Workspace setup

tips and tricks
The idea behind this session

We use a lot of different equipment and related techniques we find and invent over time.

We all accumulate tips and tricks over time that are improving our experience dealing with the above.

We need to share them with each other to be more productive, healthy, and to have more fun.
Ergonomic workspace

- Sit/Stand Desks
- Human interface points
- Software Hacks
Sit / Stand Desks

- British Journal of Sports Medicine statement last year
  - http://tinyurl.com/hqw55ox
- Recommendation on light activity per day
- The office chair is… bad.
- Exercise is not enough.
- 30min = 90% slowdown of metabolism.
Sit / Stand Desks

- case study - Steve Muckle
  - small couch
  - makeshift stand-always solution
  - Qualcomm-provided sit/stand desk
  - Geekdesk Max
  - Uplift Desk
Sit/Stand Desks

- Case Study
  - Lifespan Fitness
  - Dual Display with VESA arms
  - Logitech Trackball
  - Mechanical Keyboards
Sit/Stand Desks

- Start slow!
- Get a mat.
  - Imprint® CumulusPRO Commercial Grade Standing Desk Anti-Fatigue Mat
    http://tinyurl.com/zkluz4u
- Jerry-rigged is okay, but adjustable is best.
- Cross bar isn’t necessarily required.
Human Interface Points

- **Mechanical Keyboards**
  - Easier on your wrists (more button travel and tactile feedback)
  - More forgiving when typing and walking

- **Track Balls**
  - Helpful when walking on the treadmill and navigating your desktop.
    - The bigger the better

- **Monitor/Laptop Stand**
  - Elevate your monitor/laptop’s screen to eye level. Avoid wobble. Can be annoying
Software Hacks

- Blue light - RedShift (Xorg users), Flux for others
- Dark Reader - inverse colours in Chrome
- My Font for Gmail - Fixed fonts in Gmail
- Deluminate plugin for Chrome
Questions?
A portable engineering setup

As we travel a lot, we need to keep ourselves productive while on the go.

A portable engineer’s setup from Mark Brown: http://tinyurl.com/jmo49p6
A portable ergonomic setup

Laptop stand from Aliexpress

Bluetooth keyboard: Logitech K810

Bluetooth Mouse: Logitech M555b

Traveling does not mean suffering!
Questions?
Managing your windows

Two major workflow types:
- mouse-centric (e.g. drawing)
- keyboard-centric (e.g. writing docs/code)

The problem: SW engineering seems to be mostly keyboard-centric, while traditional window management is done using mouse. Mixing the two brings in distractions.
Solution - tiling window managers

- No overlapping windows (except for popups)
  - all your information is visible all the time
- No fancy window decoration - better screen estate usage
  - especially useful for majority of the laptop screens
- No need to touch mouse except for applications that require that
  - you can keep hands on the home row - top speed!
- Multiple virtual workspaces - can be themed too
  - e.g. one for email, others - for IM, code editor, debugging session, references, web, etc
Tiling window managers - which one?

There are many tiling window managers out there, but **i3** seems to be the best one to start with:

- lightweight, minimal screen, cpu and memory footprint
- no large legacy in the codebase
- simple configuration
- seamlessly supports multiple displays
- supports popup windows
- dynamic window layouts - no limits!
Downsides

Using i3 you will get the following bad things gradually happening to you:

- more work done
- deteriorating mouse handling skills
- inability to use others’ computers (without i3)
- a tendency to prefer text / console based applications
- more people calling you a geek
Questions?
Containers for development

- Classically used for deploying apps to servers
  - Formalizes image creation
  - Includes all dependencies
  - Easy to deploy at scale
- Docker is probably best known
- Hot! hot! hot!
Container benefits

- Formalized image descriptions
- Avoids polluting development system
- Security benefit of isolating builds
Container drawbacks and issues

- Docker images aren’t full systems
- Hard to match uid/gid with host environment
- Bugs! Bugs! Bugs!
- Image updates and security issues
More info

General Docker Info & Getting started:
https://www.docker.com/

Kernel and Android build Dockerfiles:
https://github.com/johnstultz-work/dockerstuff

Dockerfiles to work within a shell:
https://github.com/d3zd3z/davidb-docker
Questions?
Email - how to be efficient

● Using multiple clients is OK
  ○ GUI for corporate e-mail
  ○ Text mode for upstream & patches
● Concentrating on content, not the representation
  ○ Text mode clients use most of the screen estate for content
Text/Console clients

- Easy to work with code
- Often better threading support
- Operated by keyboard - match keyboard-centric workflows
- **mutt** is a very good example of a text/console mail client
Offline mail

- Faster. FASTER!
- Flexible local searches
- A local backup for your email (just in case)
- **mbsync** seems to be best out there
- A fulltext indexer can be added to allow even more flexibility (e.g. **notmuch**)
Questions?
Portable data

- One big laptop
- ChromeOS (thin-client)
- Distributed (public) syncing
- Private syncing
Using Sync/Deployment Tools

- How deployment tools help

- The usage of sync tools
  - Self hosted
    - ownCloud
      - No offsite backup/higher administration
  - Hosted
    - Dropbox/Google Drive
      - Terrible sync clients/Not in total control
Questions?
Thank you!

We will have another similar session at the next connect - tell us what you would like us to cover.