Smart Mirror

a work-in-progress



Sam Foster sfoster@mozilla.com



samfosteriam



sfoster

Motivations

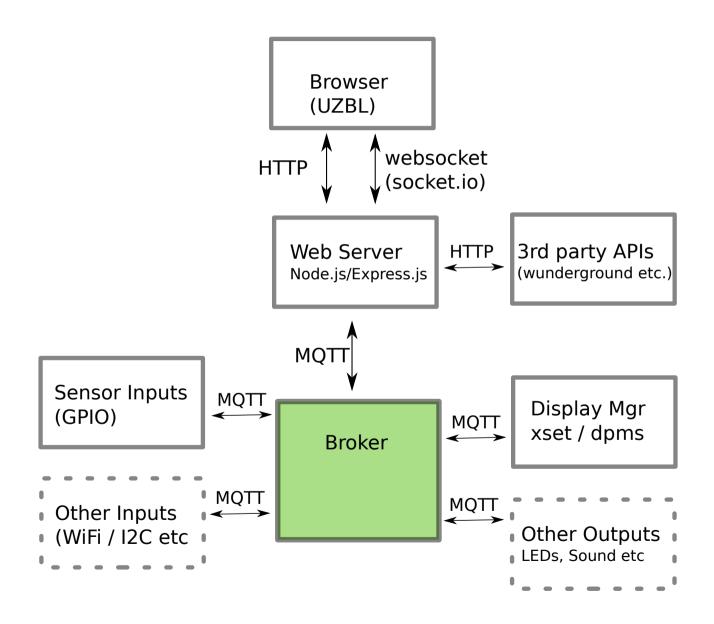


- Concrete "thing" to connect & interact with
- Clear fit with browser as front-end
- Mysteries & learning curves under the hood
- Different interaction model

Goals

- Make something useful
- Learn stuff along the way:
 - Raspberry PI as platform
 - Working with sensor input
 - Install & Deploy with hardware in the mix

System Overview



Design Considerations

- Keep It Simple Stupid
- Keep it Real
- Keep it Cheap

- Don't Touch: Hands-off experience
- Can it do...? Build Extensibly

Highlights / Lowlights

- Conventional browsers too heavy, 95% overkill
- Time consuming to learn & configure network, services, display/kiosk-mode browser
- Pub/Sub clear winner (MQTT)

What's Next?

- Trial by Family: Install for reals at home
- Add Z-Wave integration & Widget for local conditions
- Better presence detection
- Explore voice activation
- Troubleshoot setup & install for repeatability
- Face detection & Recognition?

Resources

- Scry Pi on Github https://github.com/sfoster/scry-pi
- Mosquitto http://mosquitto.org/
- Creating a Kiosk with Linux+X11
 http://www.alandmoore.com/blog/2011/11/05/creating-a-kiosk-with-linux-and-x11-2011-edition/
- Dashing on the Raspberry Pi https://github.com/mivok/squirrelpouch/wiki/dashing-pi
- Michael Teeuw's Magic Mirror http://michaelteeuw.nl/post/84026273526/and-there-it-is-the-e nd-result-of-the-magic
- Scry Pi Build Blog http://www.sam-i-am.com/blog/2016/02/smart-mirror-build-log-intro.html

Thank You!



this technology could fall into the right hands