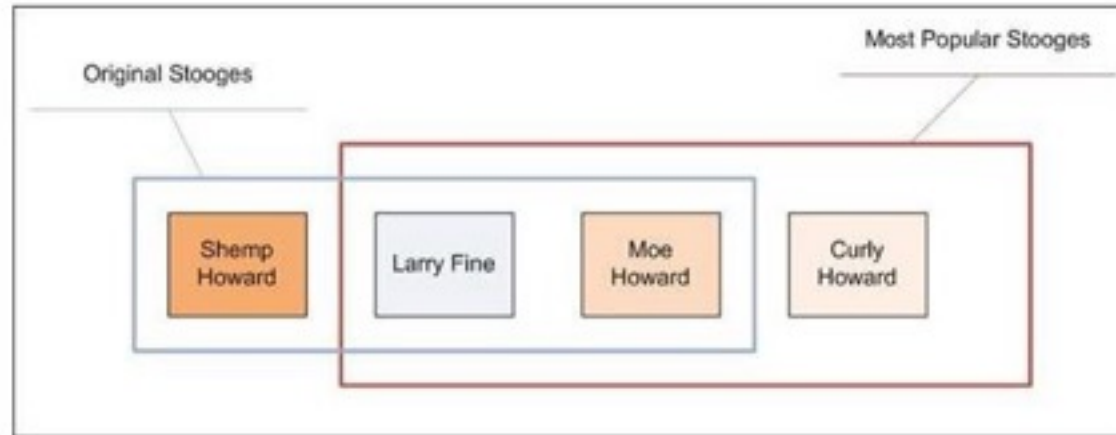


Figure 2: Larry Fine and Moe Howard were members of both line-ups of The 3 Stooges

Curly had a stroke in 1946 died in 1952. Shemp Howard rejoined the troupe as his replacement. (Please see Table 1.)

Table 1: Profile information about The 3 Stooges

Name	Real Name	Born	Died
Moe Howard	Harry Moses Horwitz	1897-06-19	1975-05-04
Larry Fine	Louis Feinberg	1902-10-05	1975-01-24
Curly Howard	Jerome Lester Horwitz	1903-10-22	1952-01-18
Shemp Howard	Schmool Samuel Horwitz	1895-03-04	1955-10-22

Use the HTML code shown in Listing 1 to display a picture of The 3 Stooges in your web site.

Listing 1: HTML img element that references an illustration of the more popular 3 Stooges ensemble.

```

```

# Real World Example: 1

## V.1 Dog

### How to Change a Spare Tire

#### Purpose

The purpose of this document is to teach you how to read this document.

#### Intended Reader

Intended reader (viewer) of this document is a person that uses or cares for a motor vehicle.

#### Assumed knowledge

In order to get full knowledge of this document we assume that you are able to operate a motor vehicle and the following tools:

- Hand jack
- Tire wrench

Also, we assume that you are able bodied and can lift a tire from its storage area and bring it to and place it upon the hub to which the flat tire is presently mounted.

#### What you'll be able to do after reading (viewing) this document

## V.2 Dog

### How to Change a Spare Tire



#### Purpose

The purpose of this document is to teach you how to read this document. The intended reader (viewer) of this document is a person that uses or cares for a motor vehicle.

#### Assumed knowledge

In order to get full knowledge of this document we assume that you are able to operate a motor vehicle and the following tools:

- Hand jack
- Tire wrench

Also, we assume that you are able bodied and can lift a tire from its storage area and bring it to and place it upon the hub to which the flat tire is presently mounted.

