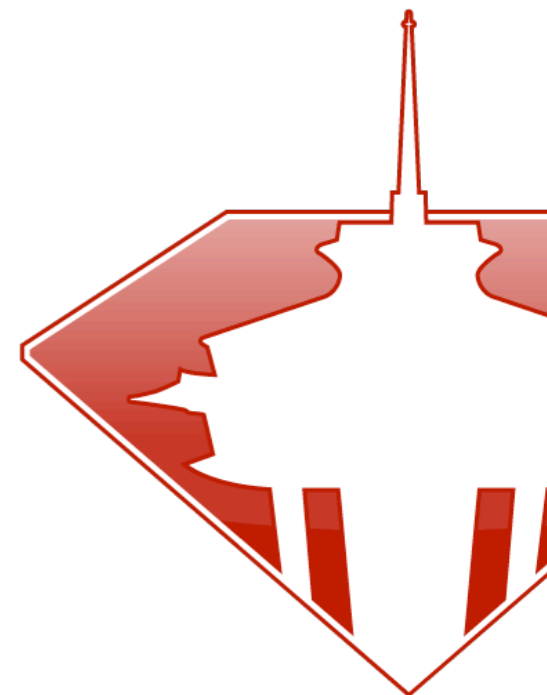


# Maximizing Productivity

or **How to Hack Well**

Eric Hodel - [drbrain@segment7.net](mailto:drbrain@segment7.net)



# My List 'o Projects

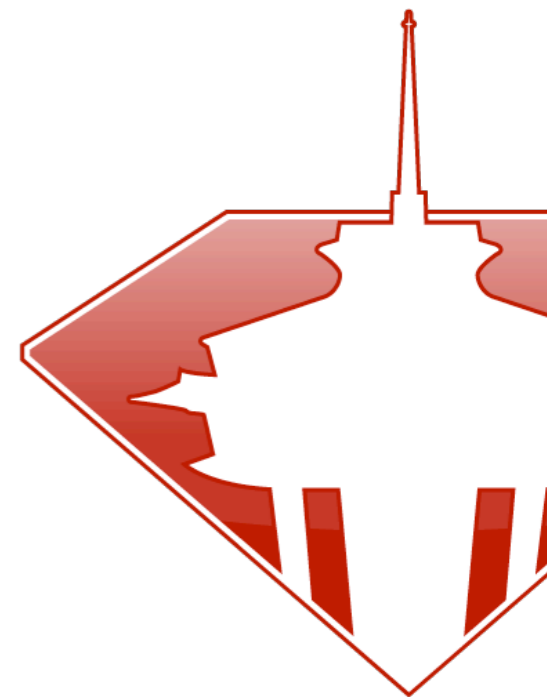
IMAPCleanse  
mem\_inspect  
mogilefs-client  
memcache-client  
ZenTest  
mem\_cache\_fragment\_store  
rails\_analyzer\_tools  
production\_log\_analyzer  
borges  
yahoo  
socket\_accept\_filter  
zenhacks  
ograph  
rubyforge  
geocoder-us  
RubyInline

hoe  
socket\_sendfile  
logmerge  
sql\_dep\_graph  
yahoo-search  
metacarta-geoparser  
png  
ruby-growl  
cached\_model  
bfts  
action\_profiler  
tinderbox  
vlad  
ruby2ruby  
ParseTree  
rbayes

SyslogLogger  
firebrigade\_api  
webrick-high-performance  
yahoo-geocode  
SuperCaller  
ruby2c  
Sphincter  
RailsRemoteControl  
google-geocode  
ar\_mailer  
RubyGems  
QuickCert  
RingyDingy  
heckle  
rc-rest  
ruby

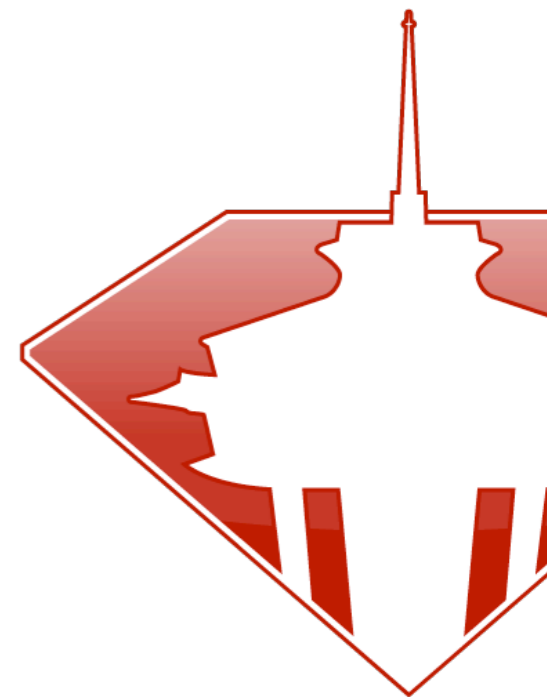


# Most Important



# Have Fun

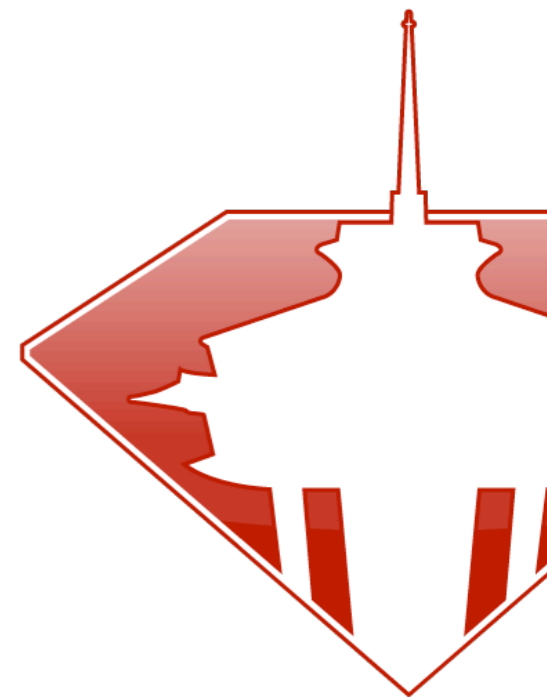
- I volunteer my time
- I don't get paid for it
- I want to enjoy my time
- I don't want to work



# Whatever!

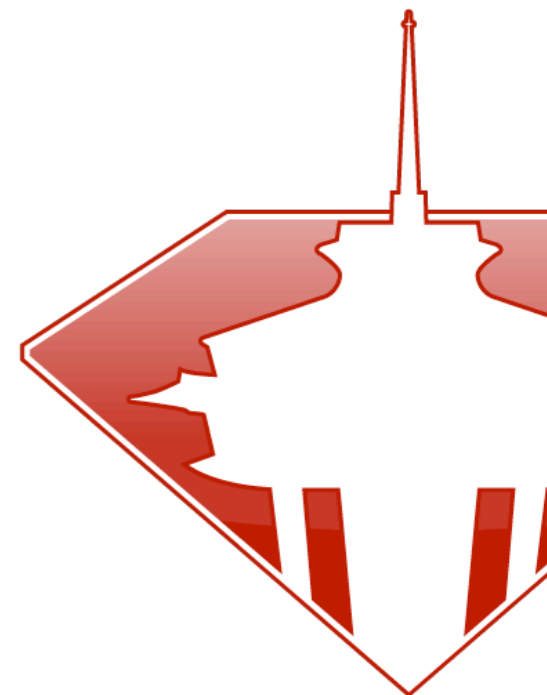


# Coding



# Before I Begin

- Don't reinvent the wheel!
- Does something already exist?
  - Does it do what I want?
    - Can I fix it?
- No? Then it's OK to rewrite



