

Build a Multiplayer node.js Game in 48 Hours



Jim Suchy

Software Craftsman

jsuchy@8thlight.com || @jsuchy

Practice



An ounce of practice
is worth more than
tons of preaching.
~Mohandas Gandhi

Photo credit to cole mama's Side Effect of Practice on Flickr

Take the time to practice
your craft without
interruptions, in an
environment where you
can feel comfortable
making mistakes.

-- Apprenticeship Patterns

Kata



<http://codekata.pragprog.com/>

Breakable Toys



Coding Competitions



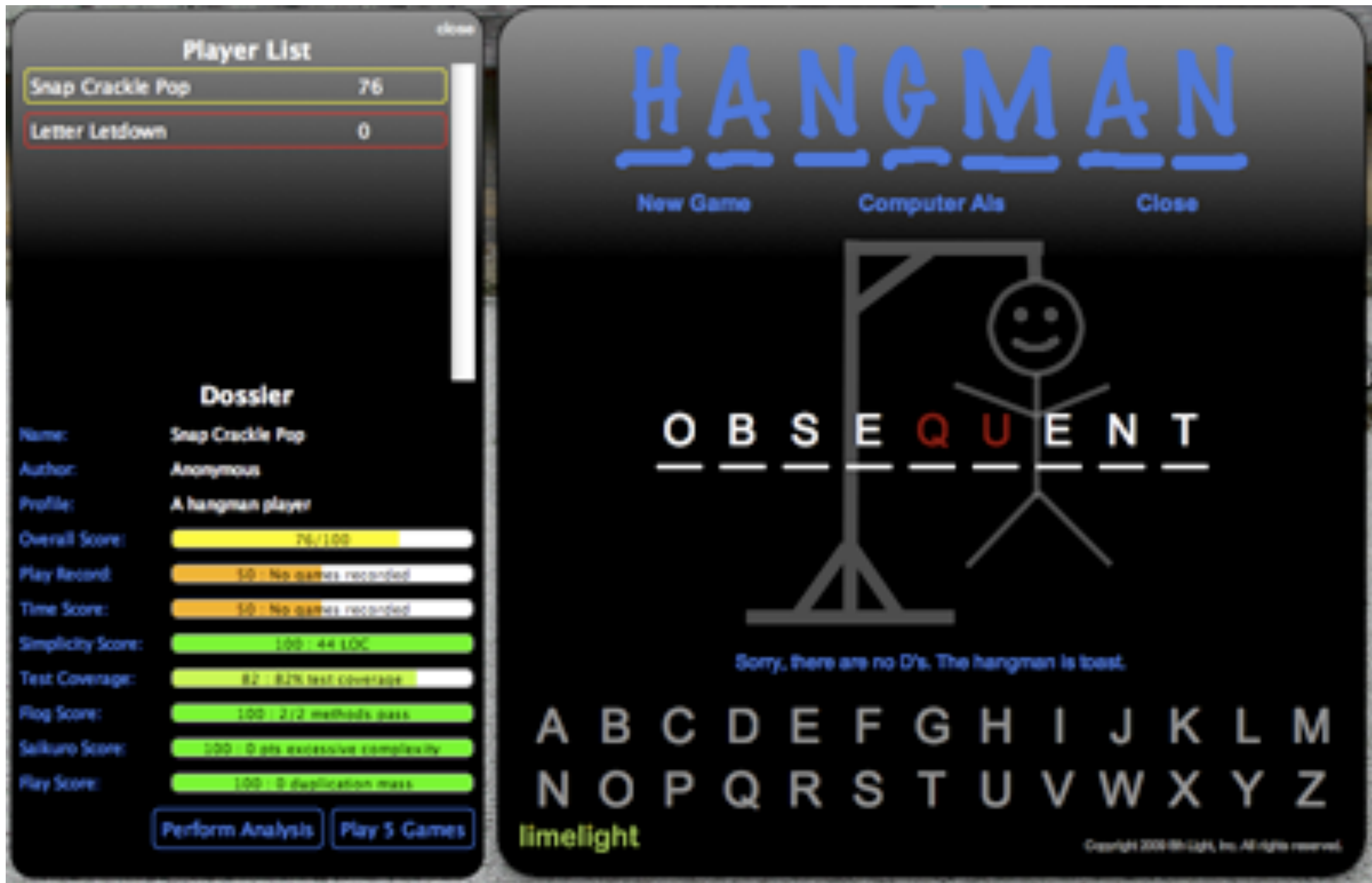
limelight

BATTLESHIP

Copyright 2008, 8th Light, Inc. All Rights Reserved



<http://slagyr.github.com/sparring>



<http://slagyr.github.com/sparring>



What Would Burt Reynolds Wear?

Friday, May 13 : Chicago, IL

Cloudy

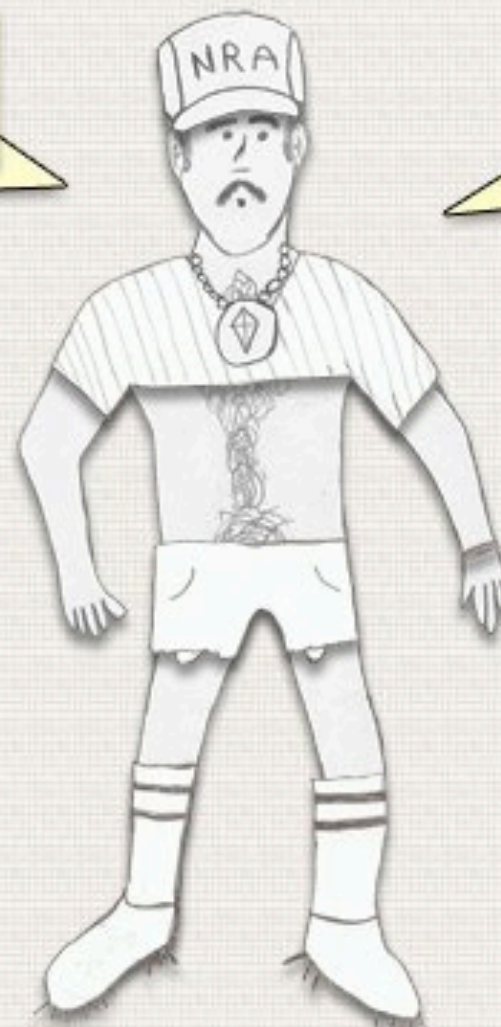
Read, aim, shoot!

15 mph wind

Ruby Amulet!

Feels like 58°F

Running with the devil!



Temperature:	58°F / 14°C
Wind:	N at 15 mph
Humidity:	81%
Pressure:	29.75 in.
Dew Point:	52°F
Sunrise time:	5:33 AM
Sunset time:	8:02 PM

Rails Rumble scheduled
for the same weekend
as SCNA





Inaugural Event
August 28 - 29, 2010

**Who's interested in
node knockout?**

Team



**Justin
Martin**



**Steve
Kim**



**Craig
Demyanovich**



**Jim
Suchy**

Practice!

“One way to learn JavaScript”

“Sharpen our tools”

“It’ll be fun!”

Prizes!

Overall Winner

Team with the best overall score.

- [NKO-branded boxing gloves](#) — [ThoughtBot](#)
- [16 GB iPad with WiFi](#) (one per team member) — [Medium](#)
- [Palm Pre+](#) (one per team member, [unactivated](#)) — [Palm](#)
- \$500 in free cloud hosting to each team member — [Joyent](#)
- \$300 service credit with Heroku — [Heroku](#)
- Mongo HQ six-month subscription, large plan — [MongoHQ](#)

Solo Winner

One-person team with the best overall score.