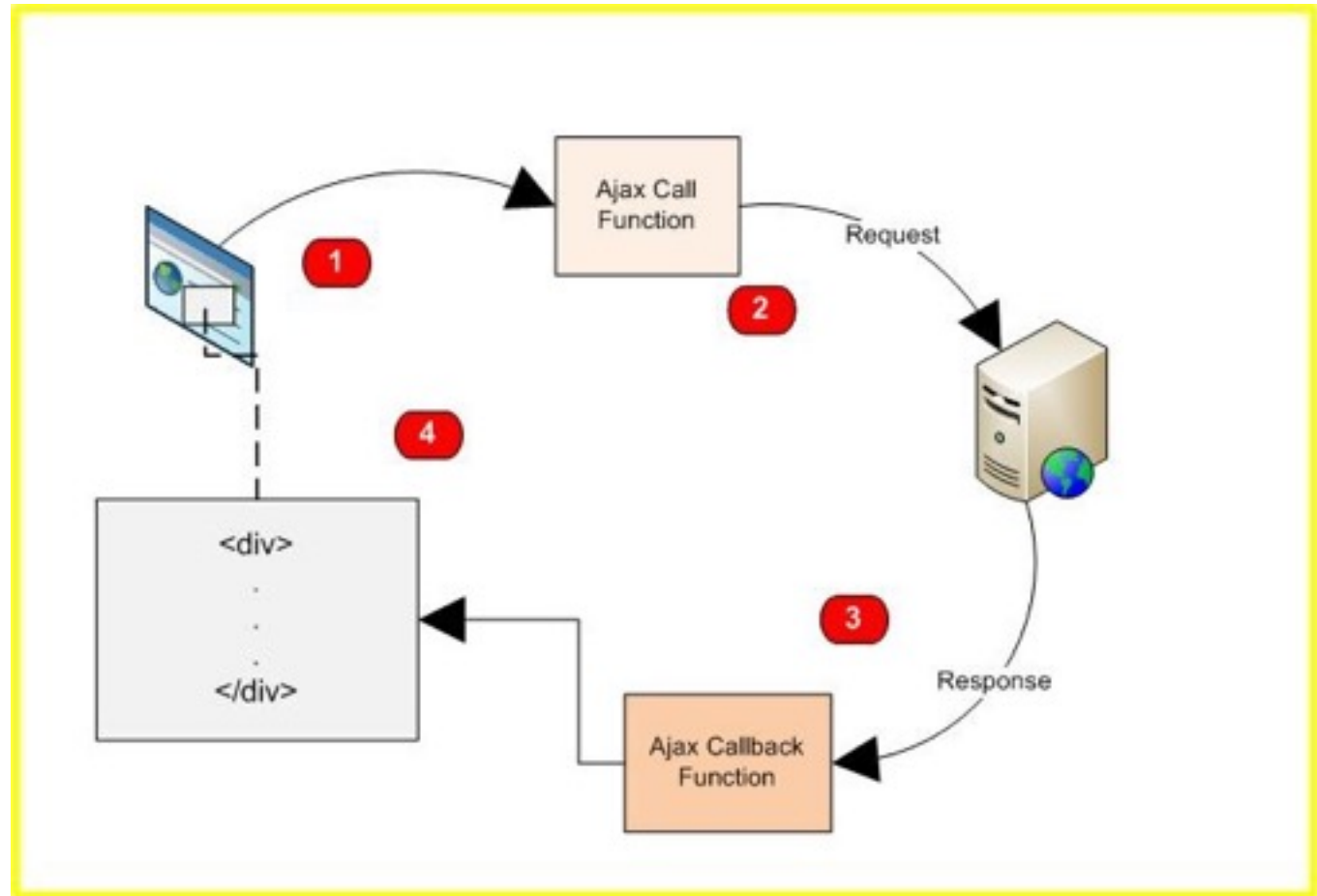
#### What you'll be able to do after reading (viewing) this document

After reading this document you will be able to change a tire on a motor vehicle. Although the motor vehicle that we'll focus upon in this article is an automobile, the techniques demonstrated herein are applicable to most motor vehicles.