# (Not a) Superhero

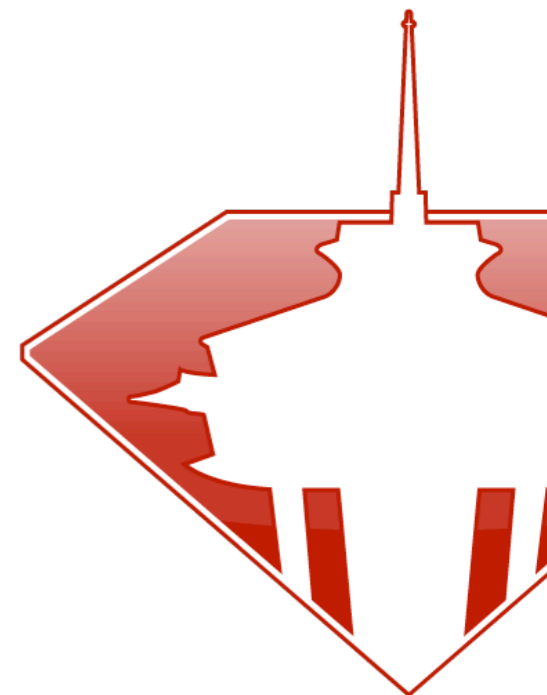


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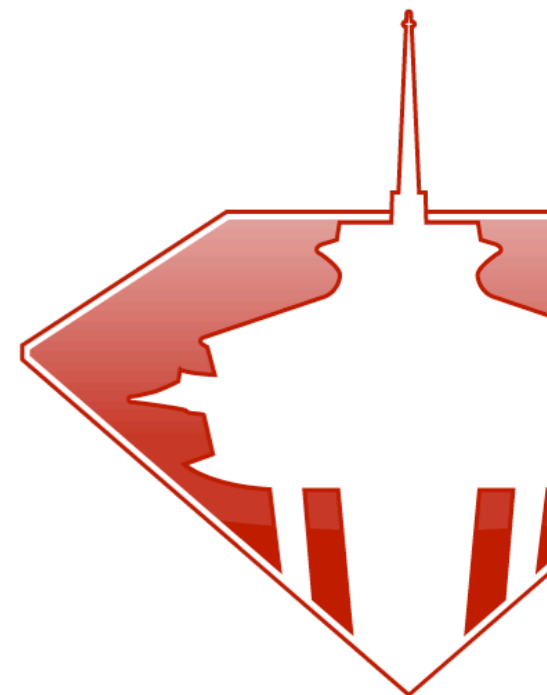
# Be Selfish

- I fix my problems first
- I'll probably solve your problems too
- If not, I won't release it
  - I might talk about it



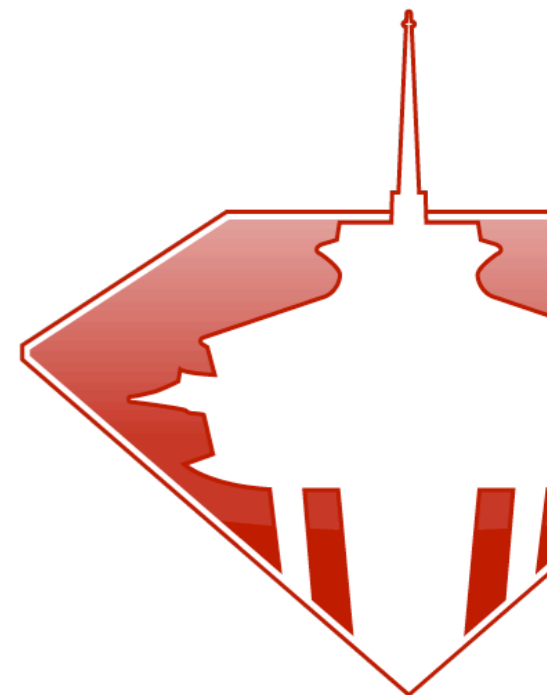
# KISS & YAGNI

- Keep It Simple, Stupid
- Ya' Ain't Gonna Need It
  - More focus
  - Smaller scope
  - Realistic goals
  - Less complexity
  - Higher quality



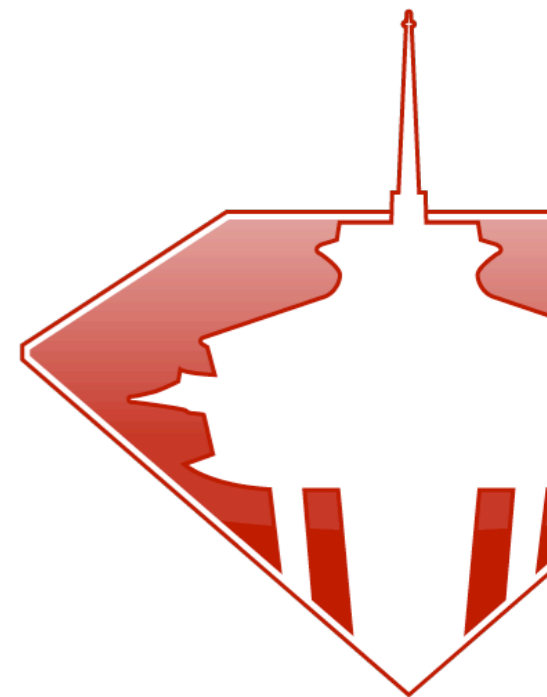
# YAGNITAGAFI

- Ya' Ain't Gonna Need It,  
They Ain't Gonna Ask For it
- I'm not invested in your features
  - Fewer features means less complexity
  - Fewer features means fewer bugs
- I don't know if the feature is necessary
  - If it is, somebody will write it



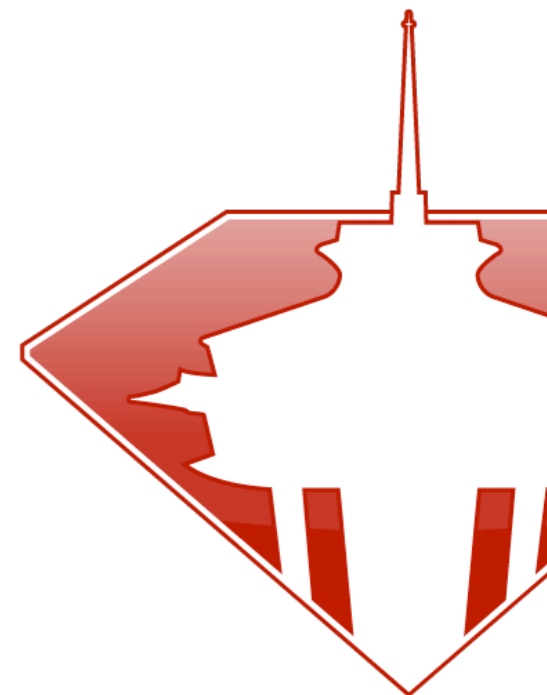
# Test

- Users will ask for features and fixes
  - Or patch them for me
- Groundwork for new features
  - Tests help me help myself
  - Tests help me help you