- [16 GB iPad with WiFi](#) — [Yahoo](#)
- [Palm Pre+](#) ([unactivated](#)) — [Palm](#)
- \$500 in free cloud hosting — [Joyent](#)
- Heroku Trading Card Set, redeemable for discounts on add-ons — [Heroku](#)
- Mongo HQ six-month subscription, large plan — [MongoHQ](#)

Utility

Team with the highest utility score.

- Ticket to JS Conf 2011 (one per team member) — [JSConf](#)
- [Apple Magic Trackpad](#) (one per team member) — [Oasis Digital](#)
- [Livescribe 2 GB Pulse Smartpen](#) (one per team member) — [CouchDB](#)
- [Palm Pre+](#) (one per team member, [unactivated](#)) — [Palm](#)
- \$500 in free cloud hosting to each team member — [Joyent](#)
- Heroku Trading Card Set, redeemable for discounts on add-ons — [Heroku](#)
- Mongo HQ six-month subscription, large plan — [MongoHQ](#)
- MongoDB swag package: limited edition Timbuk2 laptop bag, t-shirt, coffee mug, and stickers — [MongoDB](#)

Design

Team with the highest design score.

- [Adobe Fireworks CS5](#) (one per team member) — [Envato](#)
- [1 TB Western Digital external hard drive](#) (one per team member) — [Oasis Digital](#)
- [Palm Pre+](#) (one per team member, [unactivated](#)) — [Palm](#)
- \$500 in free cloud hosting to each team member — [Joyent](#)
- Heroku Trading Card Set, redeemable for discounts on add-ons — [Heroku](#)
- Mongo HQ six-month subscription, large plan — [MongoHQ](#)

... and more prizes!

Innovation

Team with the highest innovation score.

- [16 GB iPhone 4](#) (one per team member, unlocked) — [Sench](#)
- [Palm Pre+](#) (one per team member, [unactivated](#)) — [Palm](#)
- \$500 in free cloud hosting to each team member — [Joyent](#)
- Heroku Trading Card Set, redeemable for discounts on add-ons — [Heroku](#)
- Mongo HQ six-month subscription, large plan — [MongoHQ](#)

Completeness

Team with the highest completeness score.

- [Skullcandy ROCNATION aviator headphones](#) (one per team member) — [Joyent](#)
- Free setup on Braintree's payment gateway and three months of credit card processing services with all monthly
- [Palm Pre+](#) (one per team member, [unactivated](#)) — [Palm](#)
- \$500 in free cloud hosting to each team member — [Joyent](#)
- Heroku Trading Card Set, redeemable for discounts on add-ons — [Heroku](#)
- Mongo HQ six-month subscription, large plan — [MongoHQ](#)

Popularity

Team with the most votes.

- [Timbuk2 Blogger 2.0 Messenger](#) (one per team member) — [Google](#)
- [Starcraft II](#) (one per team member) — [smule](#)
- [Palm Pre+](#) (one per team member, [unactivated](#)) — [Palm](#)
- \$500 in free cloud hosting to each team member — [Joyent](#)
- Heroku Trading Card Set, redeemable for discounts on add-ons — [Heroku](#)
- Mongo HQ six-month subscription, large plan — [MongoHQ](#)

Nōdo Tanku



WTF is
nodeJS ?

8LU

What to build?



Planning



And they're off!



Where do we start?



