CATaLOG

An RFID Cat Tracker

Pete Prior

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The Grand Plan

Wanted to see when our two new cats went in and out of the house

1) Attach an RFID tag to each of them

2) Build something that could read It

3) Make it tell something when it sees one

What I get out of it

◎ It's a fun and interesting project to work on

◎ Something involving unpredictable things

◎ Combines two things I'm passionate about

What the cats get out of it

◎ RFID bling

◎ Increased safety

  - We know if they've been out too long

  - We know if they're not going out at all

◎ Don't have to be shut in when we're away

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Why I'm telling you this

◎ Hoping other people try something similar

◎ Could do with ideas for improving it

◎ Motivated me to complete it

Ignite™ Cardiff

The stars - Bobbin

The stars - Tuffin

A little bit about RFID tags

◎ Little chip which stores a number

◎ Chip attached to an antenna

◎ Reader's radio signal powers chip enough to respond with the number stored on it

The main idea

◎ RFID tag glued to cat's nametag

◎ Reader by the catflap

◎ Microcontroller talking to remote server

◎ Switches to manually set a cat in or out

Testing the RFID reader
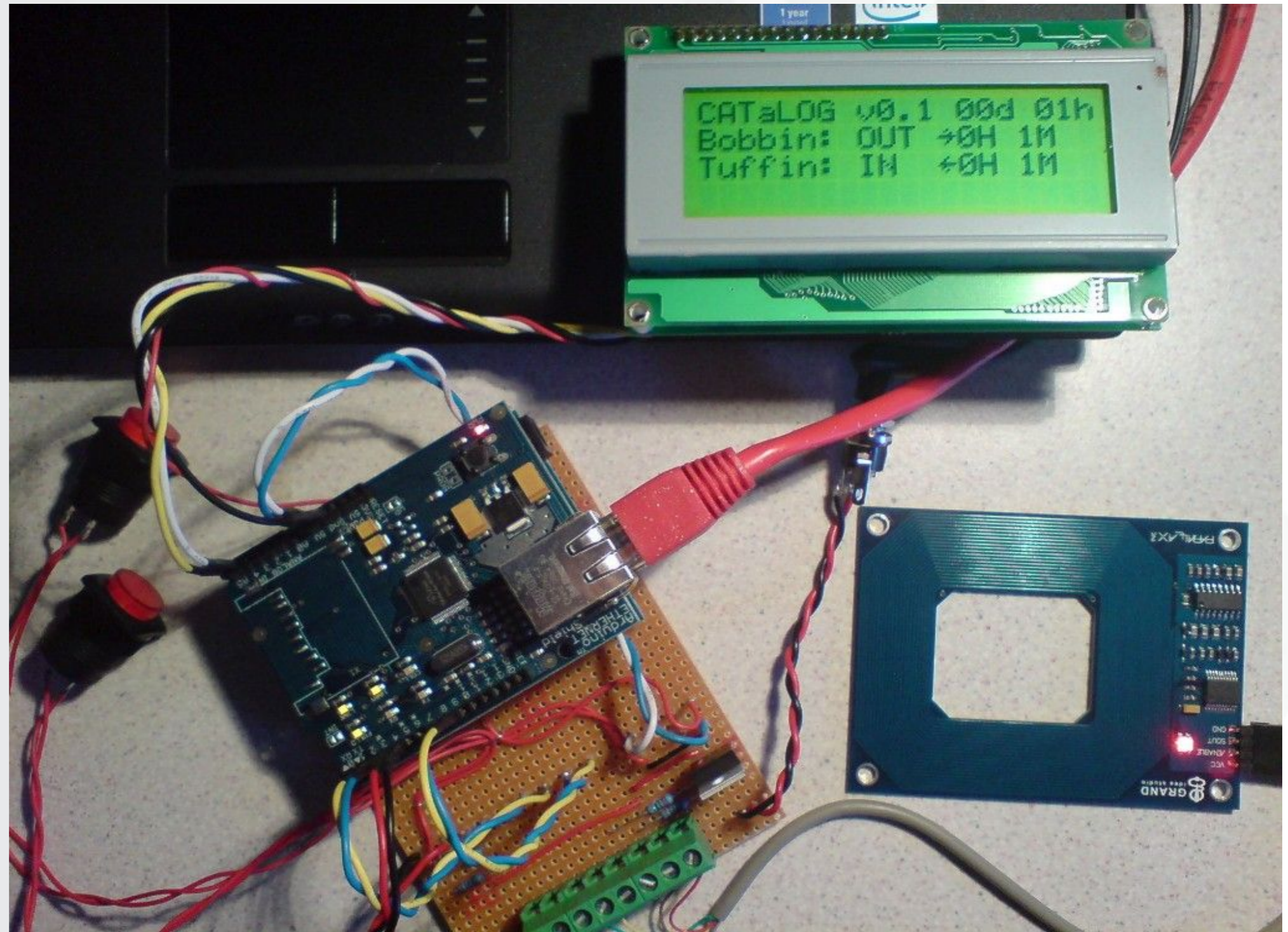
Building the system

"Incompatible is what two compatible pieces of hardware become when you try to connect them together"

- Unknown

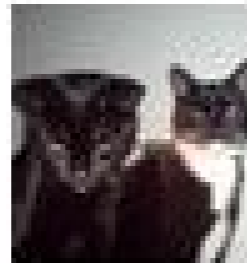O'REILLY®

A cheaper solution?

The setup

It talks to twitter...

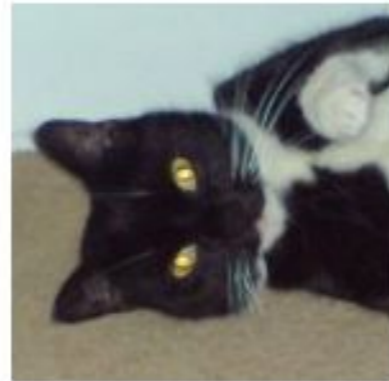**BobbinAndTuffin** Bobbin has gone IN
less than a minute ago from web

http://twitter.com/**BobbinAndTuffin**

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...to us...

...and the web
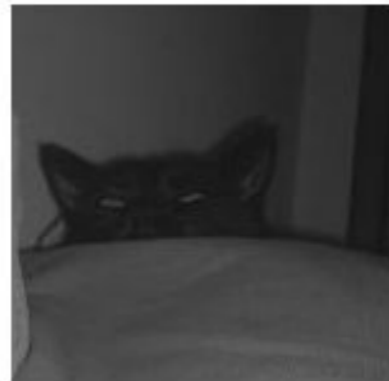
Improvements

◎ Infra-red beam each side of the cat flap

◎ Makes sure a cat has actually gone through

◎ Can tell if a cat gets half way and reverses

Pros and cons

◎ Pros

- We can now see if our cats are in or out

◎ Cons

- I now view my cats as users

Real world lessons

◎ If users break or can't use something I've designed or built, it's not their fault – it's mine.

◎ People only like to spend their free time working on or being part of something they enjoy

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FIN and more information

Project Pages

http://nermal.org/projects/catalog/

CATaLOG status pages

http://catalog.nermal.net

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