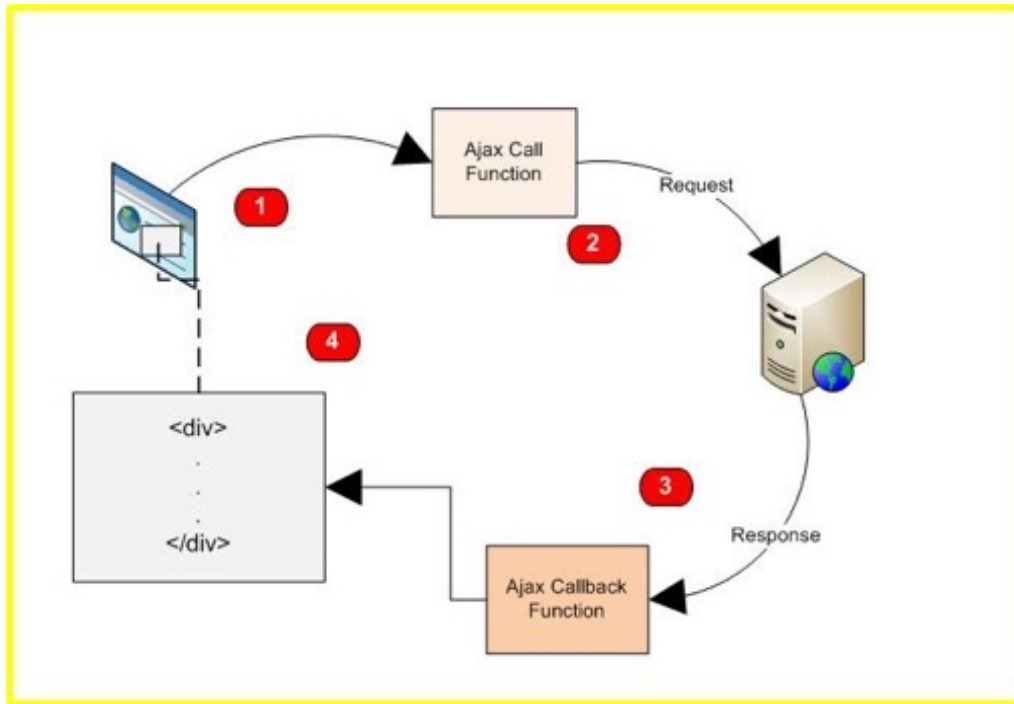
# Real World Example: 2

V.1 Dog



# Real World Example: 2

Information retrieval using Ajax is a 4 step process. (Please see Figure 1).



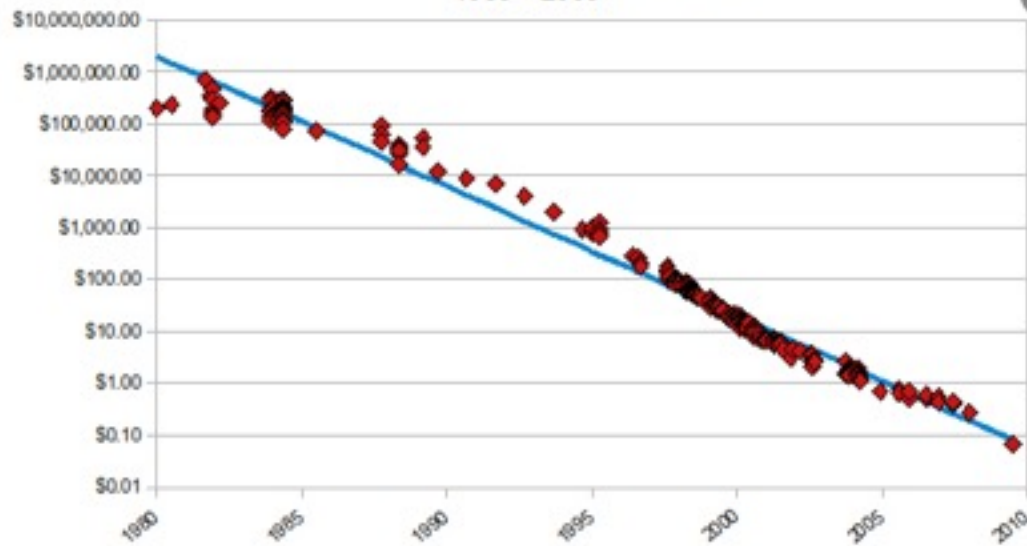
1. Browser invokes JavaScript call function
2. Call function makes http request
3. Web server process Ajax request and created http response
4. Ajax callback function renders data from web sever to div element on browser page