Node.js Knock (U)

Stories

Env

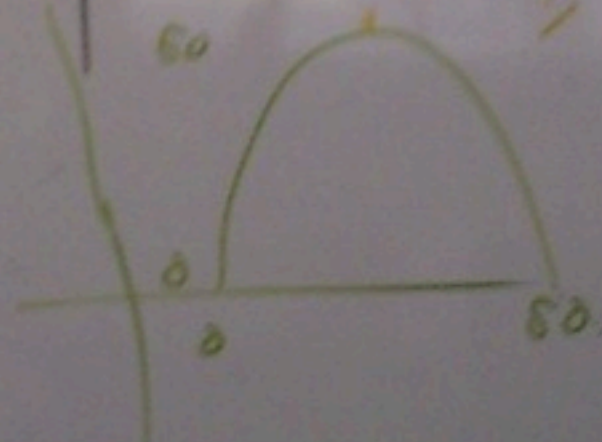
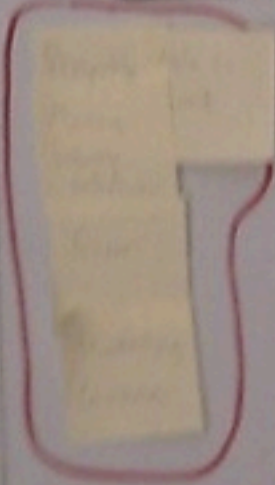
UI

Server

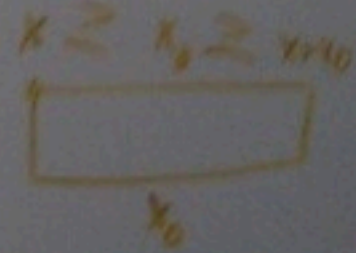
Game Eng.

Physics Eng.