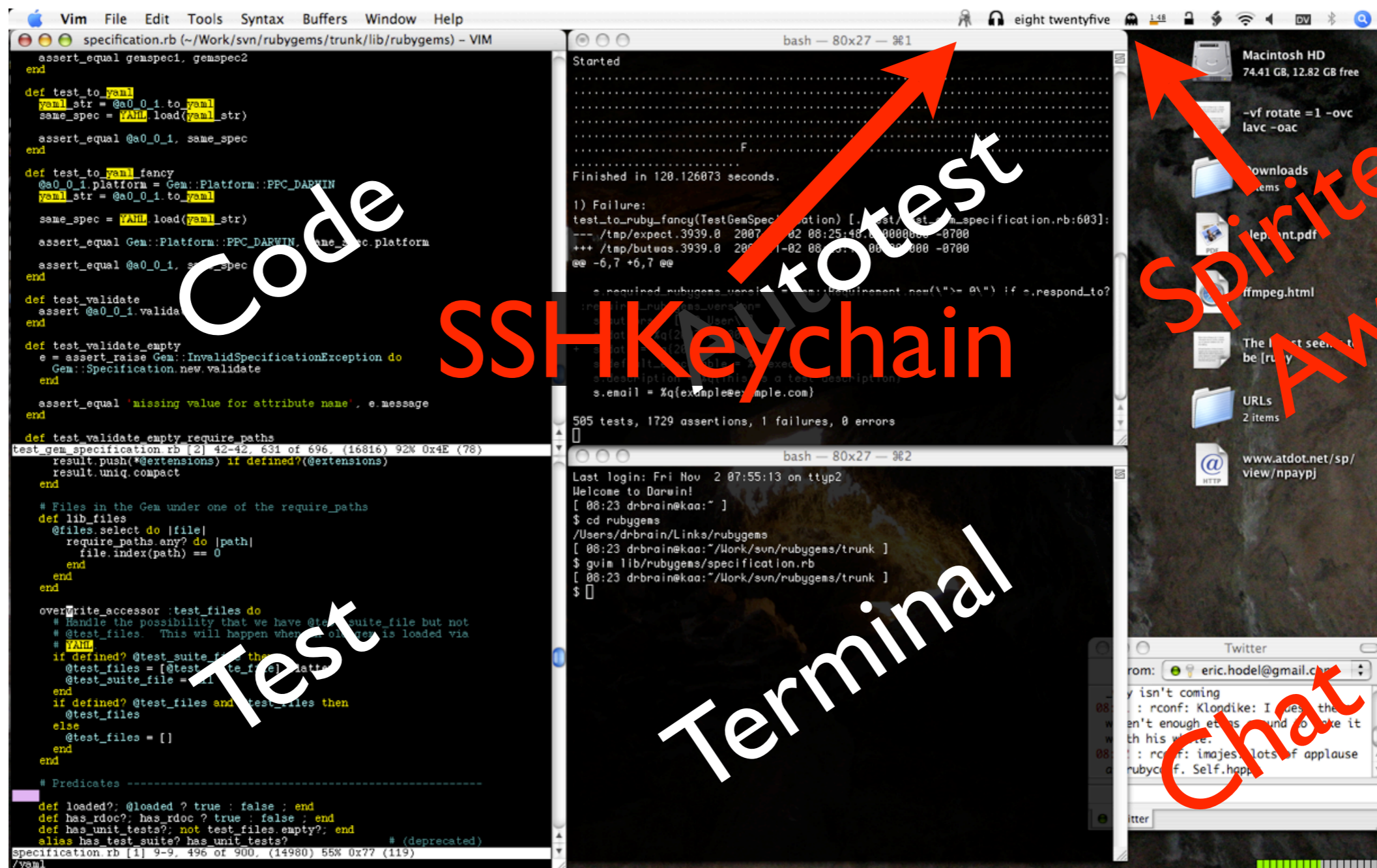


# Autotest

- Running tests becomes tedious
  - Multiple files
  - Multiple failures
  - Rerun, rerun, rerun
- Automate with autotest
  - Unloads my mental burden
  - Less time waiting, more time coding

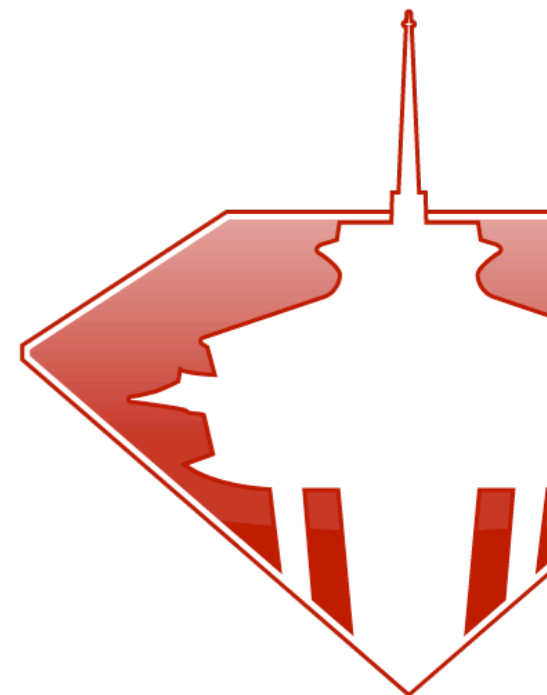


# Everything in Sight



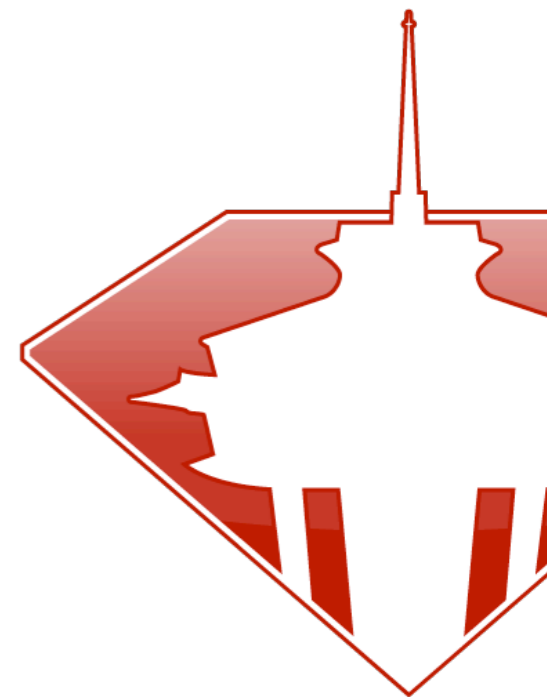
# Heckle

- Constructive self-criticism
- Mutates my code to uncover untested defects
  - Finds the edge cases I missed
- Great for long untouched code



