

Heow Goodman

LispNYC.org

Brandorr Group, LLC





# Are you happy?



yes



# Are you really happy?



I'm happy



# How happy are you?

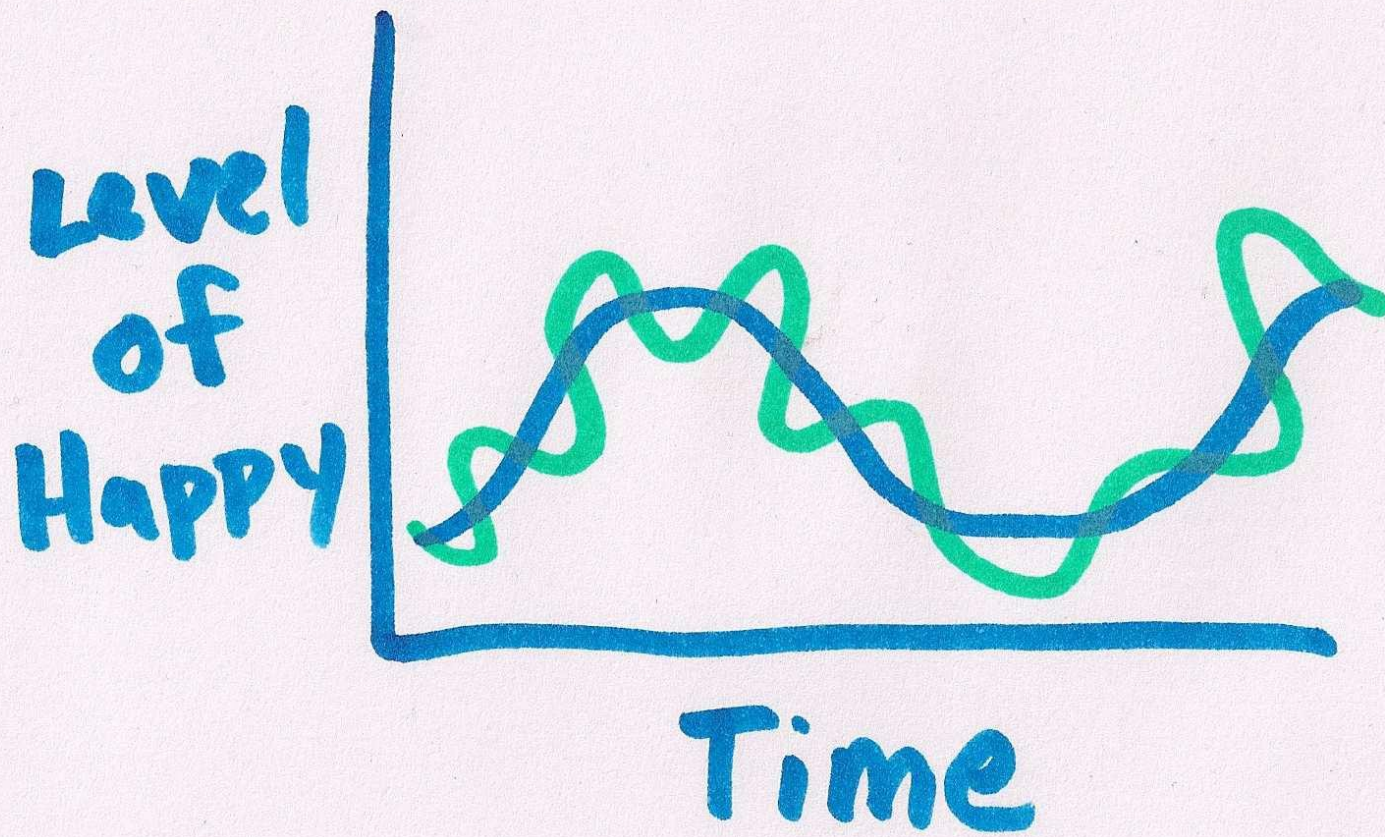






# Quantifying happiness





# Quantify Happiness

## Her Goal

- happiness over time
- easy to use
- anywhere

## My Goal



# Mixed Couple



# Simple Webapp



# “Cost” of Yet Another Host

- initial setup
- maintenance
- security updates
- AWS setup
- monitoring
- pages
- mental price
- monetary cost: nil

# Simple Webapp



# Heroku

- simple
- just the app
- you DON'T manage:
  - host failures
  - datacenter failures
  - security
  - host updates



# Heroku Development



## World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#), [Policy](#), November's [W3 news](#), [Frequently Asked Questions](#).