SEM
J14



Players
id, name, loc



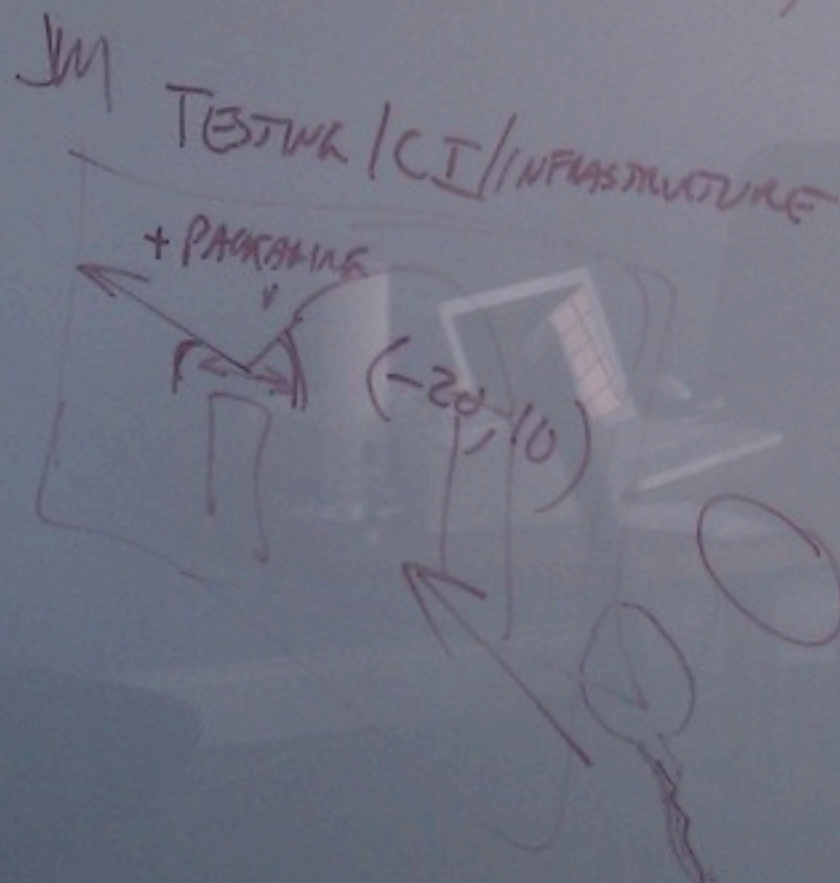
SKIM/
CRAIG
HTML 5 / CSS 3
+ ANIMATION (CANVAS)
+ WEB SOCKETS
+ MOCK UP UX

HEROKU CRAIG
+ DEPLOYABLE