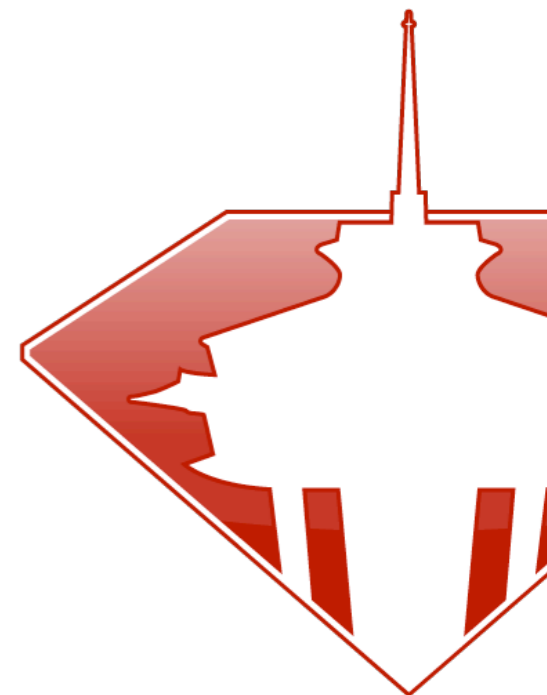
# Automate

- Automatic setup
- Migrations
- Common tasks



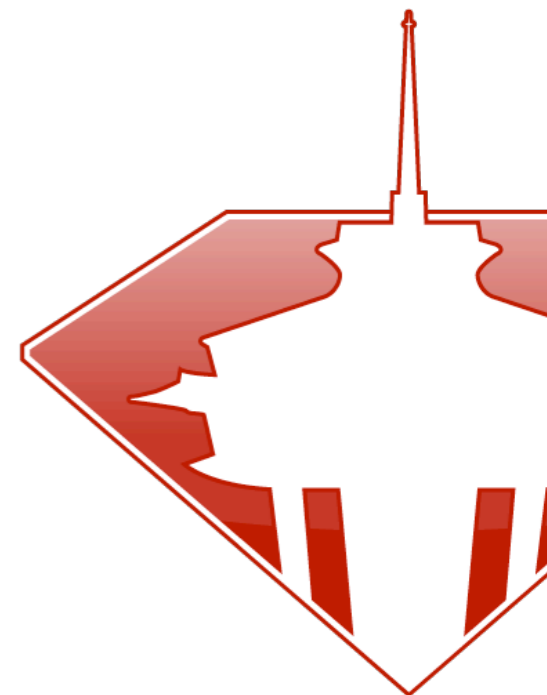
# Know Your Editor

- My most useful tool
- Find a great one
- Learn it
- Know it *intimately*

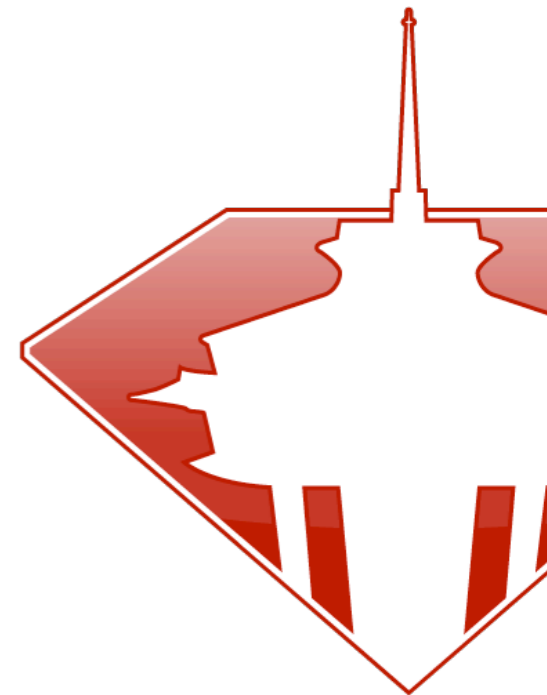


# Pair Programming

- Two heads are better than one
- Keeps you focused
- Do the simplest thing that works
- Ping-pong pairing

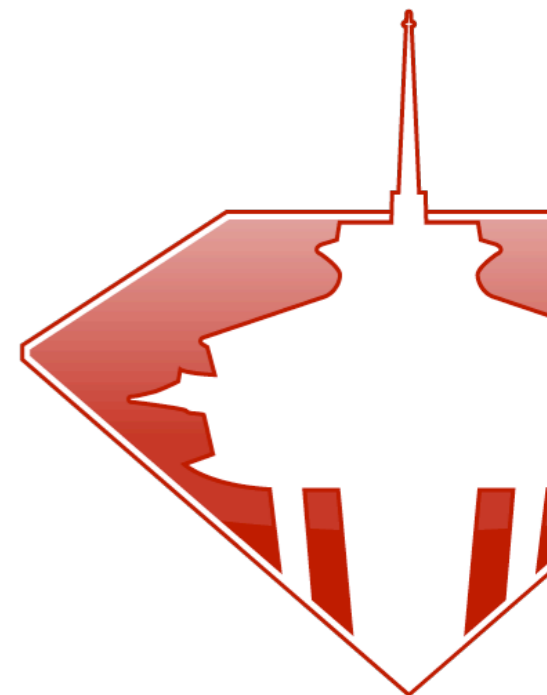


# Releasing



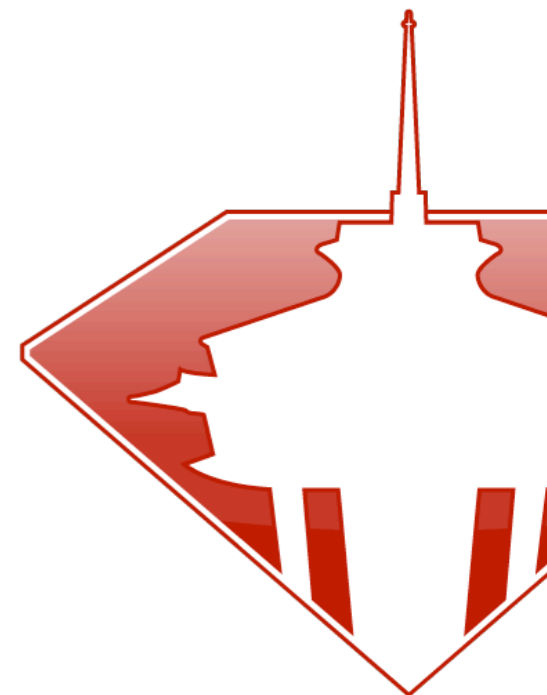
# Documentation

- README
  - Quick-start guide
  - Synopsis and feature overview
  - Bug tracker link
- RDoc
  - How to use my software
  - In-depth documentation



# Bug Tracker

- Set up categories & groups
- Set up email
- Deny anonymous reporting
  - No possibility of feedback



