

**Life, Liberty, and  
the Pursuit of APIness**  
*The Secret to Happy Code*

Dylan Beattie

@dylanbeattie

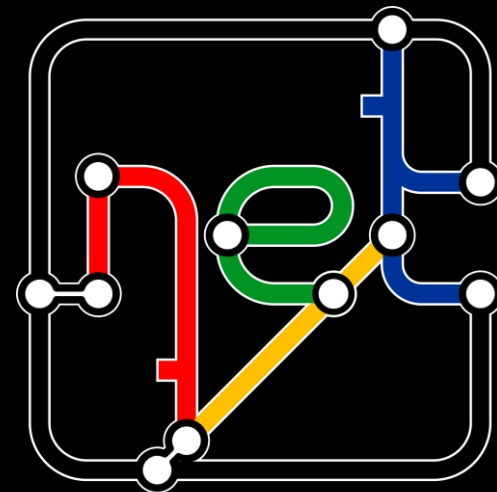
dot**net**sheff

[www.dylanbeattie.net](http://www.dylanbeattie.net)



 @dylanbeattie

- Building websites since 1992
- CTO @SkillsMatter
- Microsoft MVP
- London .NET User Group
- [www.dylanbeattie.net](http://www.dylanbeattie.net)
- [dylan@dylanbeattie.net](mailto:dylan@dylanbeattie.net)



@LondonDotNet





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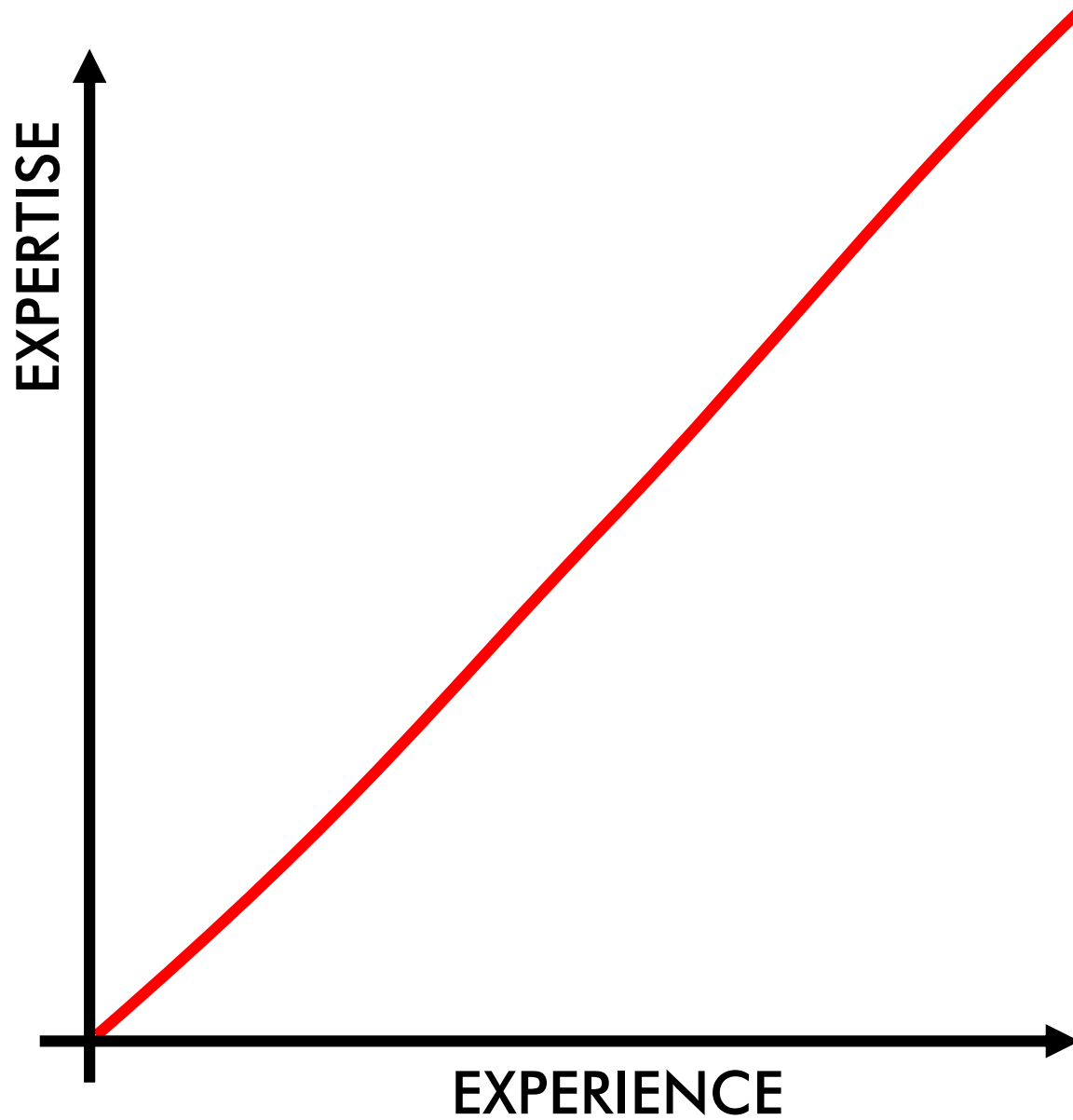
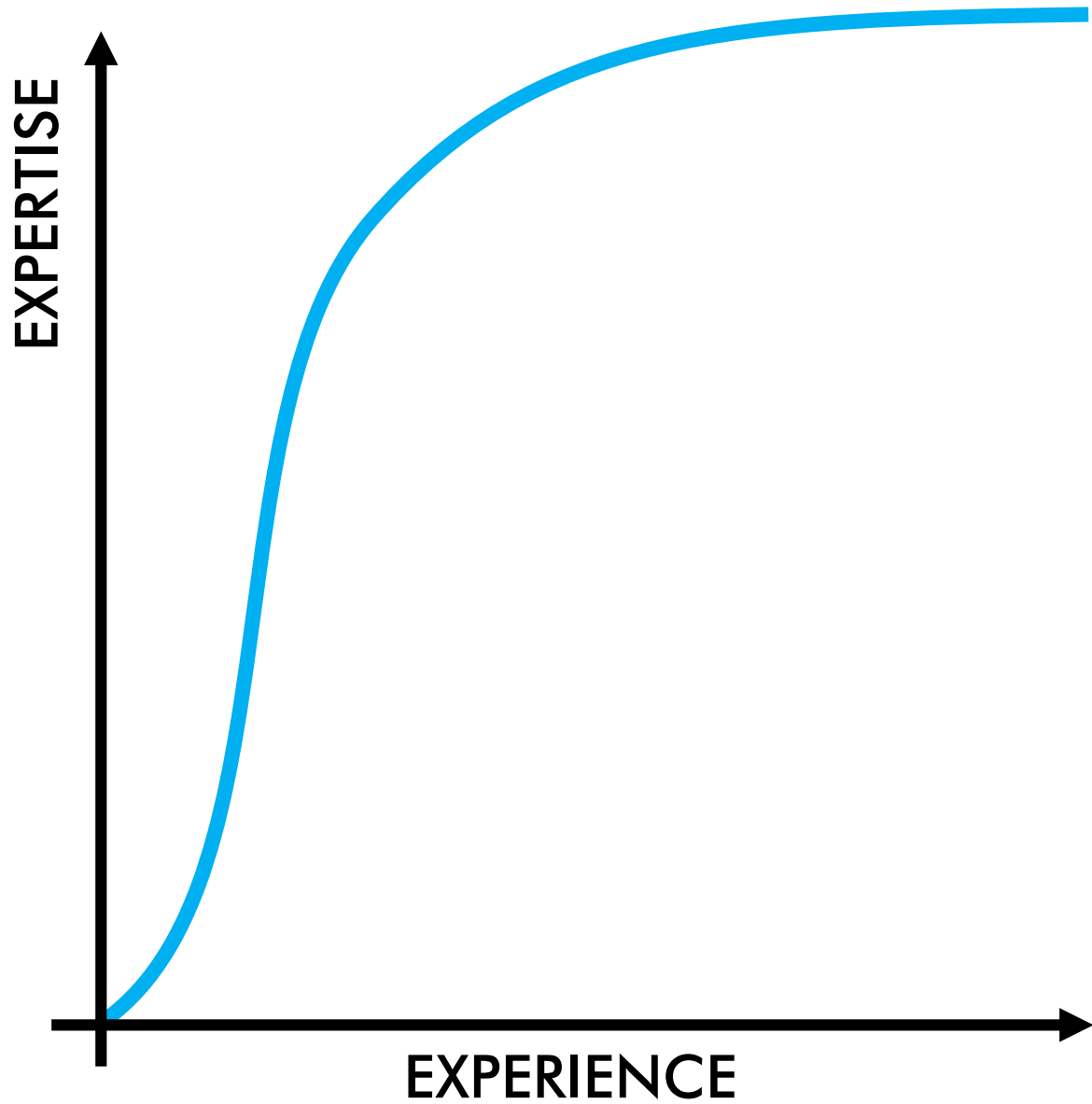
#happycode