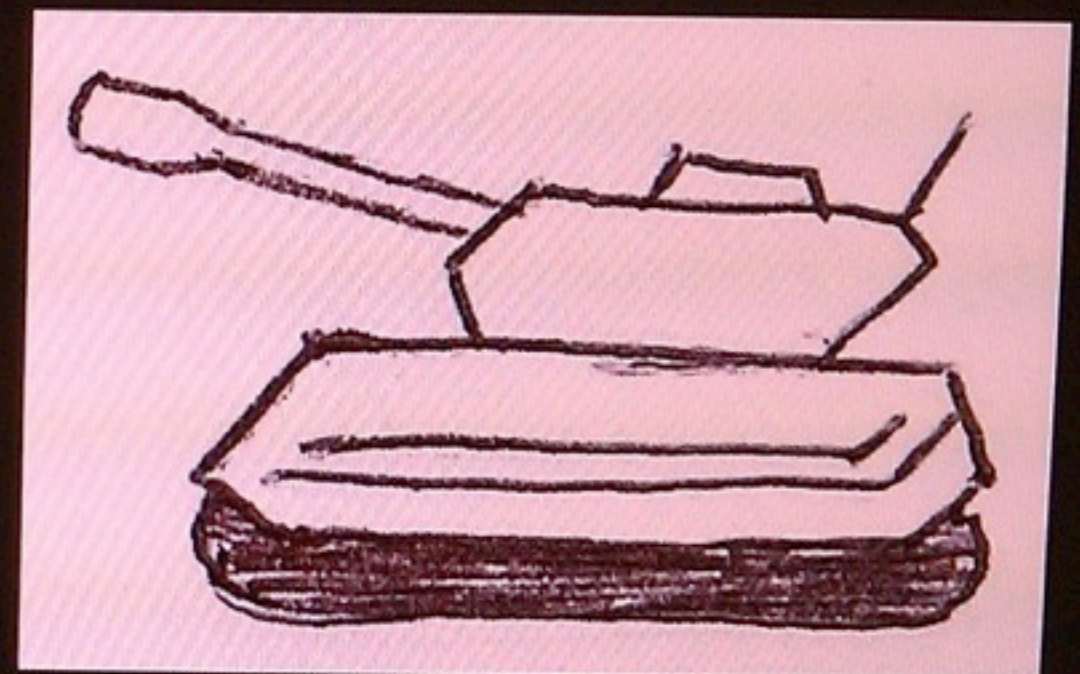
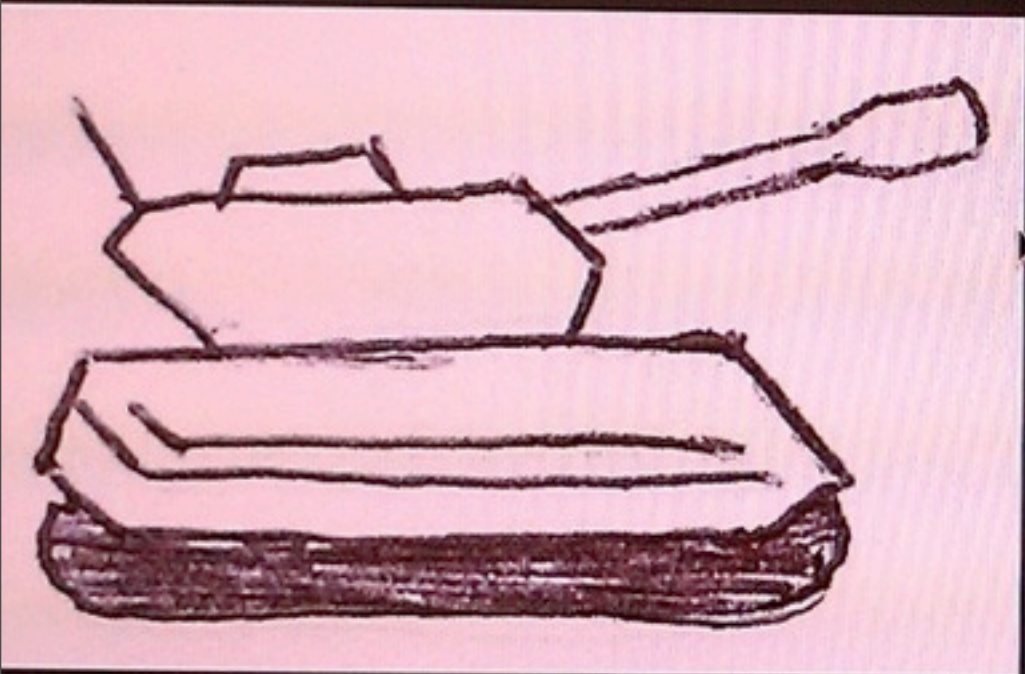
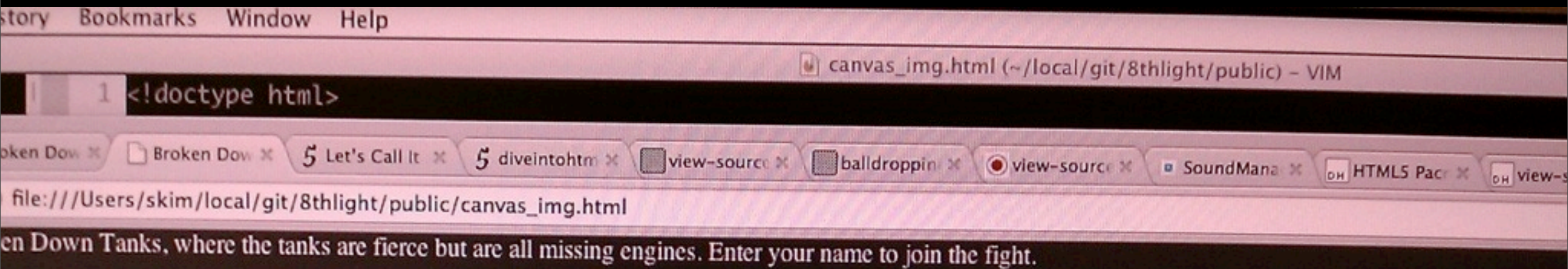
JIM/
JUSTIN
GAME LOOP / ARCHITECTURE
+ SOUNDS
+ WEB SOCKETS / EVENTS
(PUSHOLAP)