# Review

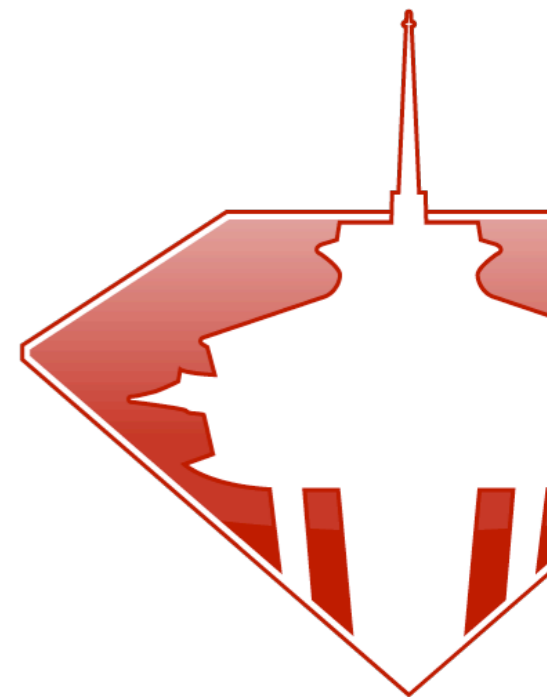


Mad Max Beyond Thunderdome



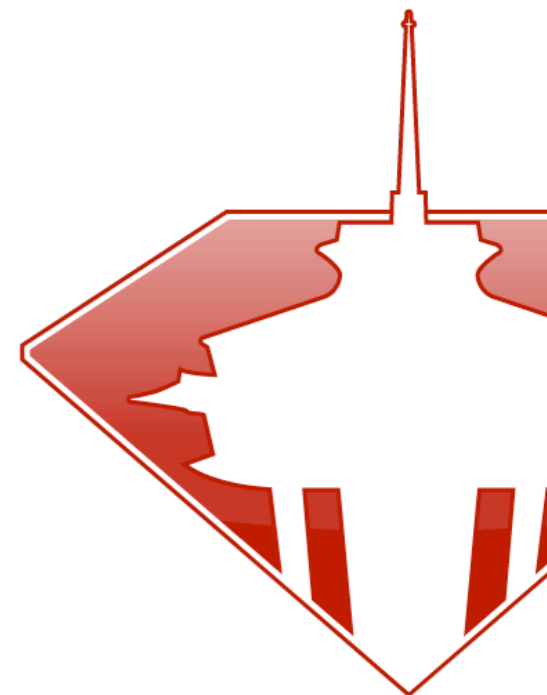
# Releasing Pre-Hoe

- Painfully hard work
- Double-checking everything for correctness
- Incredibly time consuming
- Error prone
- NOT FUN!



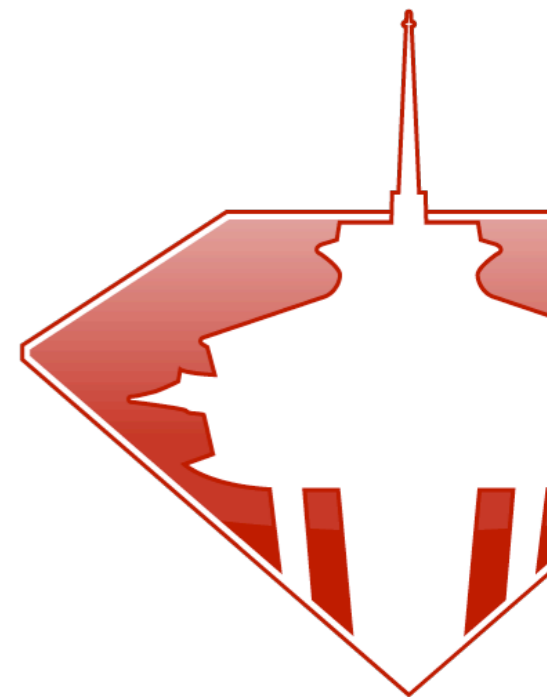
# Hoe

- I automate with Hoe
  - Packaging
  - Uploads
  - Emails
  - Blogs
- Saves tons time



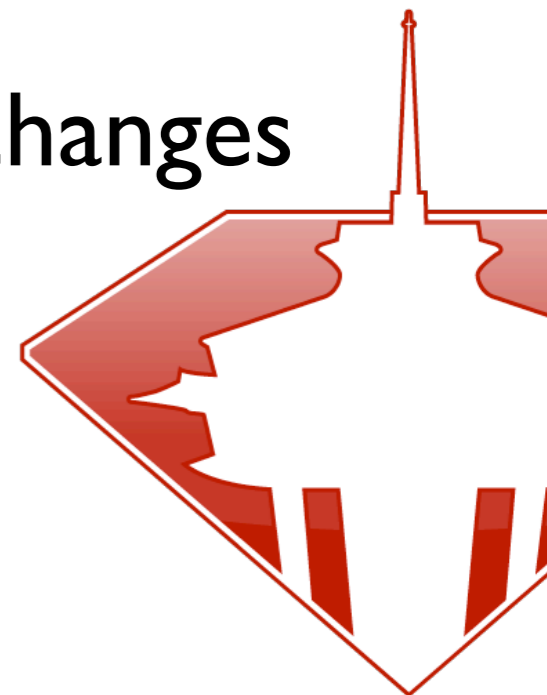
# Early & Often

- Automated releases allow small releases
- Easy to make bugfix releases
- Easy to release contributed patches



# Benefits Thereof

- KISSably small
  - Less complexity per release
  - Fewer new bugs per release
  - Easier to find bugs in a smaller set of changes

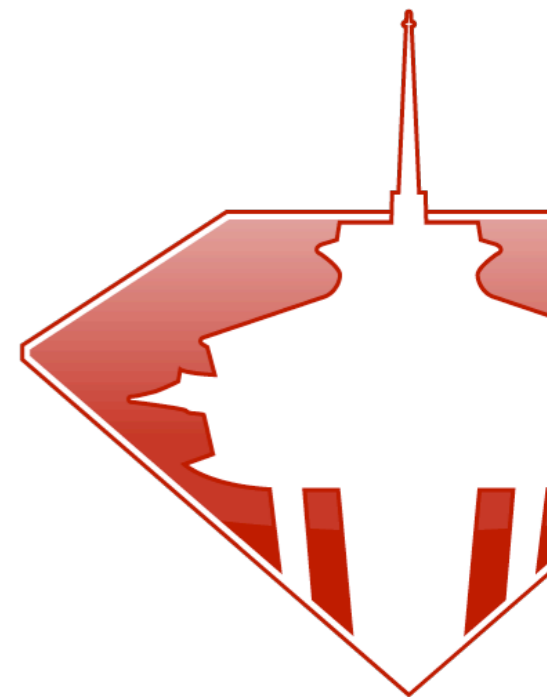


# Relax!

- Software isn't my entire world
  - Writing software 24/7 is too draining
- Watch a movie
- Take a walk
- Have a nice dinner, or go out for a drink
- Blow away some aliens