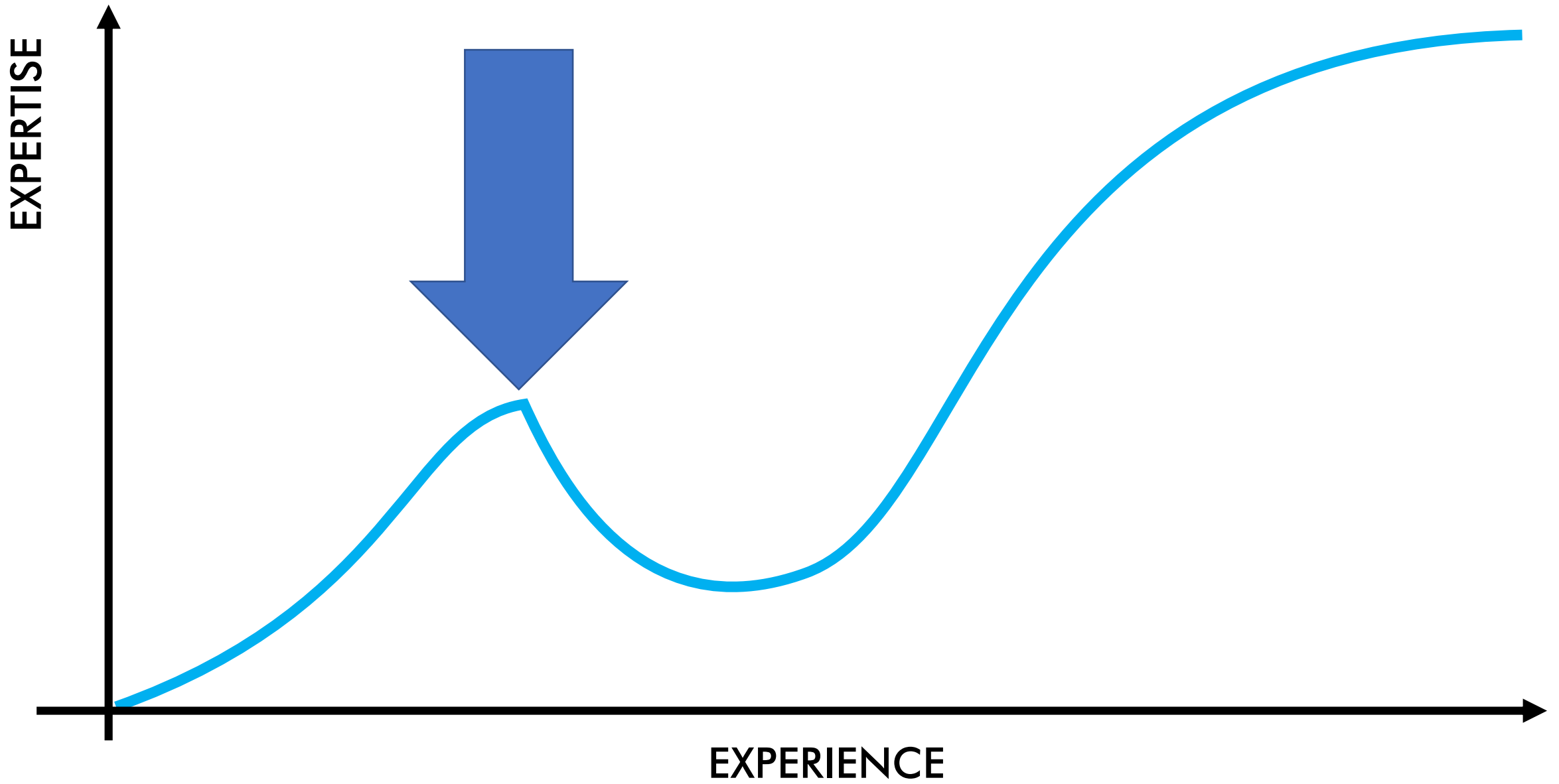


<http://www.mornota.com/beyninizi-gelistirin/>

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#happycode



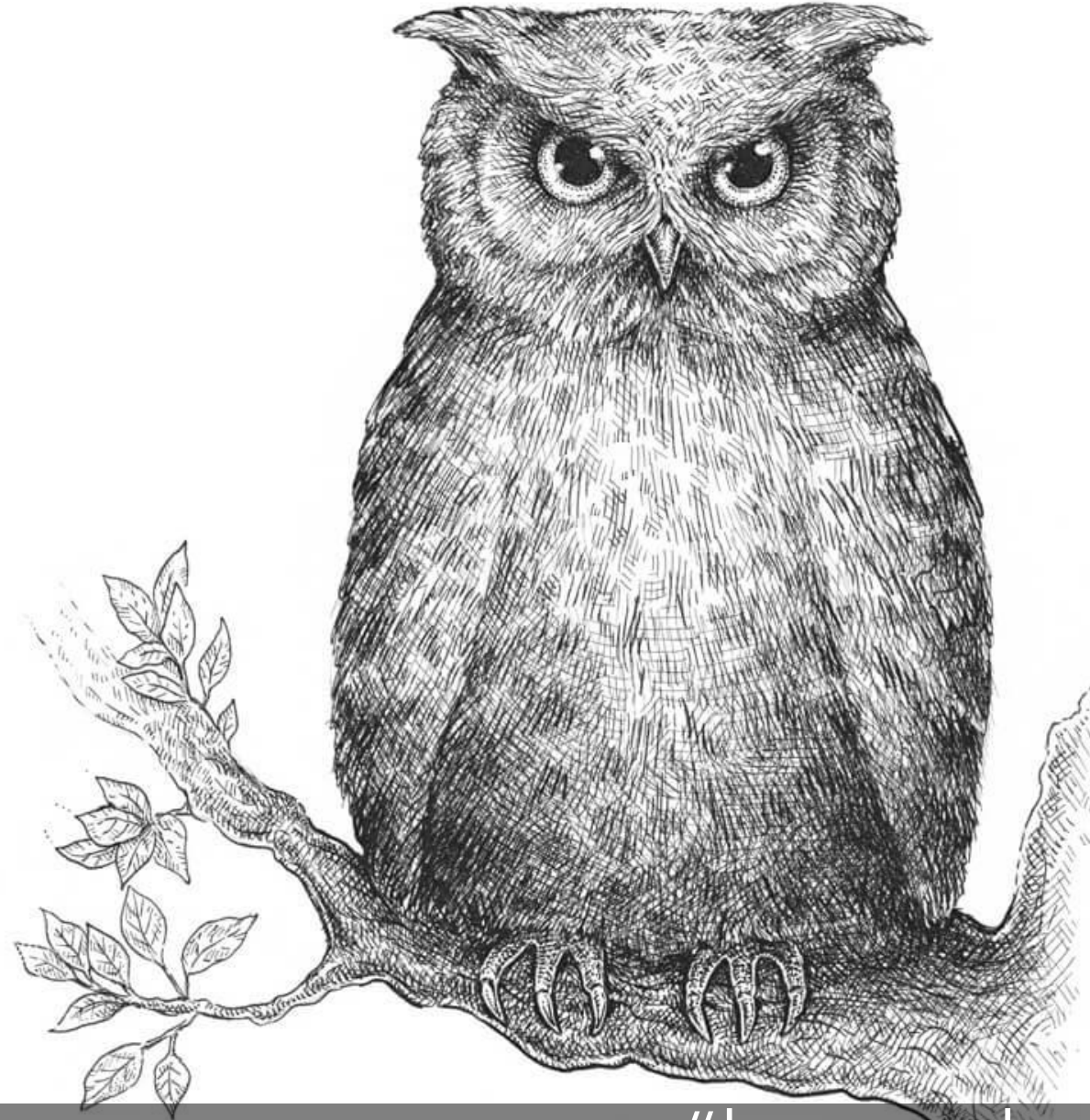


# How To Draw An Owl:

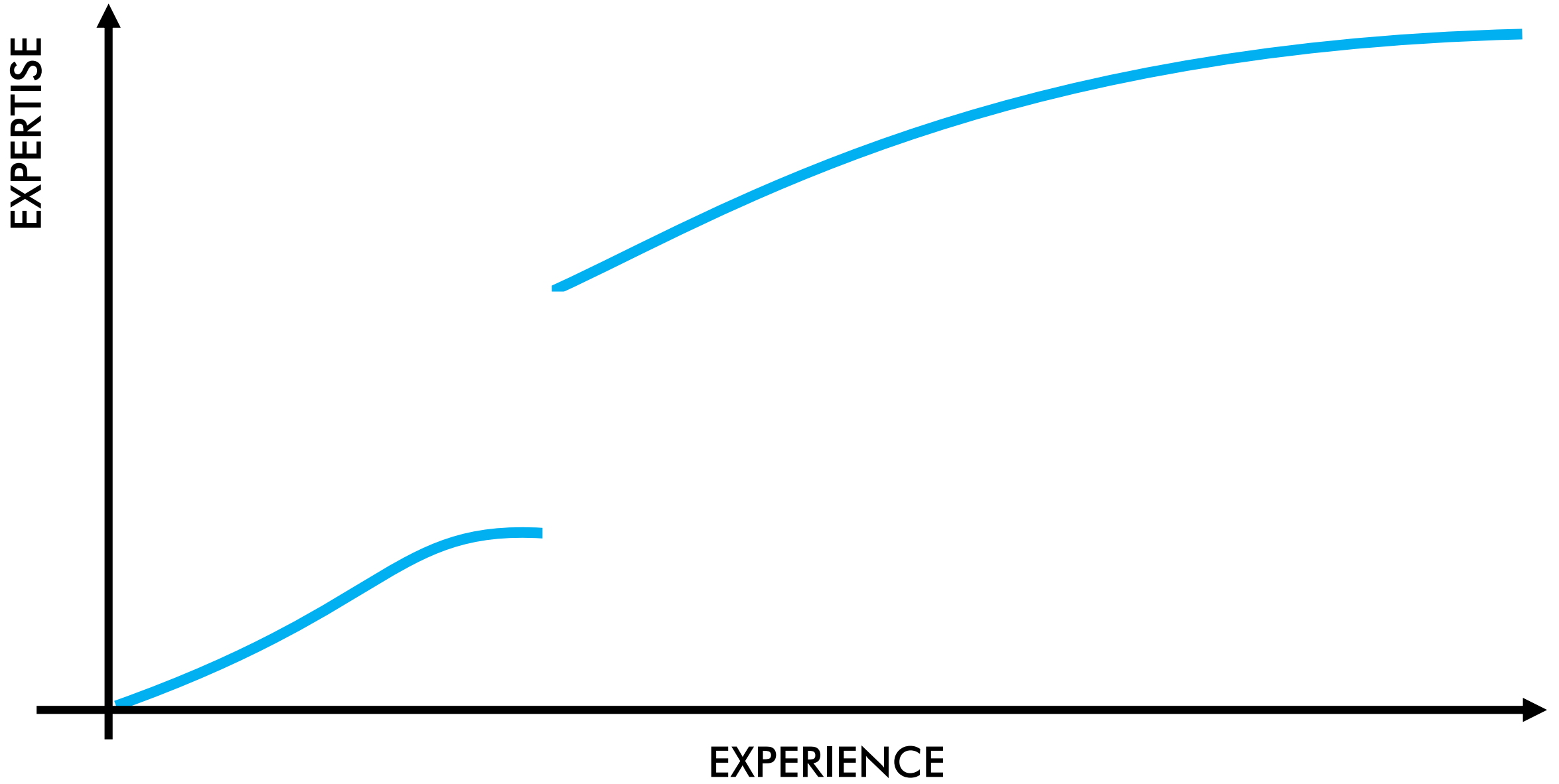
1: draw an oval for the head

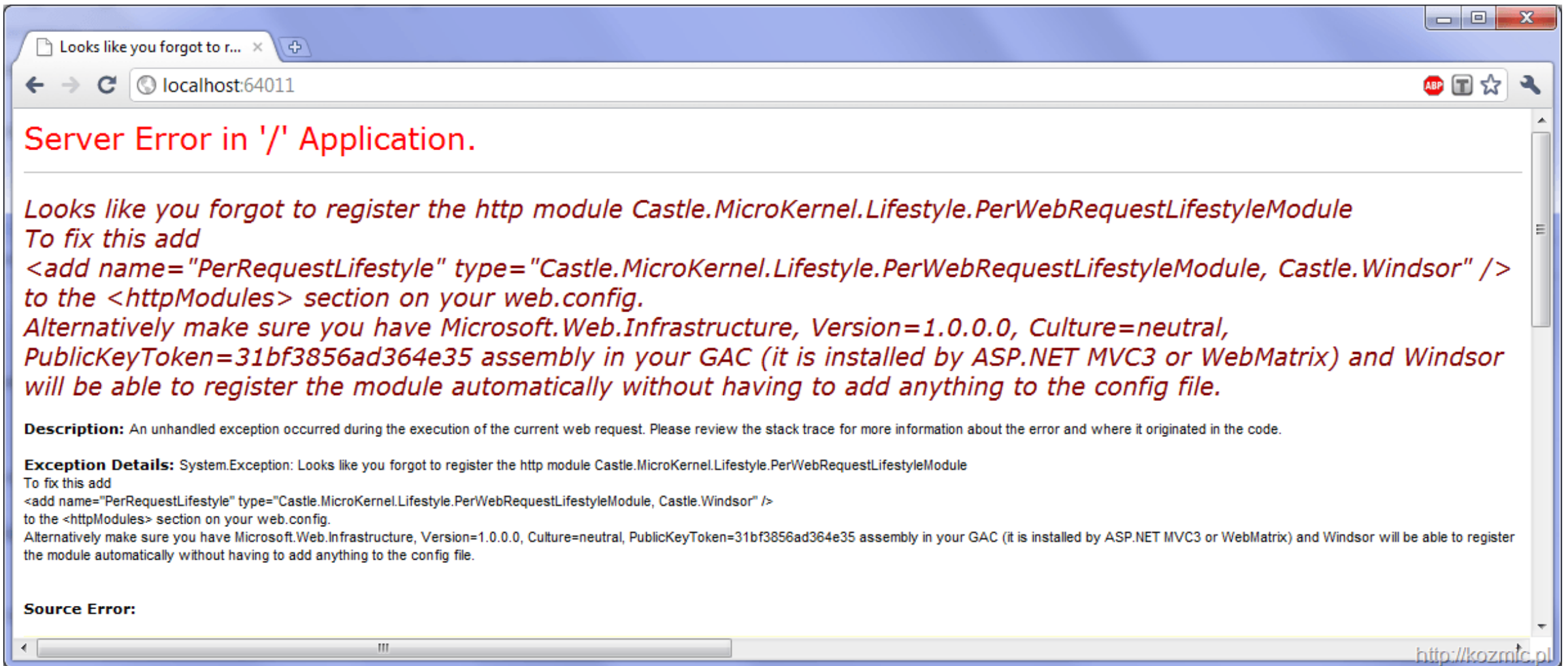
2: draw an oval for the body

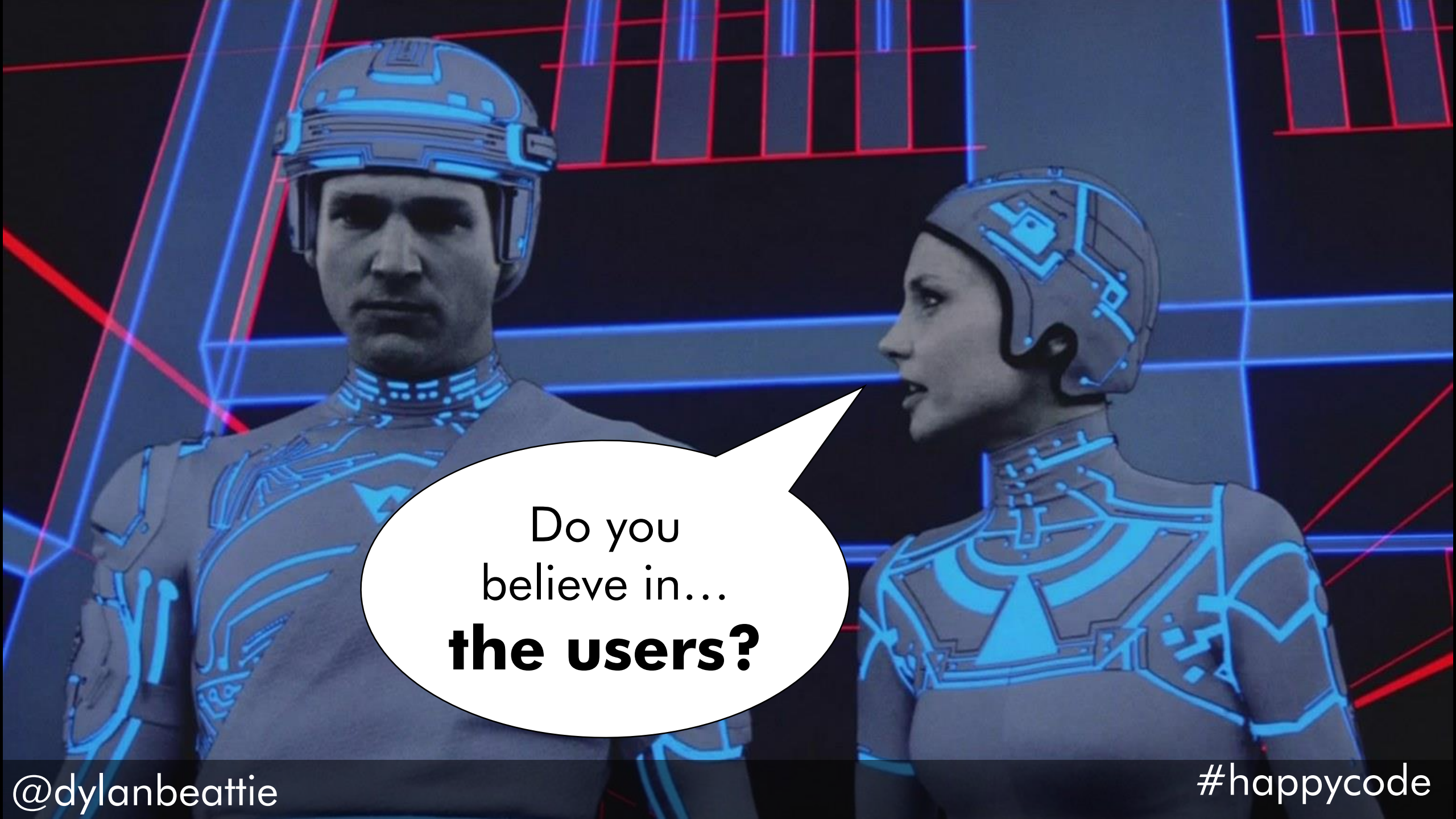
3: draw the rest of the owl











Do you  
believe in...  
**the users?**

GET WEBSITE  
RUNNING  
LOCALLY

---

Microsoft Visual Studio



The operation could not be completed. Unspecified error

OK

(image from @DrunkVS via Twitter)



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#happycode

GET WEBSITE  
RUNNING  
LOCALLY

---



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#happycode



#happycode



By MBlairMartin - Own work, CC BY-SA 4.0,  
<https://commons.wikimedia.org/w/index.php?curid=50244059>

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A >

@dylanbeattie

#happycode

A>hello

@dylanbeattie

#happycode

```
A>hello
```

```
Bad command or file name
```

```
A>
```

```
A>hello
```

```
Bad command or file name