### [What's out there?](#)

Pointers to the world's online information, [subjects](#), [W3 servers](#), etc.

### [Help](#)

on the browser you are using

### [Software Products](#)

A list of W3 project components and their current state. (e.g. [Line Mode](#), [X11 Viola](#), [NeXTStep](#), [Servers](#), [Tools](#), [Mail robot](#), [Library](#))

### [Technical](#)

Details of protocols, formats, program internals etc

### [Bibliography](#)

Paper documentation on W3 and references.

### [People](#)

A list of some people involved in the project.

### [History](#)

A summary of the history of the project.

### [How can I help?](#)

If you would like to support the web..

### [Getting code](#)

Getting the code by [anonymous FTP](#), etc.

# Amazon Web Services



**EC2**

Virtual Servers in the Cloud



**SQS**

Message Queue Service



**S3**

Scalable Storage in the Cloud



**Elastic MapReduce**

Managed Hadoop Framework



**heroku**



**RDS**

Managed Relational Database Service



**SNS**

Push Notification Service



**Route 53**

Scalable Domain Name System



**DynamoDB**

Predictable and Scalable NoSQL Data Store

# My Simple Webapp

- collect data
- store data
- collection reminders



# My Sophisticated Simple Webapp



EC2  
Virtual Servers in the Cloud



SQS  
Message Queue Service



S3  
Scalable Storage in the Cloud



Elastic MapReduce  
Managed Hadoop Framework



heroku



SNS  
Push Notification Service



RDS  
Managed Relational Database Service



Route 53  
Scalable Domain Name System



DynamoDB  
Predictable and Scalable NoSQL Data Store

# Meow o Meter . com

- total time: 4 hours
- maintenance: 0





## How Happy Are You?

name: rich

loving this presentation

1

2

3

4

5

6

7

8

9

***The purpose of life is not to be happy ? but to matter, to be productive, to be useful, to have it make some difference that you have lived at all. - Leo Roste***



## How Happy Are You?

1	2	3
4	5	6
7	8	9



```

(ns meowometer.web
  (:require [ring.adapter.jetty      :as jetty]
             [compojure.core         :as ww]
             [ring.middleware.cookies :as mw-cookies]
             [ring.middleware.params  :as mw-params]
             [ring.middleware.keyword-params :as mw-kwparams]
             [clojure.contrib.sql     :as sql]
             [clojureql.core         :as cql]))

(def db {:classname "com.mysql.jdbc.Driver" :subprotocol "mysql" :subname "//ec2-50-17-155-232.compute-1.amazonaws.com/meowometer" })

(defn make-saying []
  (let [sayings ["<em>Life is 10% of what happens to me and 90% of how I react to it.</em> - John Maxwell"
                ...]]
    (nth sayings (rand (count sayings))) ))

(defn main-page [cookies]
  (let [input-name (if (empty? (:value (cookies "name")))
                      "name: <input type='text' name='name' class='name' maxlength='10' /><br>"
                      "")]
    (str "<html><head><meta name='viewport' content='width=device-width, initial-scale=1, maximum-scale=1'> <style type='text/css'>"))

(defn process-form [params cookies]
  (let [value (:value params)
        note (:note params)
        name (if (not (empty? (:name params)))
                  (:name params)
                  (:value (cookies "name")))]

    ;; don't save anything with test
    (if (> 0 (.indexOf (.toLowerCase note) "test"))
        (sql/with-connection db
          (cql/conj!
            (cql/table :happiness) {:person name :value value :note note})))

    ;; set cookie, return html
    {:cookies {"name" name}
     :body (str "<html><head><meta HTTP-EQUIV='REFRESH' content='10; url='/'></head><body><h1>" (make-saying) "</h1></body></html>"))

(ww/defroutes routes
  (ww/POST "/" {params :params cookies :cookies} (process-form params cookies))
  (ww/GET "/" {cookies :cookies} (main-page cookies)))

(def app
  (-> #'routes
      mw-cookies/wrap-cookies
      mw-kwparams/wrap-keyword-params
      mw-params/wrap-params))

(defn -main []
  (let [port (if (nil? (System/getenv "PORT"))
                8000 ; localhost
                (Integer/parseInt (System/getenv "PORT")))] ; heroku
    (jetty/run-jetty app {:port port})) )

```

# Moral of the story

- simple services
- TCO matters
- use infrastructure
- not every server-side project requires a server
- I'm really happy



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