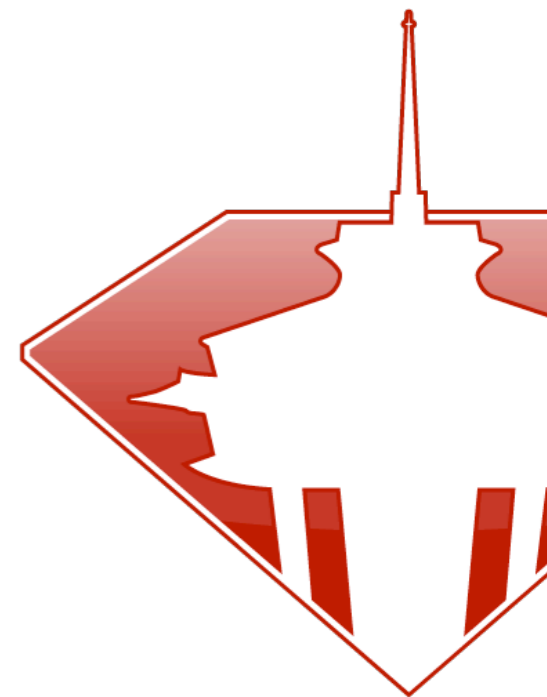


# Maintenance



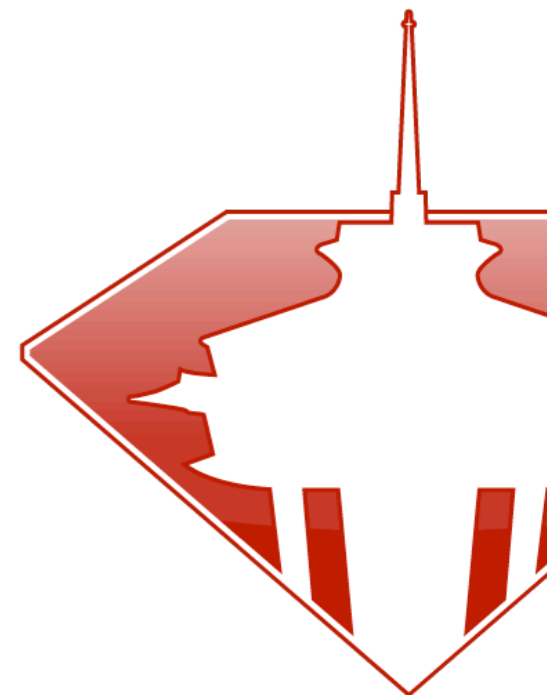
# I Forgot Something

- I write tests
- I write READMEs
- I write RDocs
- I still forget things
- Bug tracker to the rescue!



# Bug Tracking

- Remembers bug details
- A tracker is a community
  - Allows communication among reporters
  - Helps reporters find fixes
- NOT my inbox
- NOT a mailing list



# Gardening

- Iterative
- Simple goals
- Small changes
- Well organized

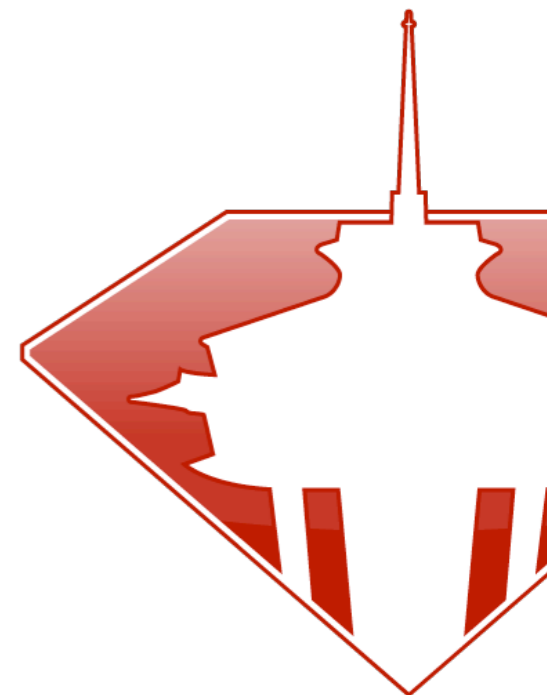


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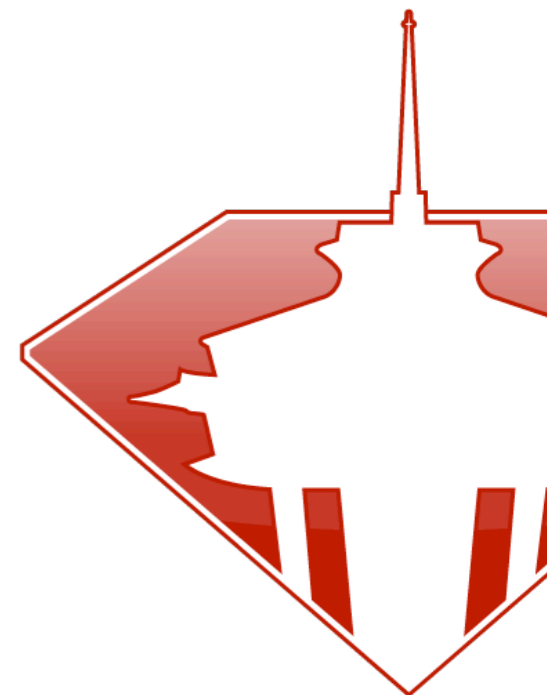
# "Bug Reports"

- Some users refuse to use the tracker
  - Email
  - Blogs
  - Complain to friends & coworkers
- Find them!
  - Apple Mail's smart filters
  - Technorati blog search



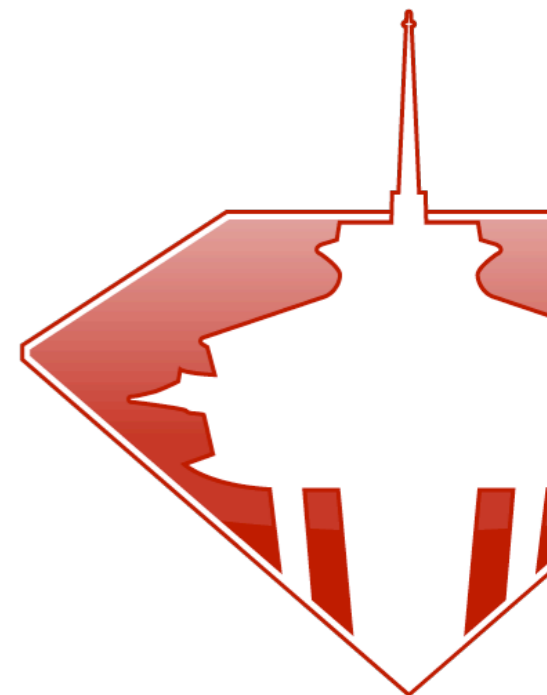
# Be Responsible

- File good bug reports
  - Steps to reproduce
  - Expected vs actual results
  - Versions and platforms as appropriate
- Be responsive to the developer
  - Bugs aren't always easy to reproduce



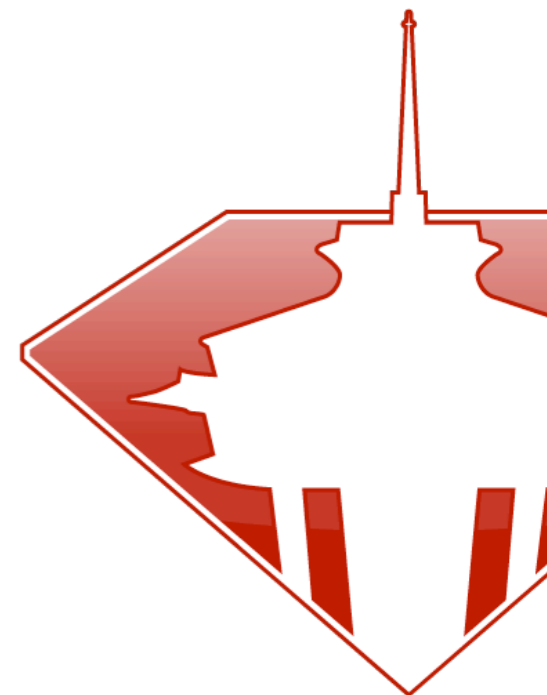
# Versions

- Whatever you choose, be consistent
- I use major.minor.bugfix
  - Major for API incompatibility
  - Minor for new features
  - Bugfix for (well, duh)