```

```
A>menu
```

```
Bad command or file name
```

```
A>help
```

```
Bad command or file name
```

```
A>
```

A>if you're happy and you know it, syntax error  
Syntax error

A>if you're happy and you know it, syntax error  
Syntax error

A>if you're happy and you know it and you really  
want to show it if you're happy and you know it  
syntax error

A>if you're happy and you know it, syntax error  
Syntax error

A>if you're happy and you know it, syntax error  
Syntax error

A>if you're happy and you know it and you really  
want to show it if you're happy and you know it  
syntax error  
Syntax error

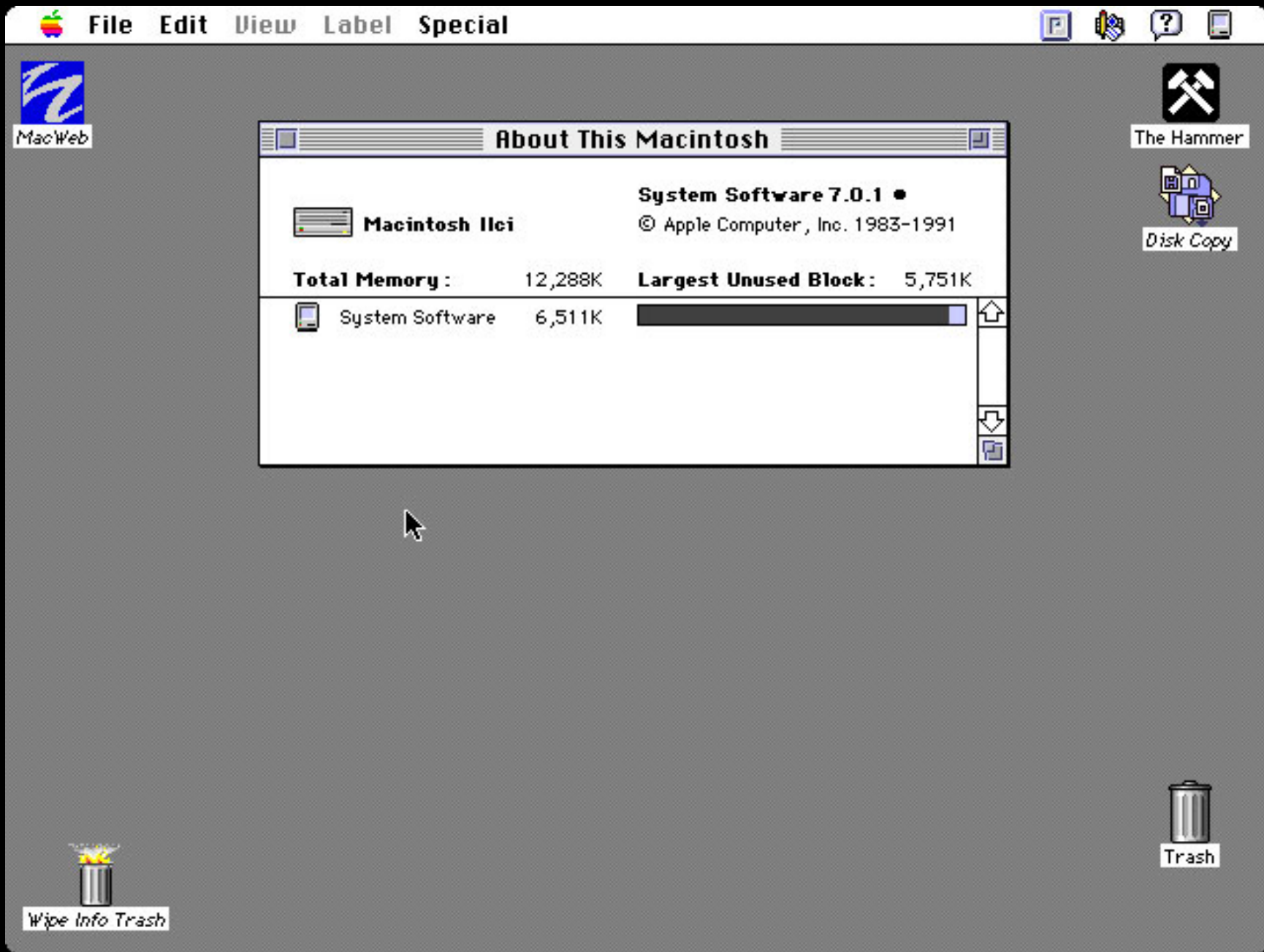
A>



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#happycode





Microsoft Visual Studio - FakeDos

File Edit View NCrunch GitExt Project Build Debug Team Tools Architecture Test ReSharper Analyze Window Help

Process: [ ] Lifecycle Events Thread: [ ] Stack Frame: [ ]

Code Map Application Insights

SQL Server... Server Explorer UML Model... Data Tools O... Find Results 1 F# Interactive

Package Manager Console

Package source: All

Type 'get-help NuGet' to see all available NuGet commands.