PHYSICS ENGINE JUSTIN
+ ALGORITHMS (COLLISION DETECT)
+ FORMANTS



Self Organizing

Elusive Minimum Viable Product



This is `*code*` camp...

jasmine-node

<https://github.com/mhevery/jasmine-node>

Web Sockets using Faye and Socket.IO

Canvas

Audio

Hits and Misses





Cameras

Know Your Tools



Doojiggy



Hickeymabob



Redthingy



Jiggymadoo



Thingymajig



Doshickeys and Doodads



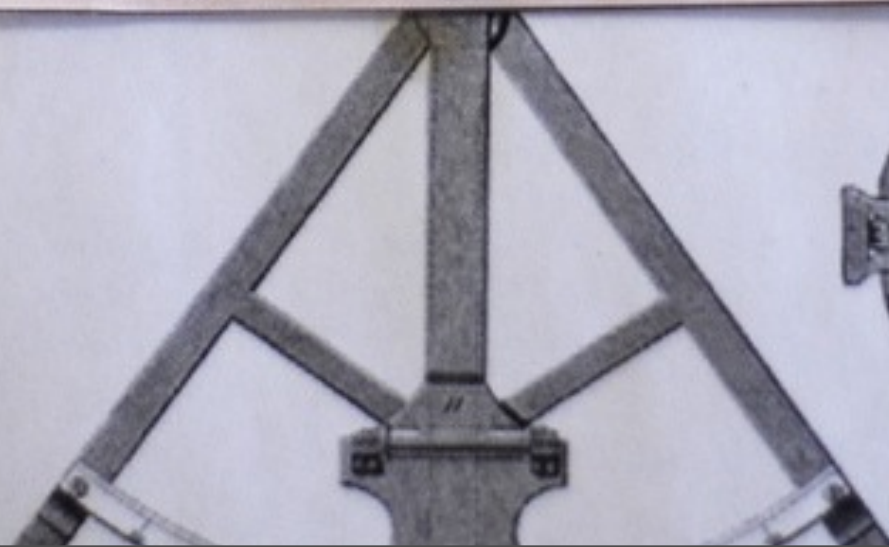
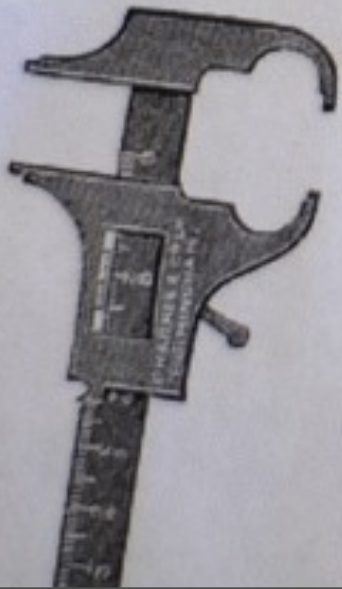
Squeezythingy



Gizmo



Whatchamacallit



No UX or Gaming Expertise



With a little help
from your friends

The Elusive MVP (Minimum Viable Product)

Working in Silos



Untested code!

Deployed working app in 48 hours



Results

- Winner(s) of node knockout... not us.
- <http://2010.nodeknockout.com/teams/8thlight>