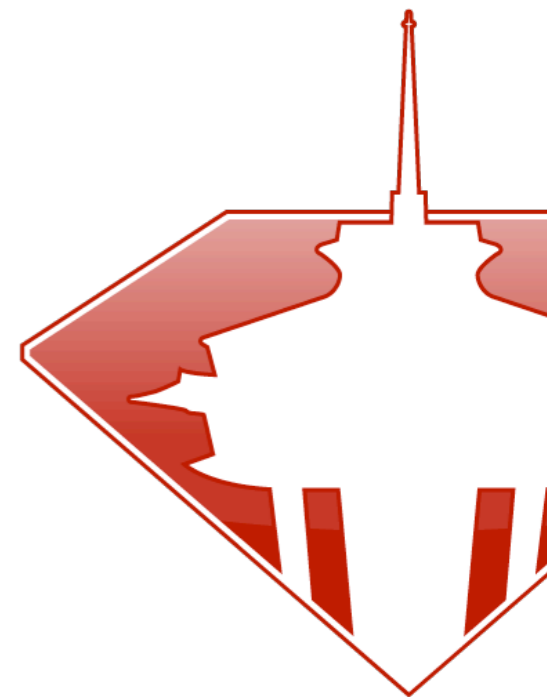


# Break It Up!

- Software grows
  - Sometimes into discrete components
    - Usually it lets you know
- So separate them
  - Reduce support burden
  - Increase release cycle rate

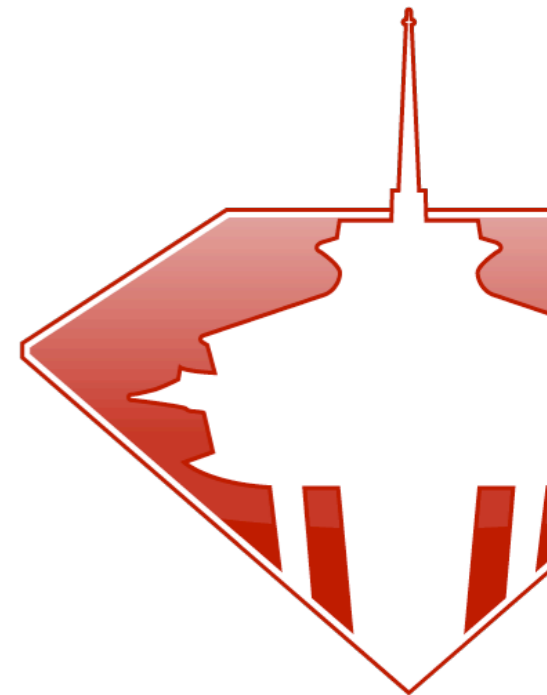


# Inspiration



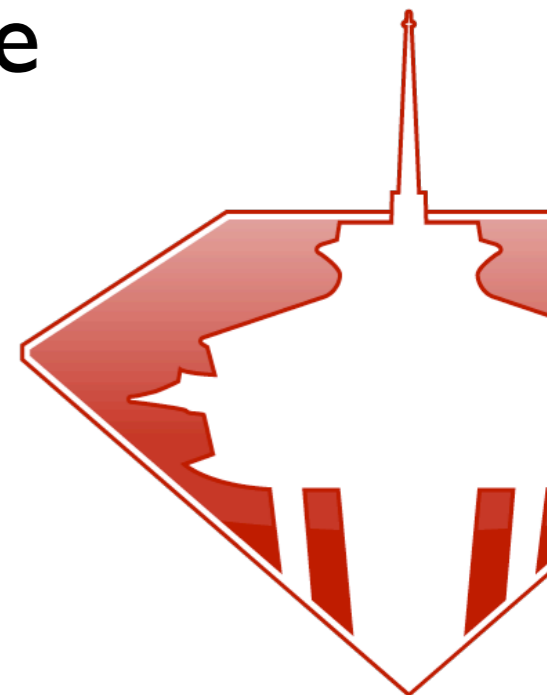
# I Don't Owe You ...

- After a release, people want support
- I didn't get paid to write it
- I don't have to give it to them



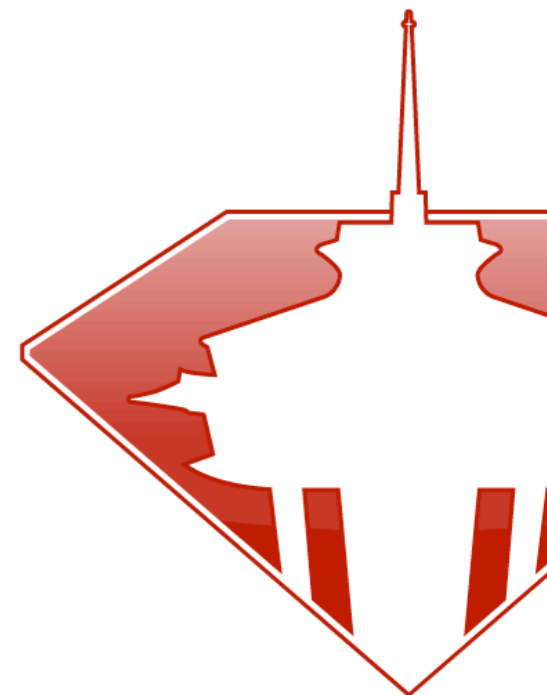
# ... Right This Second

- Its OK if I'm too busy
- Or want to work on something else
- I'll get around to it eventually
  - The bug tracker will remember for me
- Trickle out releases when I'm ready



# Criticism

- My software sucks
- Its OK
- People complaining is OK
- Maybe they'll be motivated to fix it



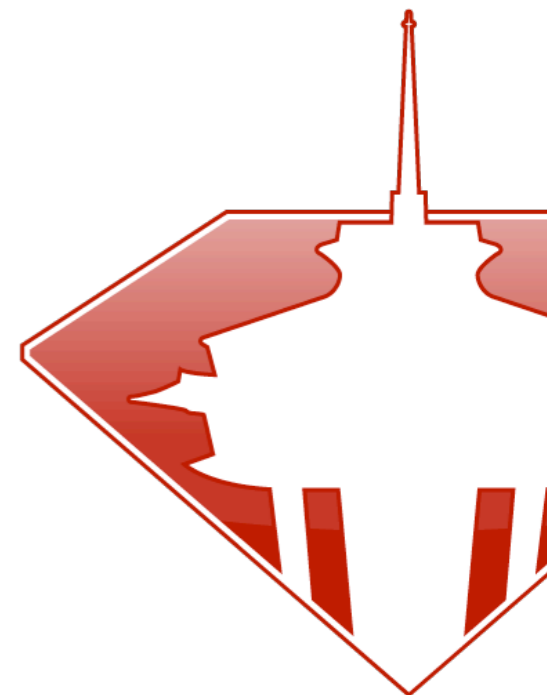
# Hacking Night

- Boredom prevention
  - Every week for the Seattle Ruby Brigade
- Helps me focus on my projects
- Helps me avoid my projects by answering questions
- Also, pre-hacking dinner