PM>

Task List

Description	Project	File	Line
-------------	---------	------	------

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

namespace HelloWorld {
    class Program {
        static void Main(string[] args) {
            // TYPE YOUR PROGRAM HERE
        }
    }
}
```

Resource View - FakeDos

- FakeDos
  - {} HelloWorld

Class View

- FakeDos
  - Project References
    - Microsoft.CSharp
    - mscorlib

Solution Explorer

- Solution 'FakeDos' (1 project)
  - FakeDos
    - Properties
    - References
    - App.config
    - Program.cs

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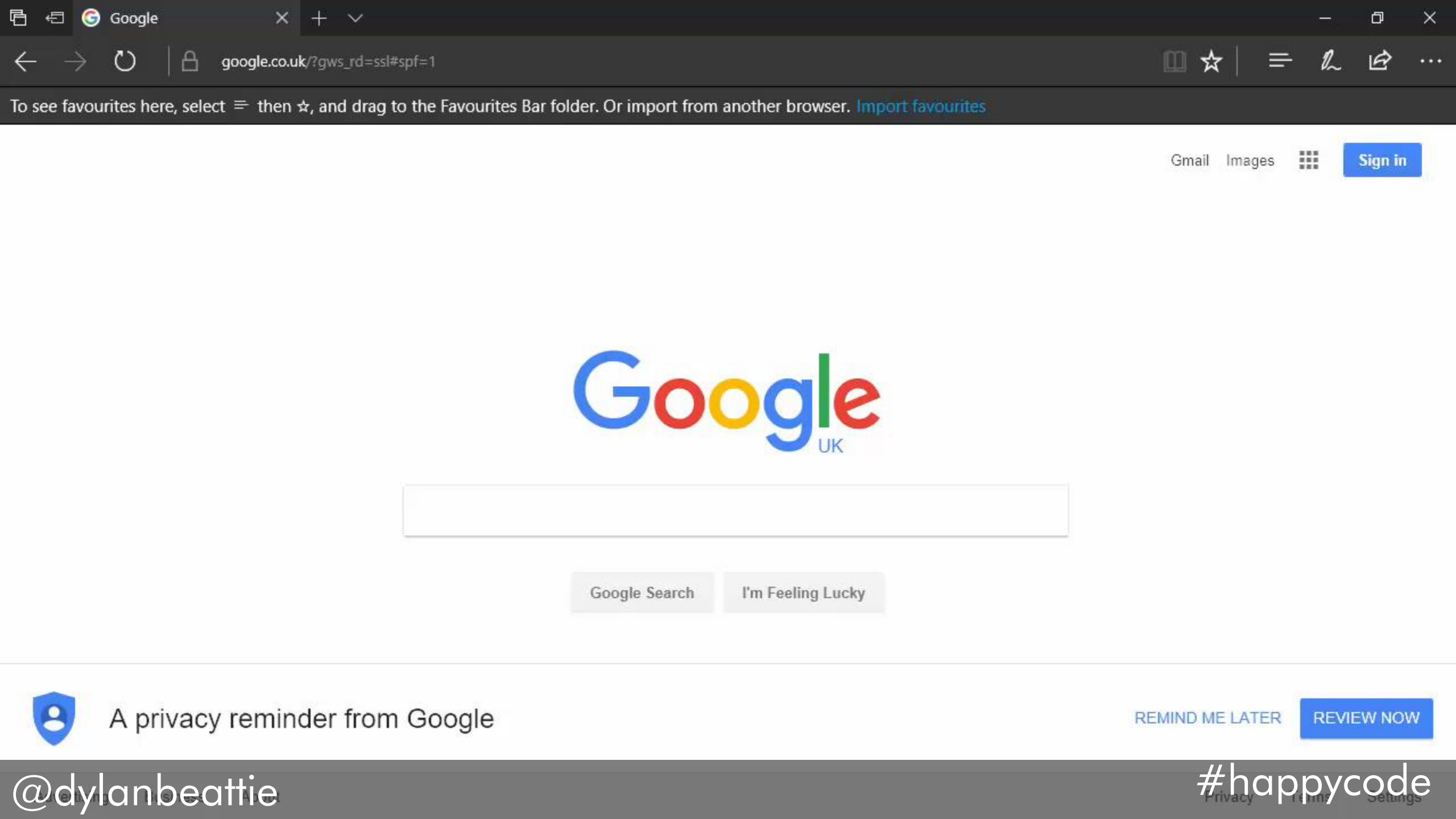
#happycode



WALK

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#happycode



google.co.uk/?gws\_rd=ssl#spf=1



To see favourites here, select then , and drag to the Favourites Bar folder. Or import from another browser. [Import favourites](#)

Gmail Images [Sign in](#)

# Google

UK

Google Search

I'm Feeling Lucky



A privacy reminder from Google

[REMIND ME LATER](#)

[REVIEW NOW](#)

@dylanbeattie

#happycode

[Privacy](#) [Terms](#) [Settings](#)

```
namespace HappyCode {  
    class Program {  
        static void Main(string[] args) {  
  
        }  
    }  
}
```

```
namespace HappyCode {  
    class Program {  
        static void Main(string[] args) {  
        }  
    }  
}
```



Peter Pan

Serpentine Gallery

Buck Hill Playground

Albert Memorial

Diana, Princess of Wales  
Memorial Fountain

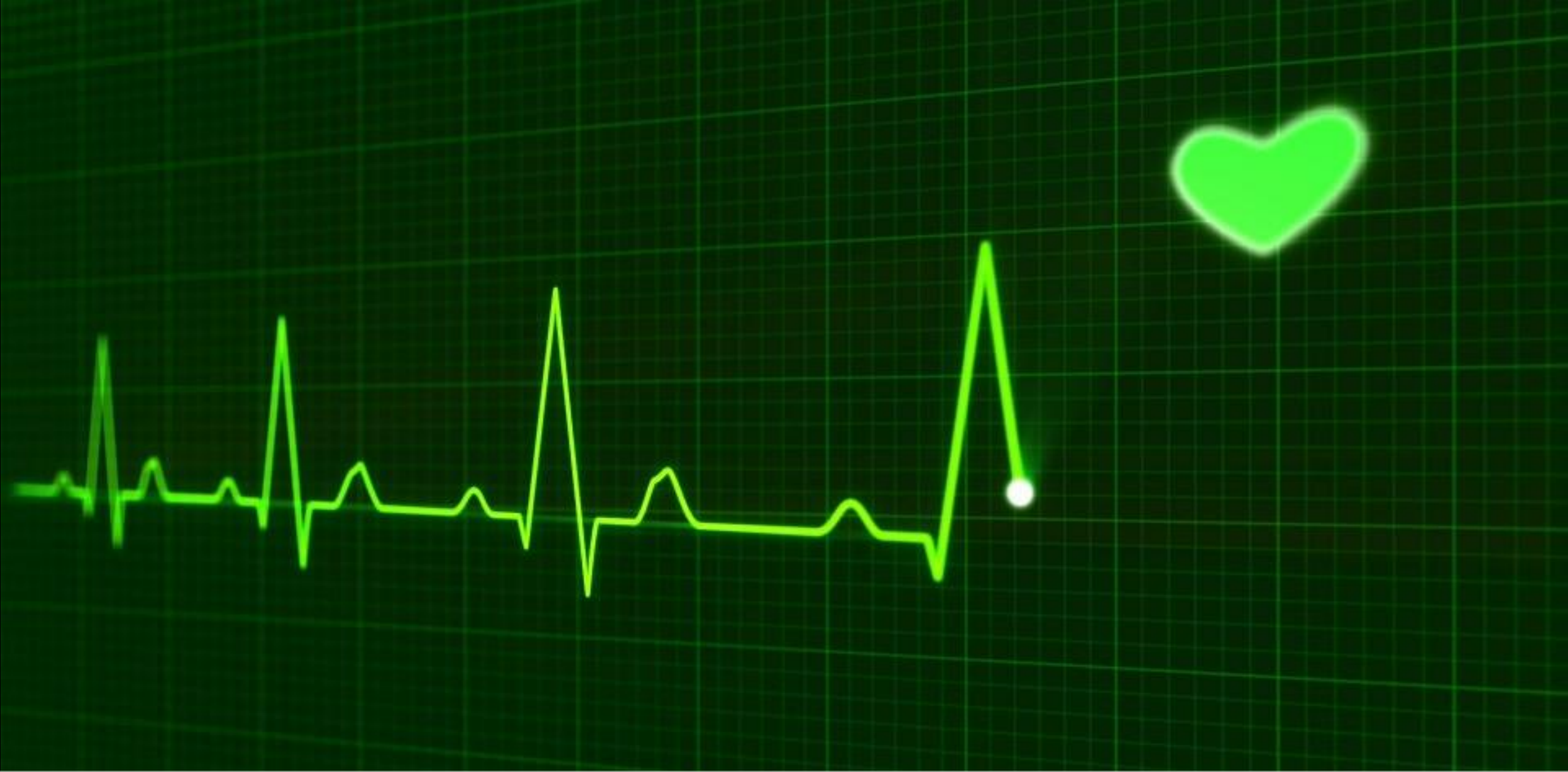


Toilets 40m

Oxfordian Kissuth via Wikimedia Commons : [https://commons.wikimedia.org/wiki/File:Hyde\\_Park\\_sign\\_post.jpg](https://commons.wikimedia.org/wiki/File:Hyde_Park_sign_post.jpg)

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#happycode



<http://maxpixel.freegreatpicture.com/Heartbeat-Pulse-Healthcare-Heart-Medicine-163709>

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#happycode





<https://www.flickr.com/photos/philliecasablanca/2070476609/in/photostream/>

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#happycode

# Server Error in '/' Application.

## *Request timed out.*

**Description:** An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

**Exception Details:** System.Web.HttpException: Request timed out.

### Source Error:

An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below.

### Stack Trace:

```
[HttpException (0x80004005): Request timed out.]
  System.Web.HttpContext.InvokeCancellableCallback(WaitCallback callback, Object state) +4862152
  System.Web.UI.<ProcessRequestAsync>d__2c.MoveNext() +455
  System.Runtime.CompilerServices.TaskAwaiter.ThrowForNonSuccess(Task task) +144
  System.Runtime.CompilerServices.TaskAwaiter.HandleNonSuccessAndDebuggerNotification(Task task) +84
  System.Web.TaskAsyncHelper.EndTask(IAsyncResult ar) +98
  System.Web.CallHandlerExecutionStep.System.Web.HttpApplication.IExecutionStep.Execute() +606
  System.Web.HttpApplication.ExecuteStep(IExecutionStep step, Boolean& completedSynchronously) +288
```

**Version Information:** Microsoft .NET Framework Version:4.0.30319; ASP.NET Version:4.0.30319.34274



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#happycode

Fire exit

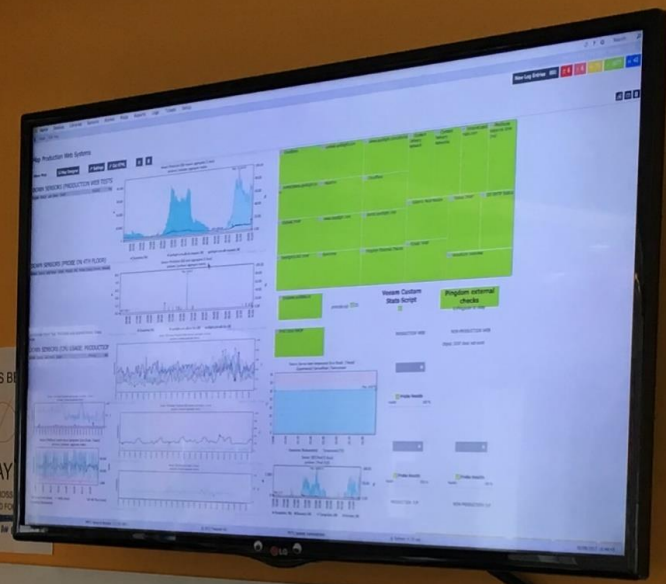


she's  
female  
actress  
shes  
beautiful  
herself



years  
actor  
looking  
good

handsome  
male



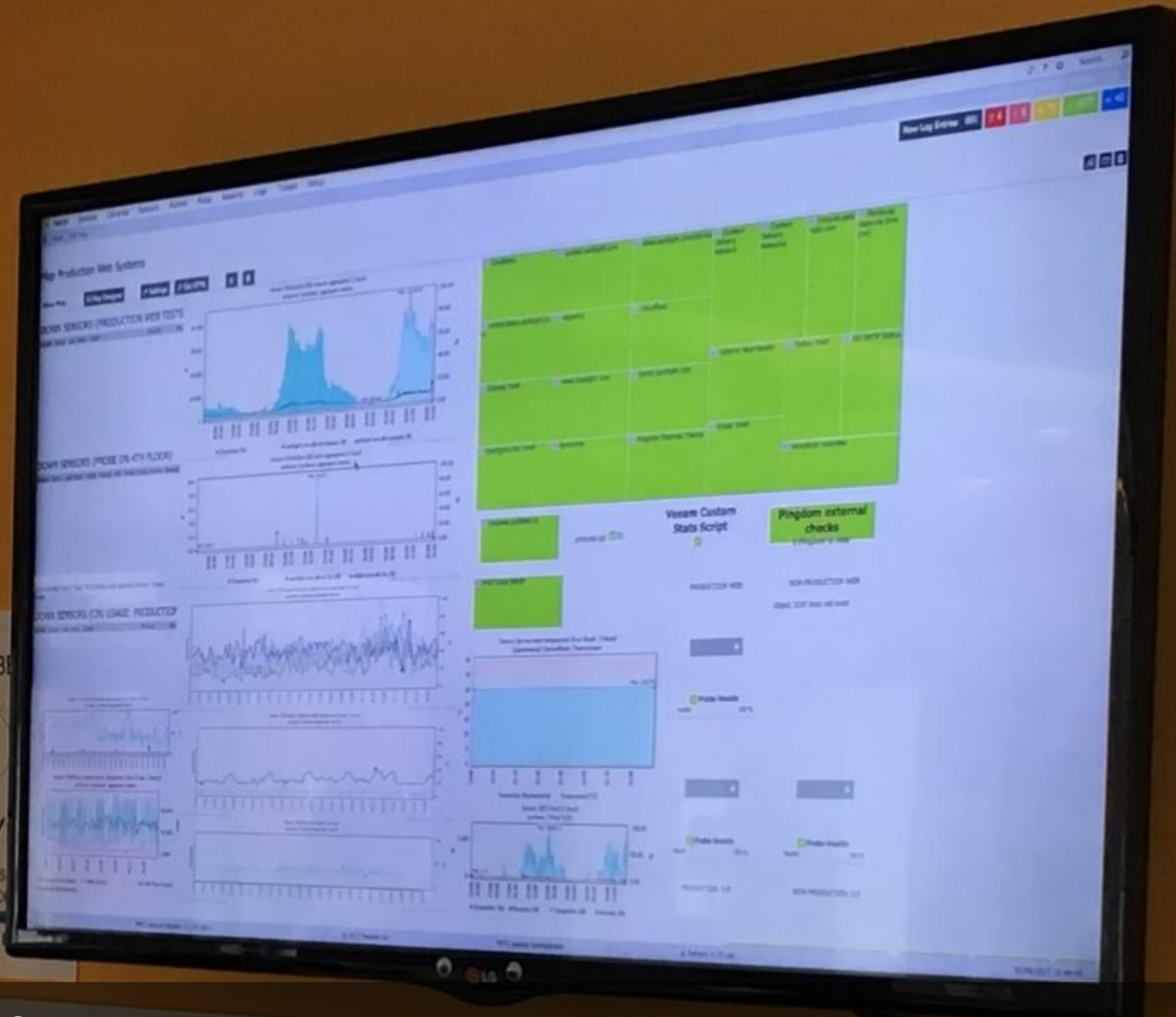
IT HAS B  
DAY  
SINCE BOSS  
BLAMED FOR

Particular  
MVP  
Microservices  
Professionals



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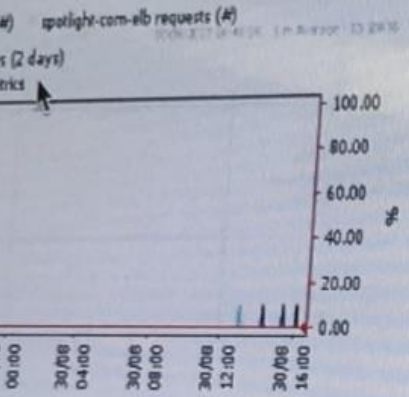
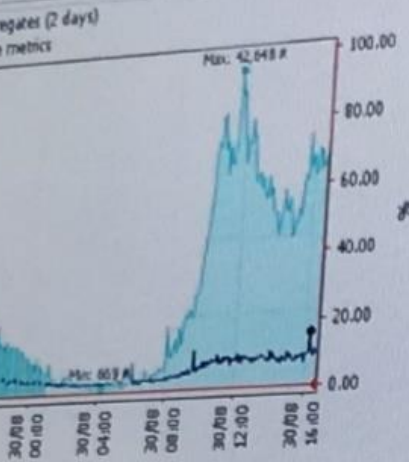
#happycode



IT HAS BEEN  
DAY  
SINCE ROSS  
BLAMED FOR  
DELETING AN

@dylanbeattie