Some good reviews

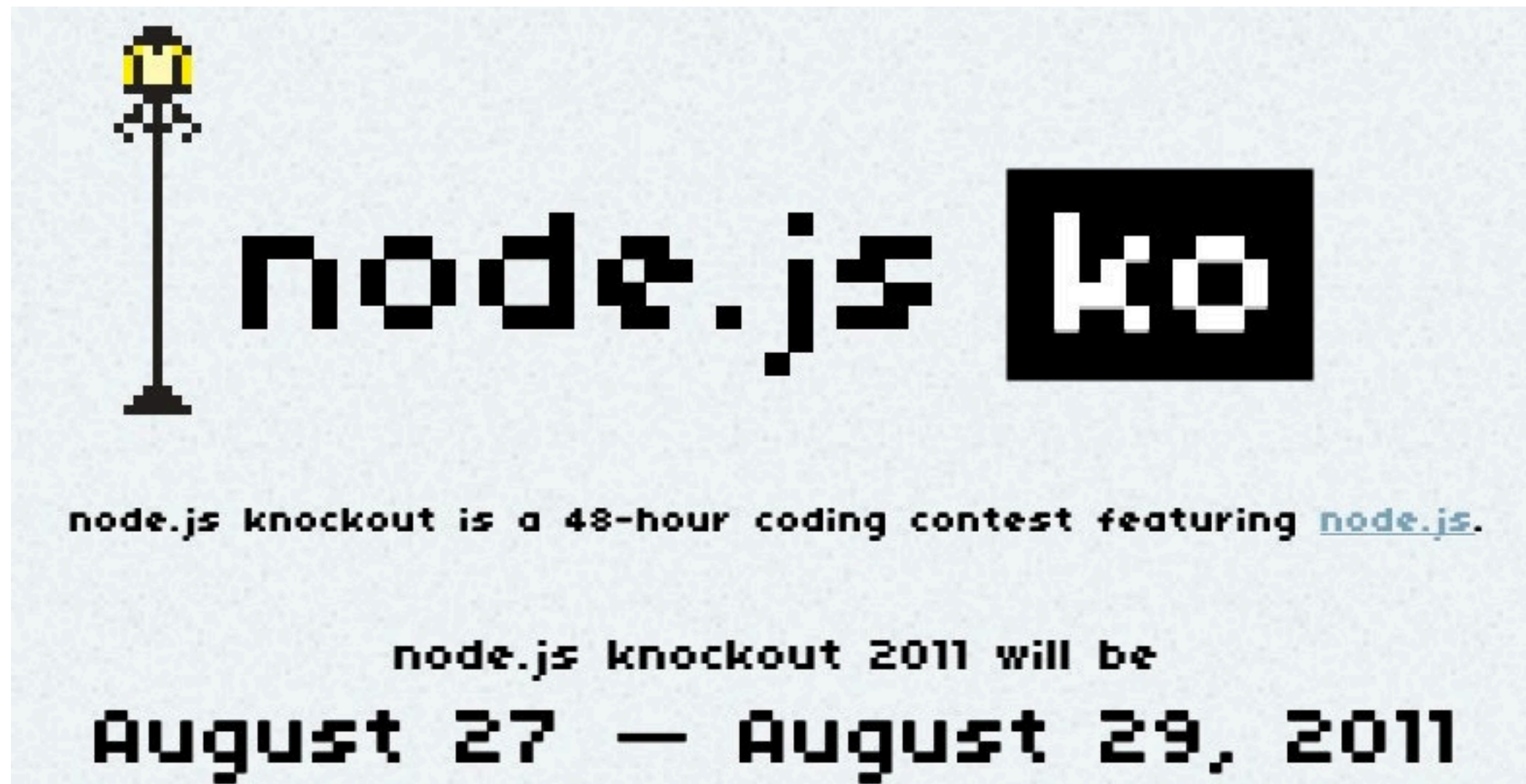
- Good Job! Don't be discouraged by my scoring, the competition is STIFF! I couldn't have done better. Great sound effects! Made me lol :) -- Danny Coates
- good game mechanics and sound effects. there are some bugs that need to be worked out, though. ui could perhaps use some improvement/pointers, but great start! --chang
- Neat Game Design - But hard to control. --Fabian Grassl

People played it and
had fun

**Accessibility,
portability, usability**

Had Fun and Learned a Ton

What's next?

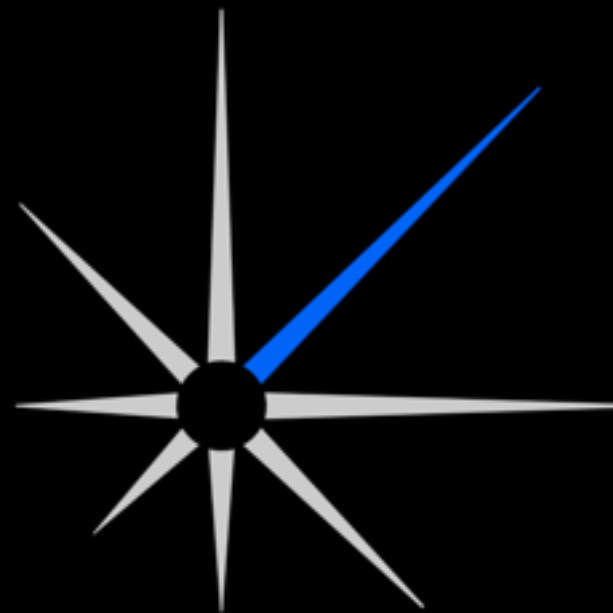


Nōdo Tanku Open Sourced

https://github.com/8thlight/nodo_tanku

<http://tanku.no.de/>

Thanks!



8th light

Jim Suchy

Software Craftsman

jsuchy@8thlight.com || @jsuchy