Figure 1: Asynchronous JavaScript uses the callback function pattern

V.2 Dog



## Hard Drive Cost per Gigabyte 1980 - 2009



mkomo.com

1 Drop in the cost of storage...

2 Increase of inexpensive, on demand computing.....

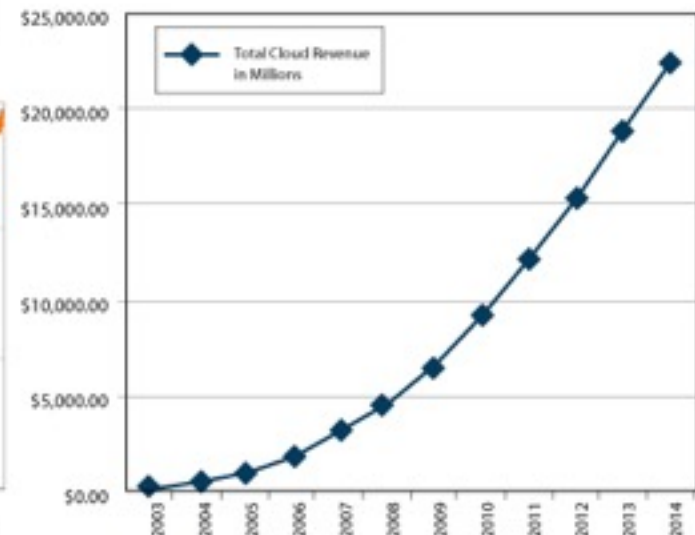
3 Increased demand to analyze data.

Job Trends from Indeed.com  
— "data scientist"



## Floating on a Cloud

The soaring growth of "cloud" computing



Source: Yankee Group 2010

WWW.AGORAFINANCIAL.COM

Figure 12 below shows how to configure the test, GetAlphaSquare. GetAlphaSquare is the test that exercises the API GET methods that returns an alphaSquare based on a path parameter. First, you open the test, GetAlphaSquare. Notice that Ready! API shows you in the left side Navigator panel, that the test requires a path parameter, {alphaChar} (1). Ready! API provides a number of ways to set a path parameter. We'll use the Form interface to set the path parameter, g (2). Now that the path parameter is set (3), we set an assertion for the status code 200 using the Assertion dialog (4). The Assertion dialog is access from the Assertions tab (6). When the test is run, you see that that an alphaSquare for the character, g is returned (5). And the assertion is satisfied (6).