#happycode



prodaws.spotlabs.uk

principle sql:  21

Prod Cloud AMQP

### Veeam Custom Stats Script



### Pingdom external checks

0:Pingdom is okay

PRODUCTION WEB

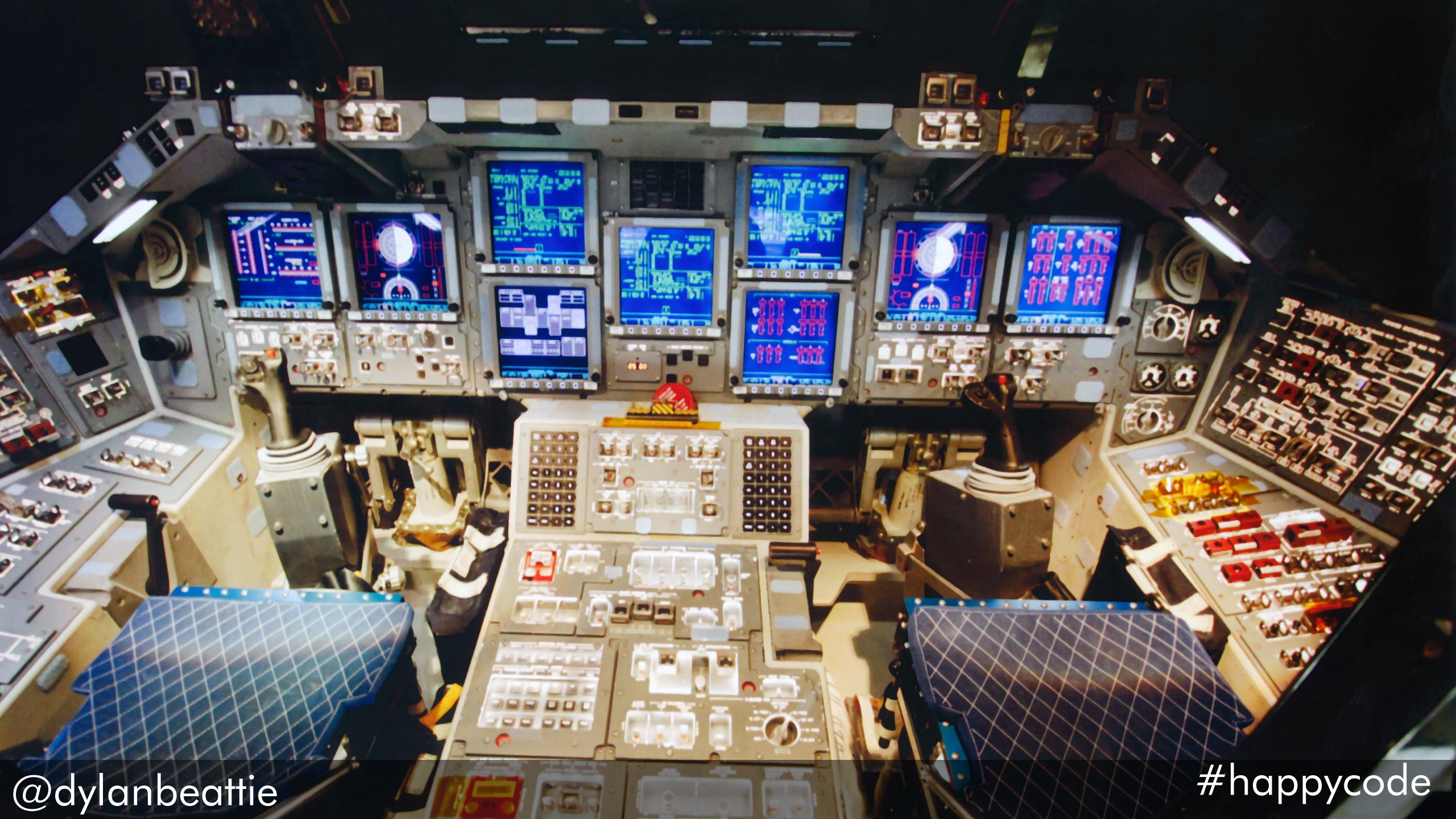
NON-PRODUCTION WEB

Object 5207 does not exist



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#happycode



@dylanbeattie

#happycode





<https://practicalmotoring.com.au/car-advice/common-car-warning-lights-explained/>

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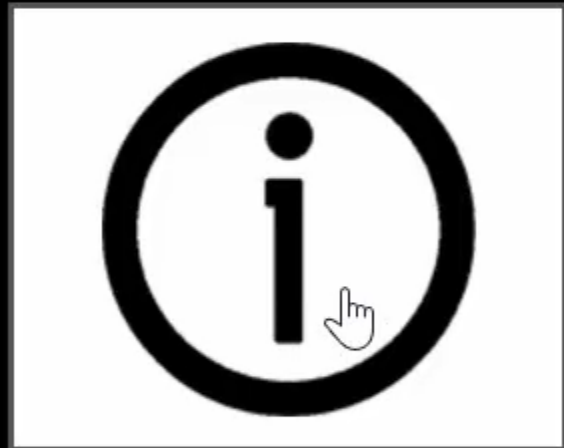
#happycode

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#happycode

# NANCY

## Dashboard



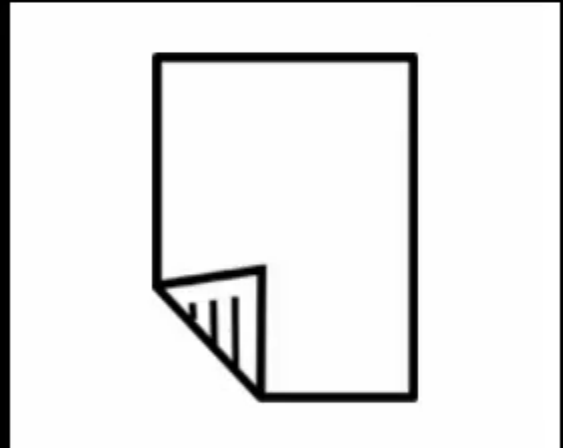
### Information

Information about Nancy's current runtime configuration. A useful starting point for diagnosing a misbehaving site.



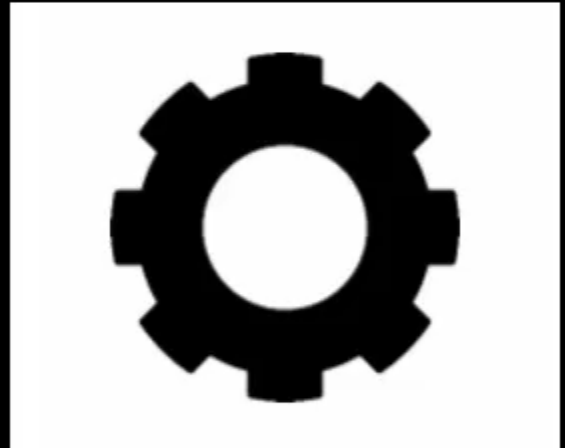
### Interactive Diagnostics

Interactive diagnostics allow you to poke and prod at the guts of your Nancy site, from querying configuration, to clearing caches, through to executing parts of the pipeline and visualising the results.



### Request Tracing

Provides tracing information about requests including request/response headers and a tracelog of each request.



### Settings

Configure some of Nancy's runtime static configuration.