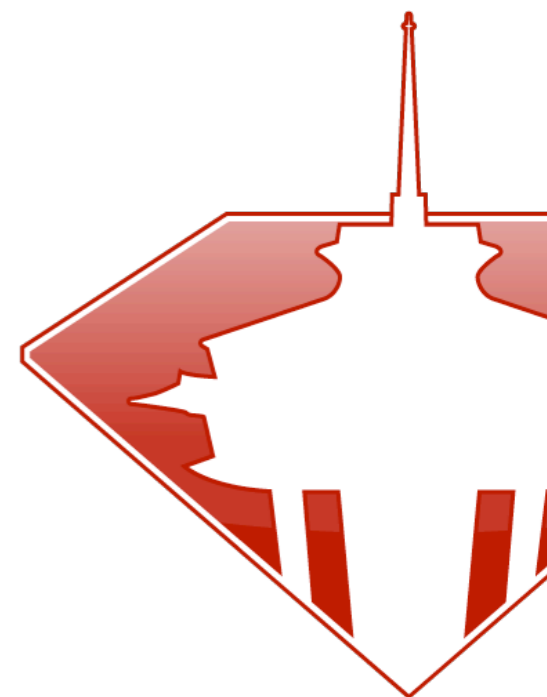
# Imitation

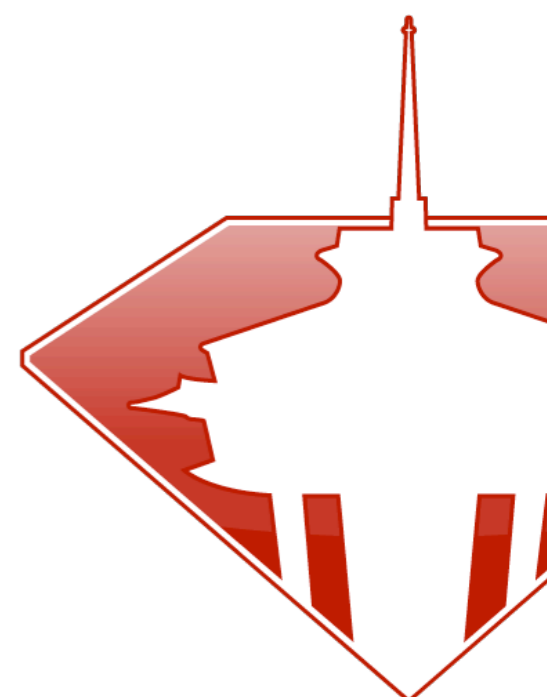
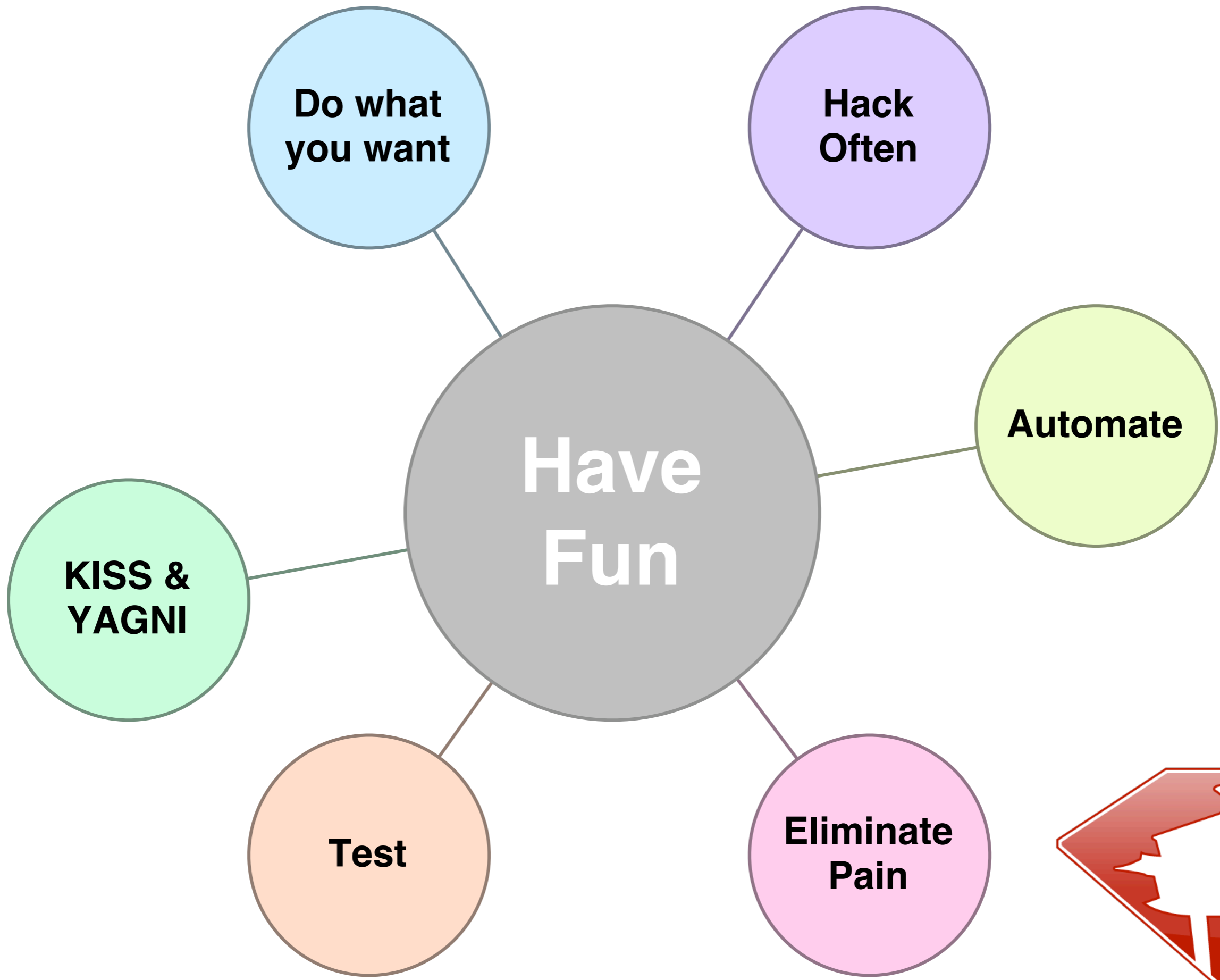
- Great ideas can come from everywhere
- Ruby doesn't have everything
- autotest was inspired by Smalltalk
  - I still want their debugger
- Avoid NIH



# Pain-Killers

- Write yourself pain killers
  - Automate something you do by hand
- Hoe for releasing
- IMAPCleanse for reading my email









**No Bikeshed**