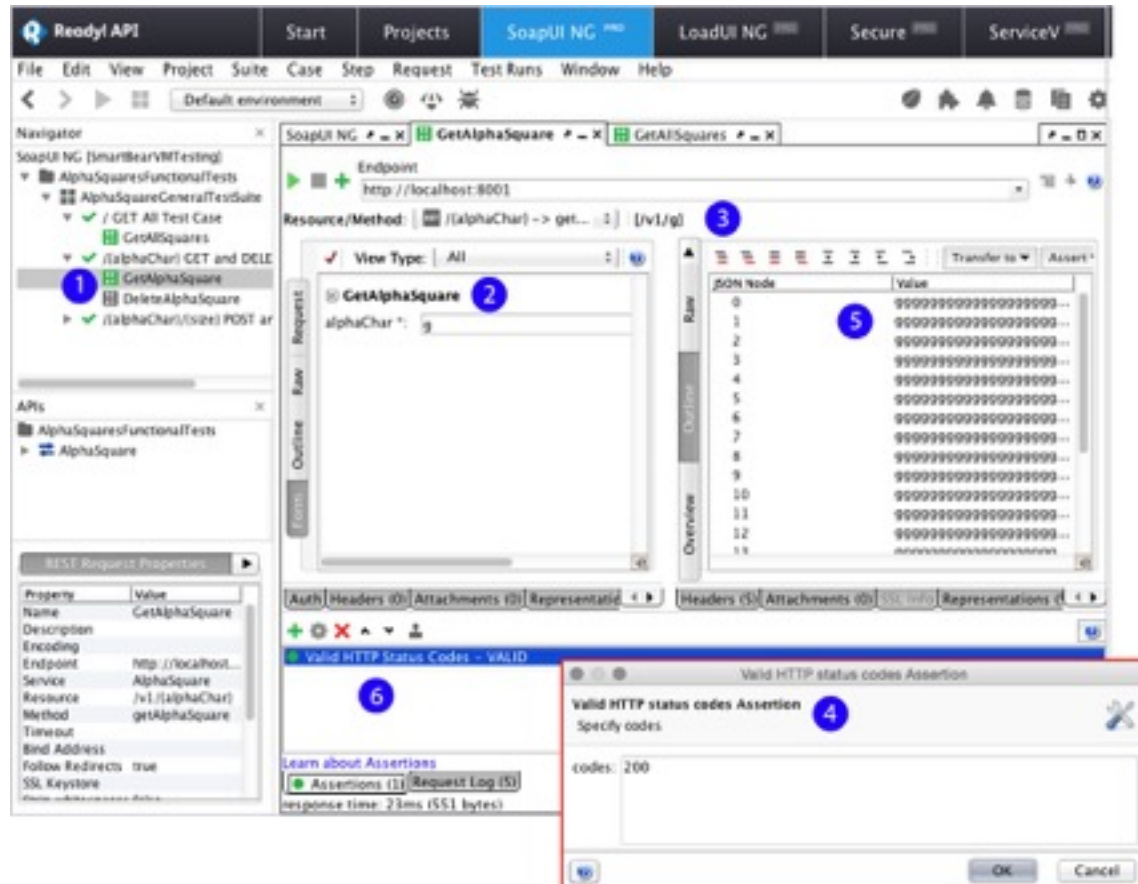
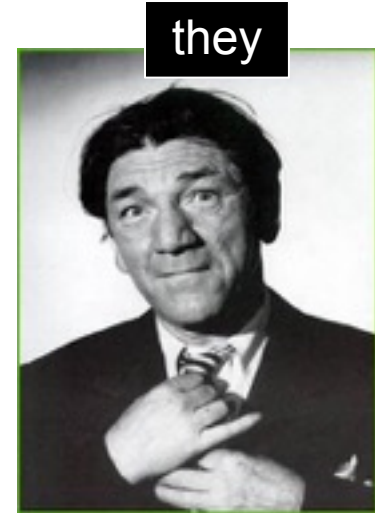