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#happycode

# CPU Consumption

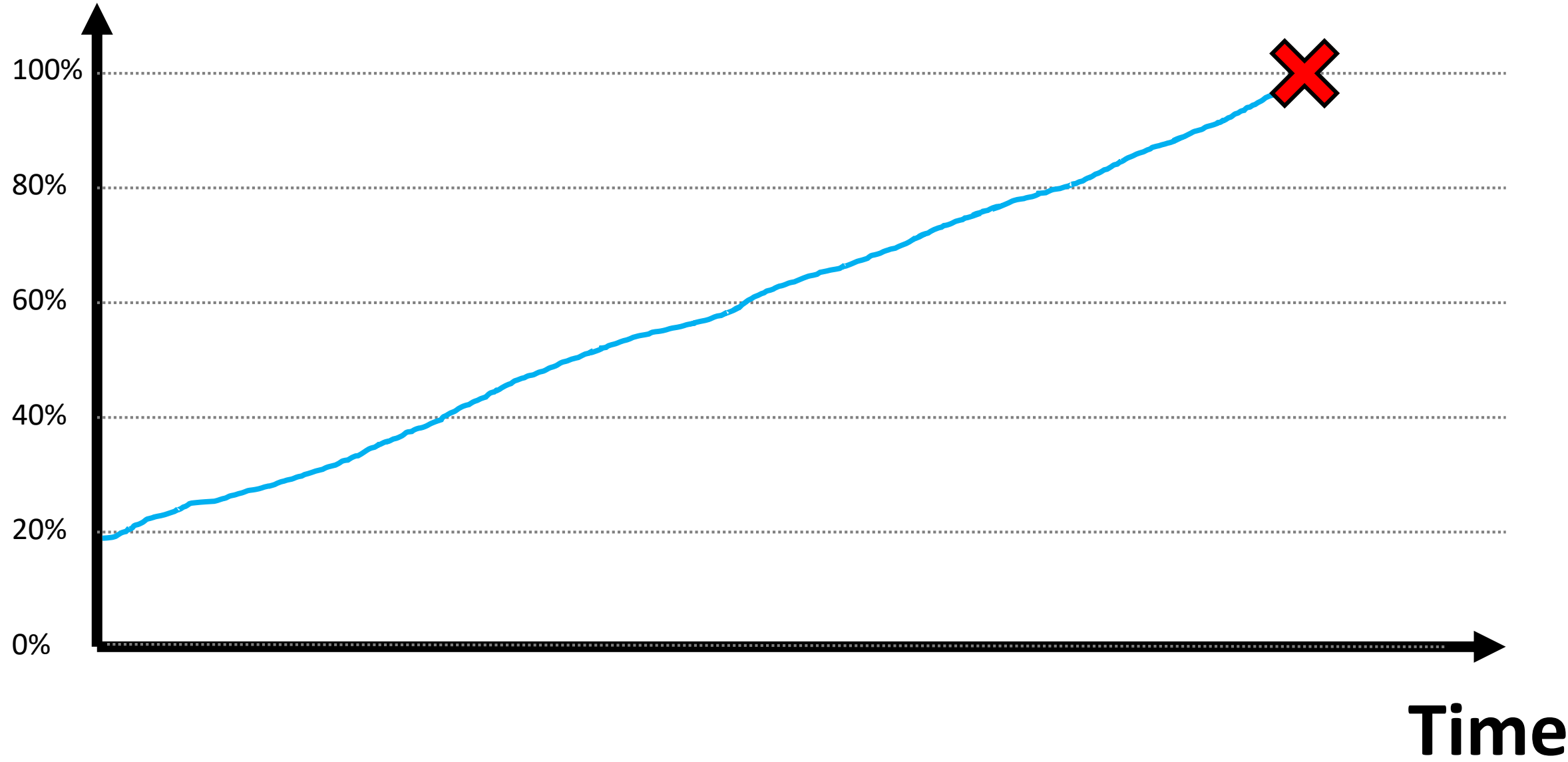


# CPU Consumption

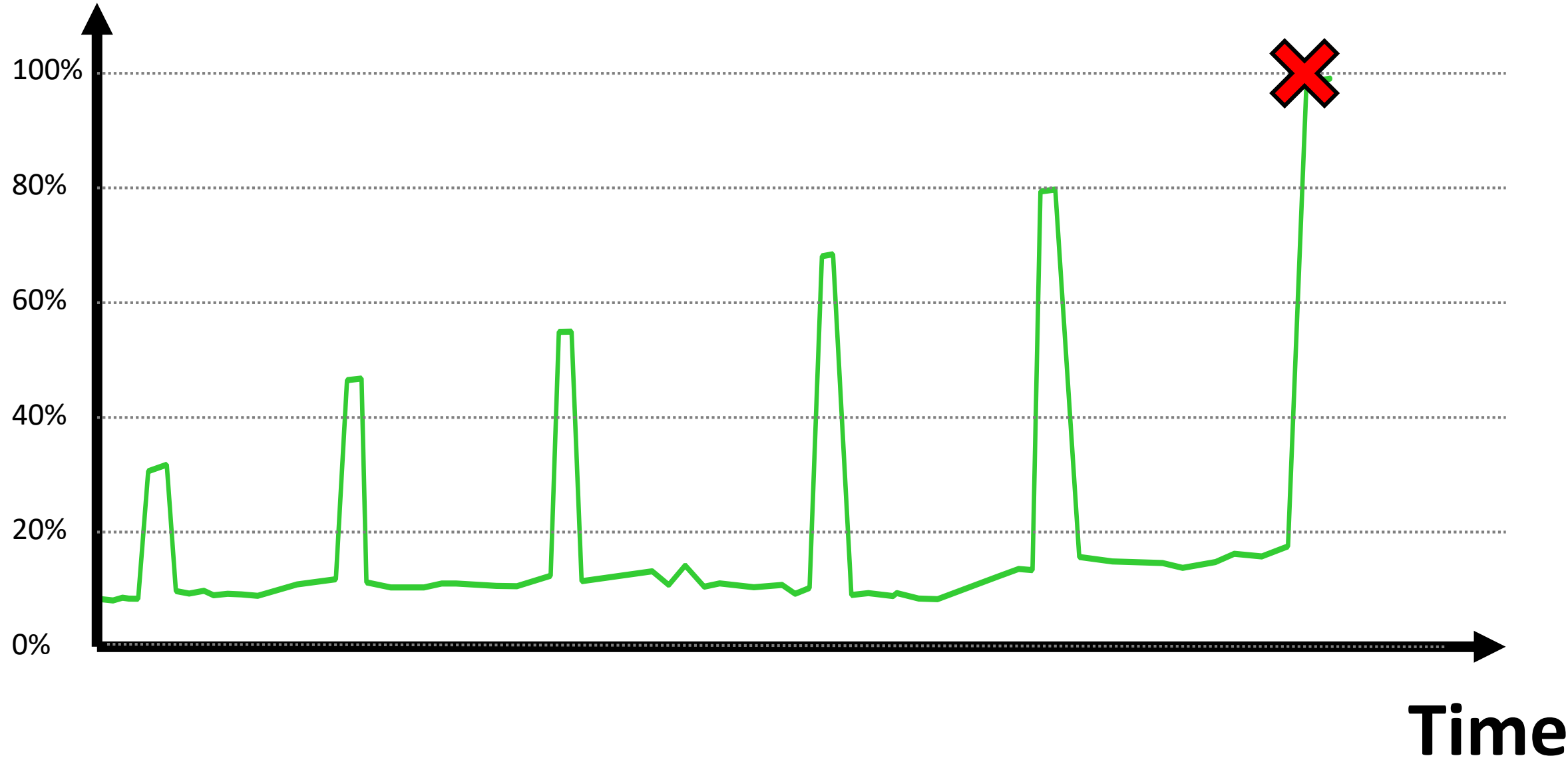


**Time**

# CPU Consumption

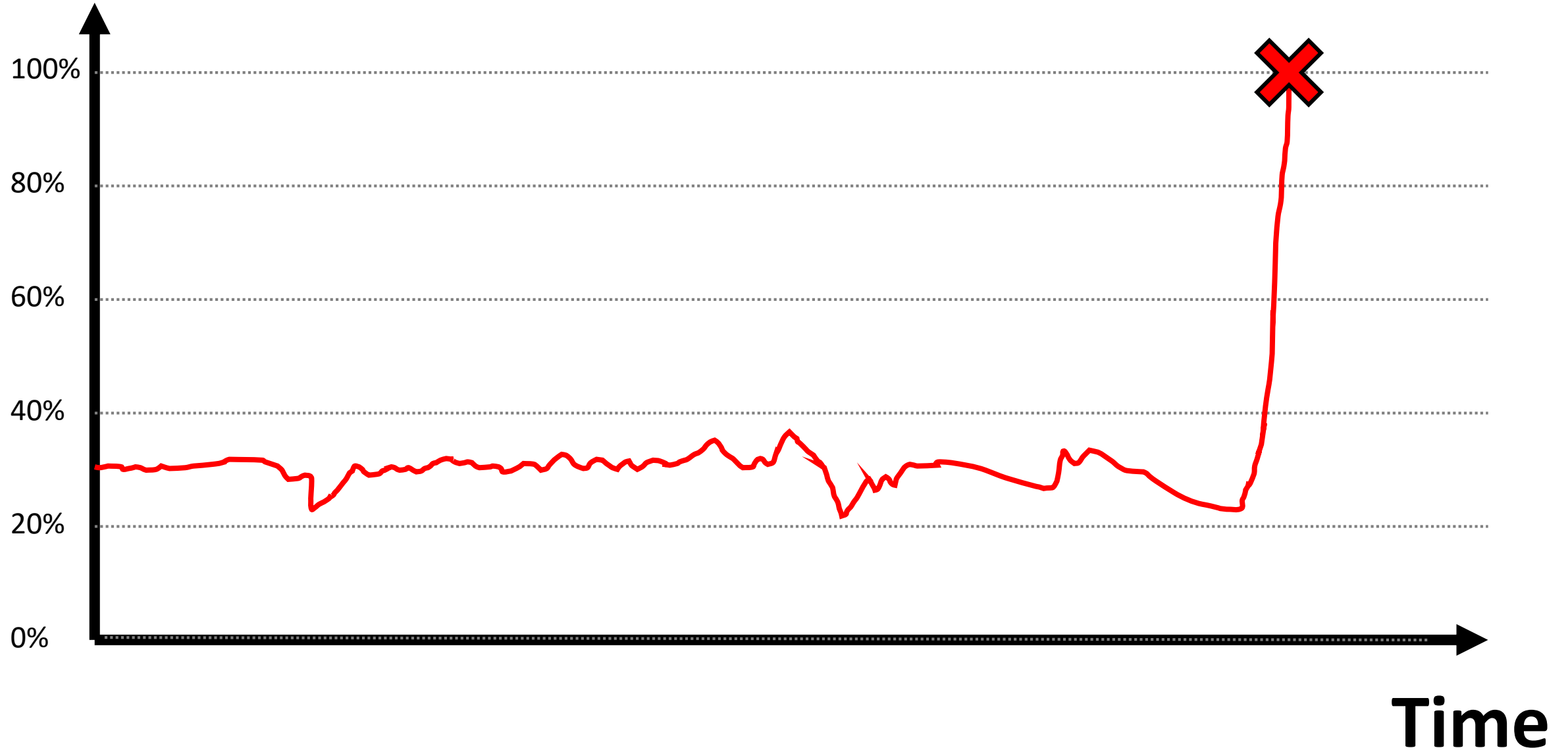


# CPU Consumption

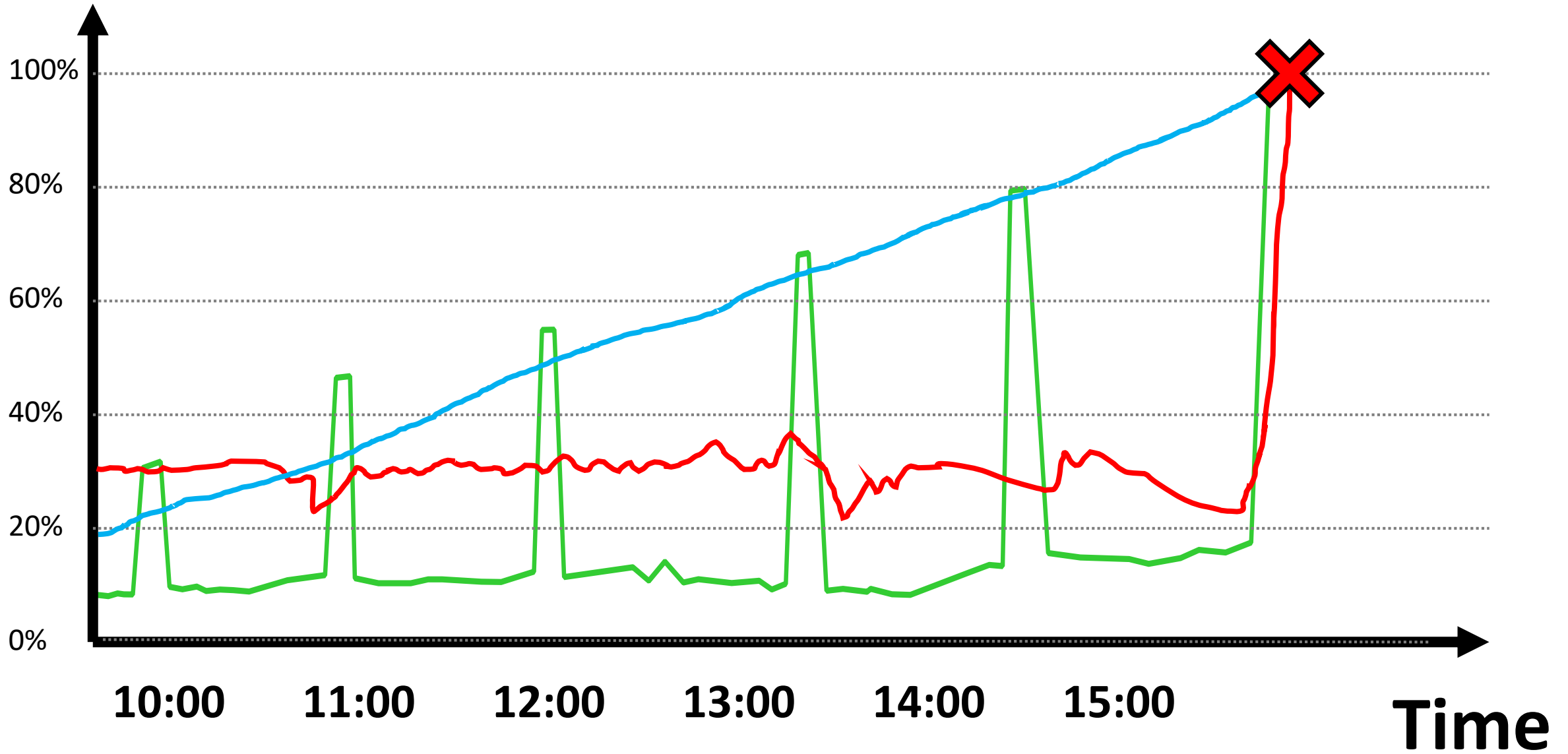




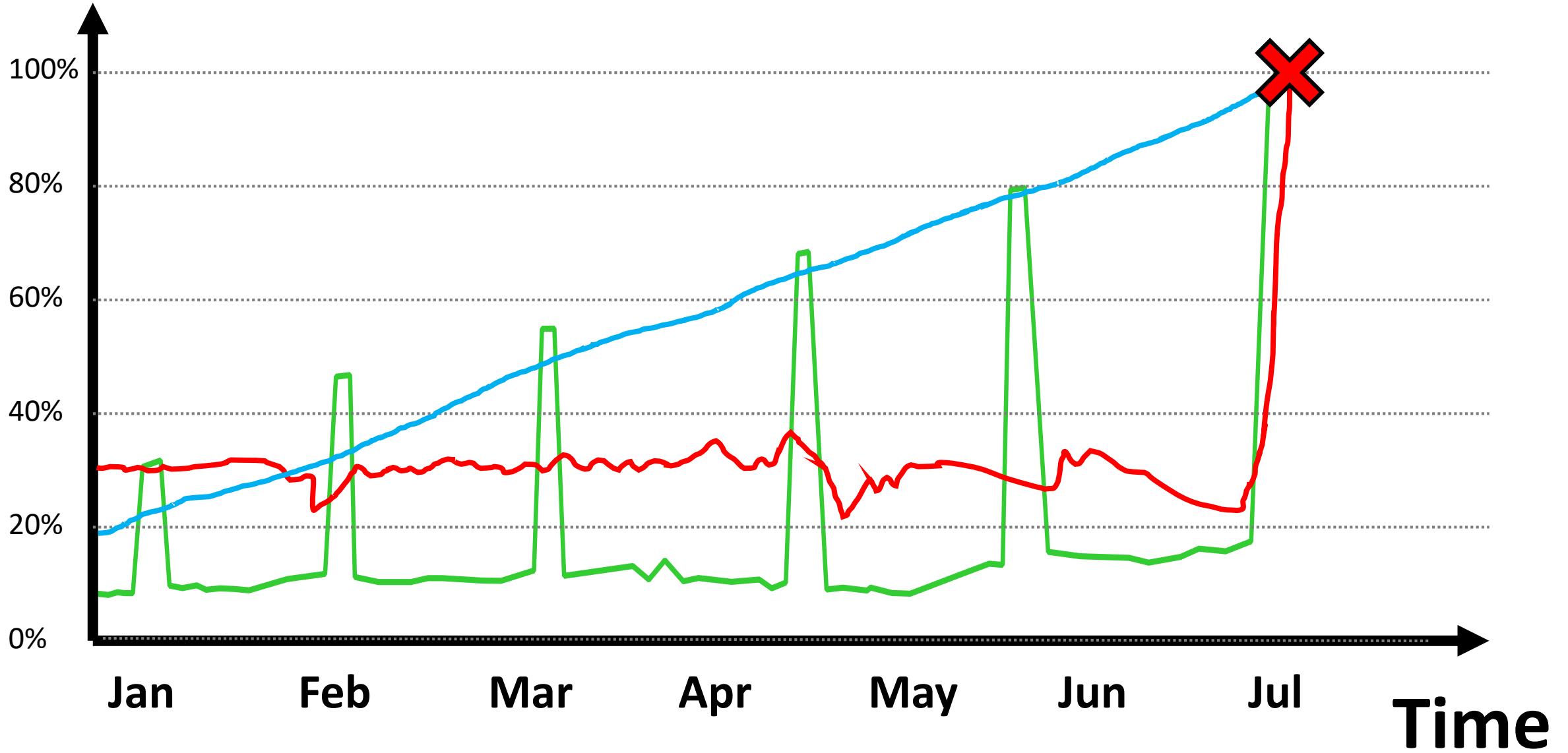
# CPU Consumption



# CPU Consumption



# CPU Consumption





# Analysis Graph ?

Time range:

24 hours

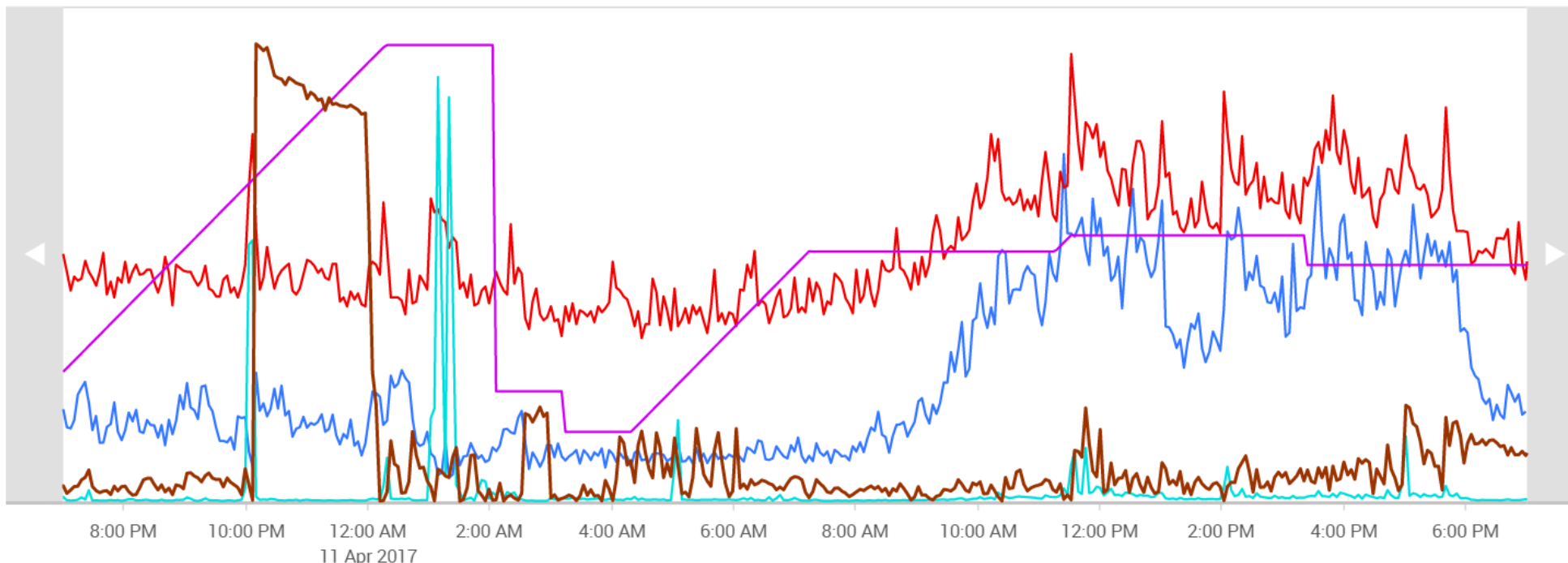
Mon, Apr 10 19:00

Tue, Apr 11 19:00



COMPARE BASELINE

Last 1h Last 6h Last 24h Last 7 days Today This week | Export (csv)



- SQL Server: processor time  
[redacted] (local)
- User connections  
[redacted] (local)
- Buffer page life expectancy  
[redacted] (local)
- Latch wait time  
[redacted] (local)
- SQL Server: free memory  
[redacted] (local)

Show:  For:  (local) ×  
 And:  For:  (local) ×

Description  
Statistics

**FATAL**

**ERROR**

**WARN**

**INFO**

**DEBUG**

# FATAL

- Application is completely unresponsive
- Multiple users affected with immediate effect
- Immediate attention. Stop what you're doing and look into it.

# ERROR & WARN

- They *will* happen.
- **ERROR** – one person noticed, maybe?
- **WARN** – nobody noticed but it's still odd.
- Individual messages probably aren't useful





# INFO

- Everything's fine
- Startup, shutdown, cache recycle
- In a perfect world, **INFO** is all you'll ever see.

LOG ALL THE  
THINGS!



<http://hyperboleandahalf.blogspot.co.uk/>

@dylanbeattie

#happycode

wait., all the things?



<http://hyperboleandahalf.blogspot.co.uk/>

@dylanbeattie

#happycode



3:17 AM

@dylanbeattie

#happycode

~~log.Fatal~~ Wake\_Me\_Up\_At\_4AM\_On\_A\_Sunday()

~~Log.Error~~ Apologize\_To\_User\_And\_Raise\_A\_Ticket()

~~log.Warn~~ Tell\_Me\_If\_This\_Happens\_1000\_Times()

~~log.Info~~ Everything\_Is\_Fine\_Just\_Checking\_In()

~~log.Debug~~ Fill\_My\_C\_Drive\_With\_Stack\_Traces()

Adapted from a post by Daniel Lebrero / <https://labs.ig.com/logging-level-wrong-abstraction>

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#happycode

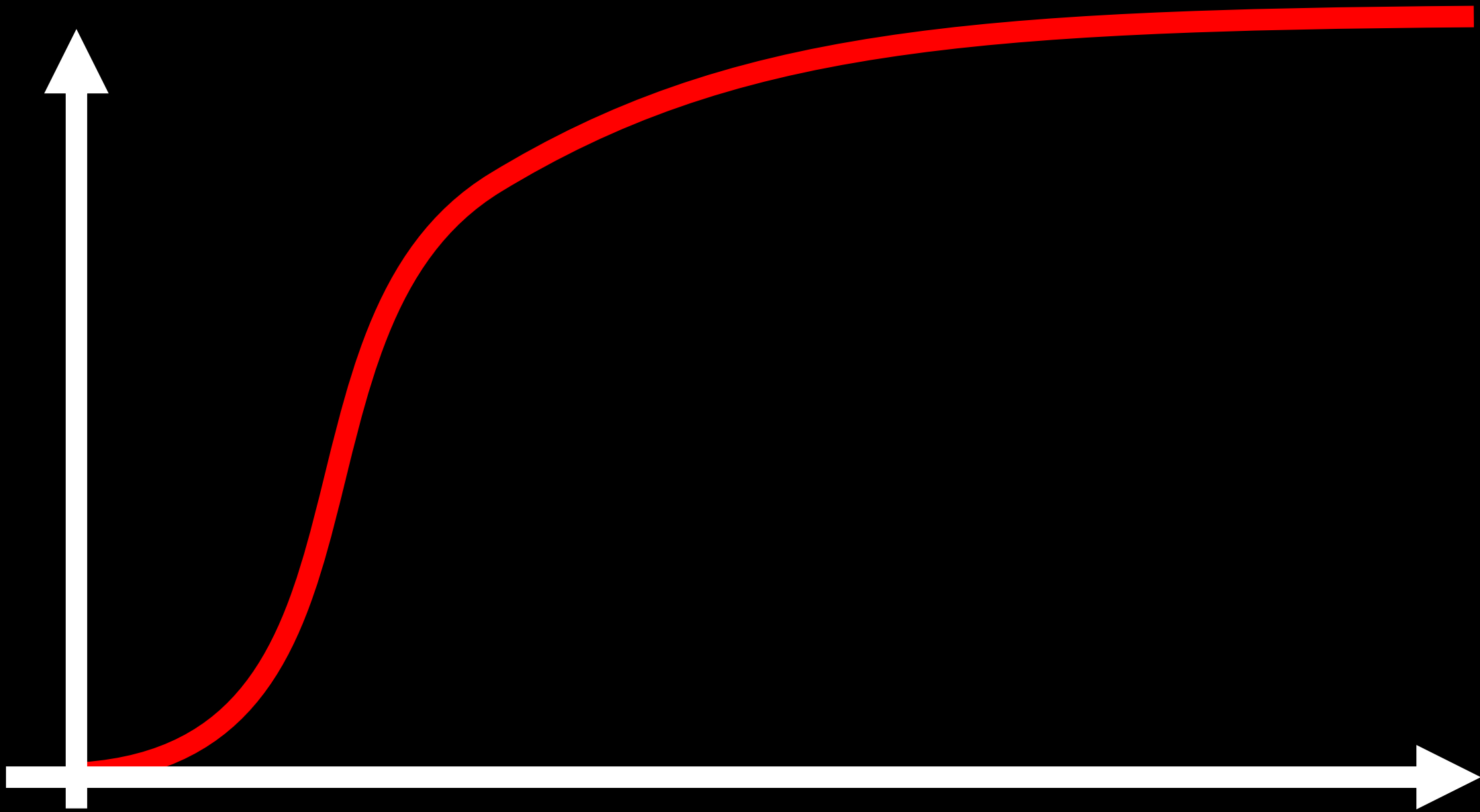
The Rules Of

**#happycode**



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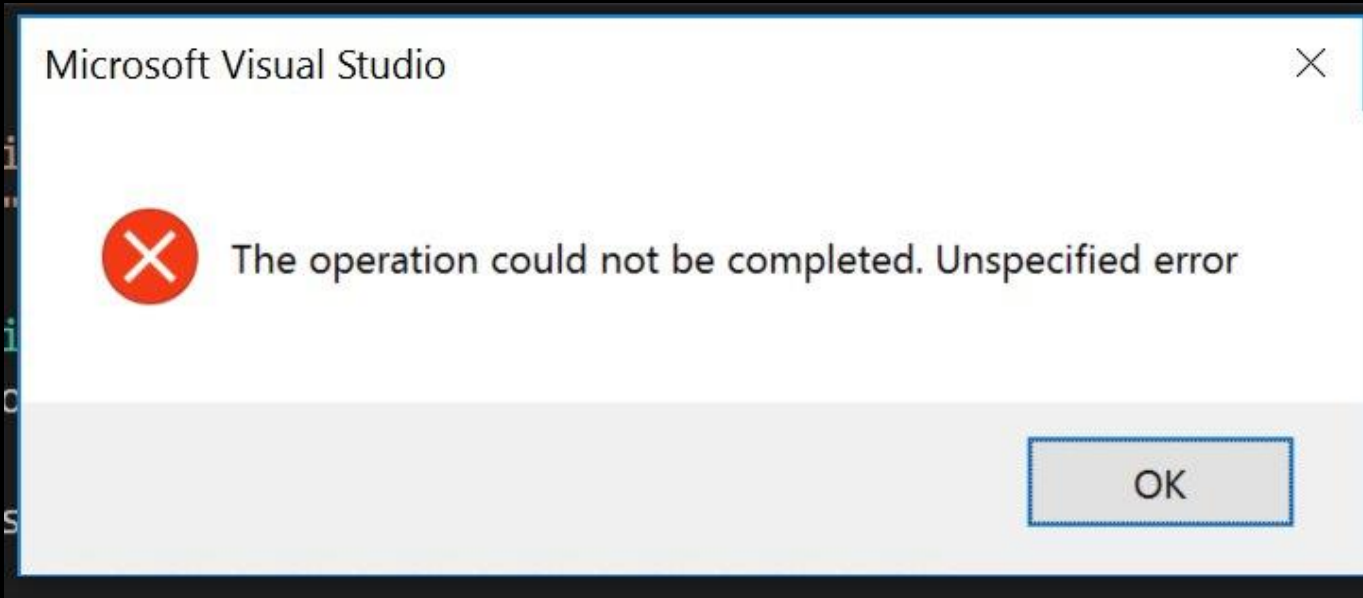
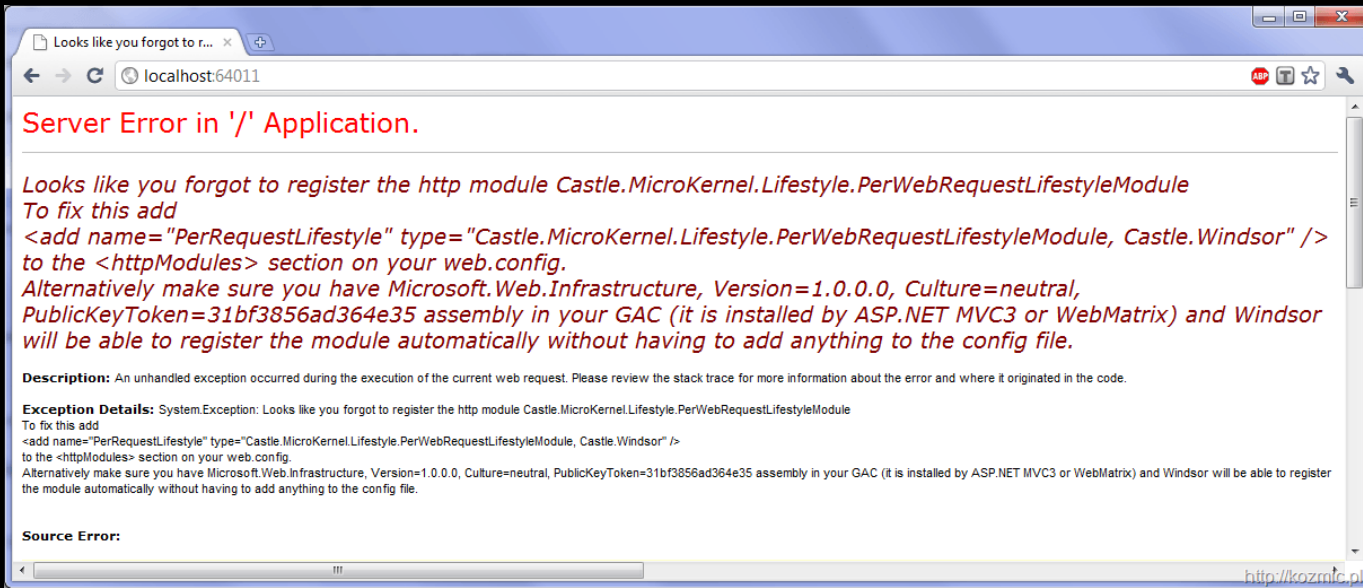
#happycode



@dylanbeattie

#happycode





Peter Pan

Serpentine Gallery

Buck Hill Playground

Albert Memorial

Diana, Princess of Wales  
Memorial Fountain



Toilets 40m

@dylanbeattie

#happycode



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#happycode



@dylanbeattie

#happycode

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