Figure 12: You configure API tests within the Ready! API application interface

## 6. Watch the pronouns



## 6. Watch the pronouns

- The culprits

- it

- this

- that

- they

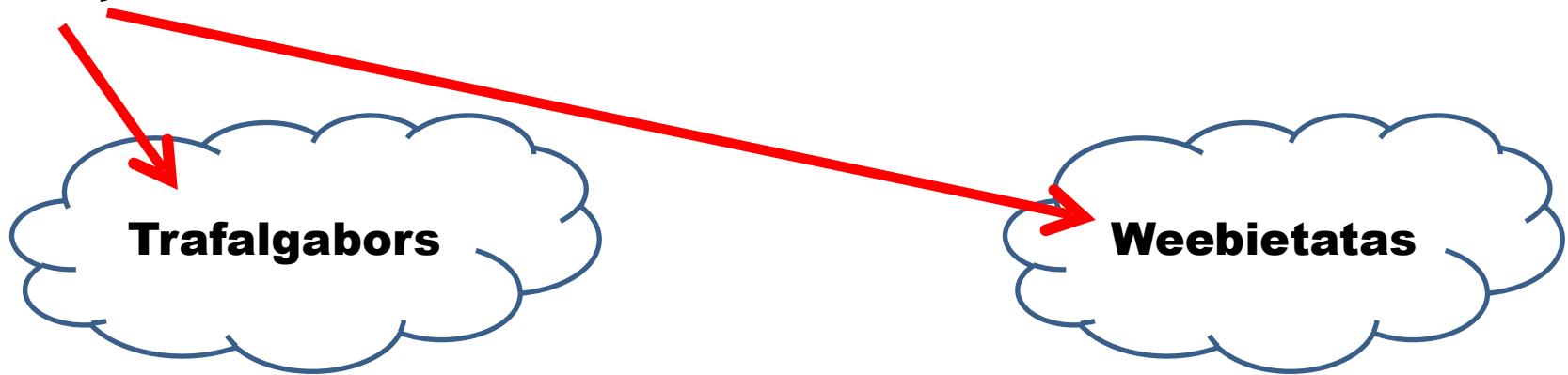
- these

- those

- What is the reference?

## 6. Watch the pronouns

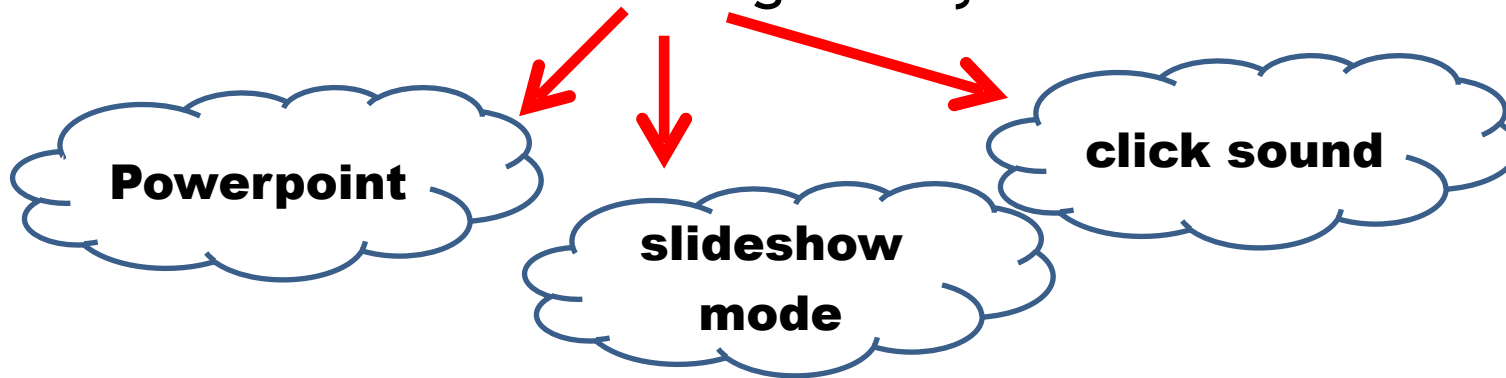
- Trafalgabors are a fundamental component of the Weebietatas framework. This screencast shows you what they are about and how to use them



- Trafalgabors are a fundamental component of the Weebietatas framework. This screencast shows you what **Trafalgabors** are about and how to use them.

## 6. Watch the pronouns

I am doing a presentation in PowerPoint 2007 Win. In slideshow mode, every time I move between slides hitting the space bar, I get an awful click sound. Does anybody know how to make that go away?



I am doing a presentation in Powerpoint 2007 Win. In slideshow mode, every time I move between slides, hitting the space bar I get an awful click sound. Does anybody know how to make that **sound** go away?

# 7. Embrace revision

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## The Down and Dirty Guide: Async and Await in C#

Posted by [Bob Reselman](#) on July 31st, 2015

[Tweet](#) [Like](#) 101 [Share](#) 97 [G+1](#) +5

I will share a little secret with you; I've found asynchronous programming a hard, but necessary, comp master. In fact, it hurts my head. Yet, being able to do asynchronous programming effectively is part important now when so much data comes from data stores that are unpredictable in terms of respons any help I can get simplifying the amount of stuff I need to know to do my programming work is alway When it comes to asynchronous programming, .NET has made my life a lot easier by adding the clas the keywords `async` and `await` to my C# programming toolkit.

Task, `async`, and `await` have been around for a while. Nonetheless, I can imagine that there are fe there who might have hurting heads on this topic. Hopefully, this piece will give you the basics you ca some relief.

```
using System;
using System.Threading;
using System.Threading.Tasks;

namespace Reselman.DownAndDirty
{
    public class AsyncDemo
    {
        public async Task<bool> DoTimeIntensiveWork()
        {
            await Task.Run(() =>
            {
                Console.WriteLine($"The ThreadID for the Task
                running in AsyncDemo.DoTimeIntensiveWork()
                is: {0}",
                Thread.CurrentThread.ManagedThreadId);
                var time = DateTime.Now.ToString("hh:mm:ss:fff");
                Console.WriteLine($"Start time for the Task in
                AsyncDemo.DoTimeIntensiveWork(): {0}", time);

                //get the task to sleep to emulate time working
                Thread.Sleep(500);

                Console.WriteLine($"--- behavior that takes 1/2
                second ---");
                time = DateTime.Now.ToString("hh:mm:ss:fff");
            });
        }
    }
}
```



# 7. Embrace revision

## Comments

### Writer

Posted by [Bob Reselman](#) on 01/20/2016 08:23am

Thank you Kris and Joseph, sincerely.

Reply

### Thread.Sleep(1000) ???

Posted by [Kris](#) on 08/10/2015 03:34am

You should avoid fixed timing in your demo method. Thread.Sleep() can be replaced with .Wait():

```
.ContinueWith((t) => { Console.WriteLine("\n---\ntask.ContinueWith() returns the value: {0}, at: {1}", t.Result,
DateTime.Now.ToString("hh:mm:ss:fff")); }) .Wait();
```

Reply

### C# async

Posted by [Joseph](#) on 08/09/2015 09:58am

Hey @Bob, I noticed two things that you can improve on this article. Please use await Task.Delay(500) instead of Thread.Sleep(500) since we don't want to block the thread that is executing the task. The second thing is to decorate your method names with the Async suffix (e.g. DoTimeIntensiveWorkAsync or DoWorkAsync) since sometimes the task may not be asynchronous.

Reply



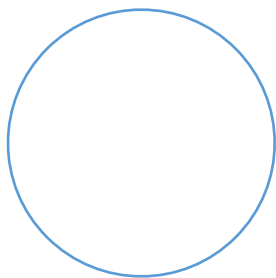
# 7. Embrace revision

- As technology releases increase, revision cycles must become shorter
- Print = 6 months  $\rightarrow \infty$
- Web = today  $\rightarrow$  `DateTime.Now`

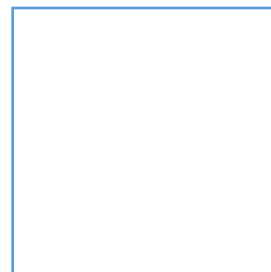
## Bring back the Tech Editor

# Video

- 1 minute = \$1000
- 1 word = 1 second
- 5 minutes max, unless you have extraordinary production quality



**Bad Dog**



**Good Dog**

# The 7 Rules

1. If you don't want to read it, don't write it
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