Eric & Wendy Schmidt
Data Science For Social Good
Summer Fellowship

THE UNIVERSITY OF CHICAGO

Agile, User Stories, and Wireframes

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Learning objectives

1. Understand why usability and User Interface are important in Data Science for Social Good
2. Learn how to wireframe

Non- Profits :

Limited Resources

Empathy

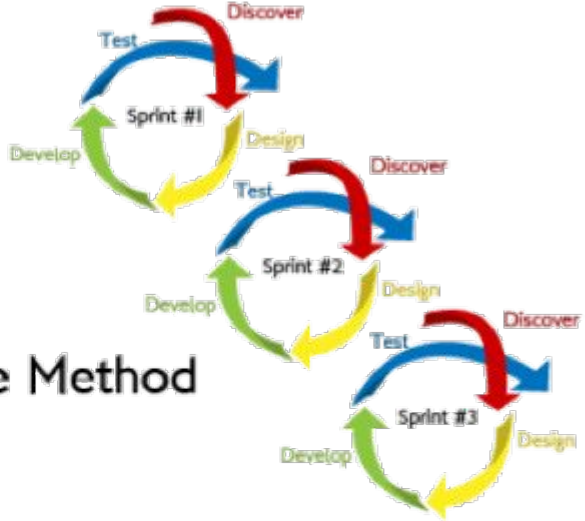
High Touch/Relationships

Social Issues

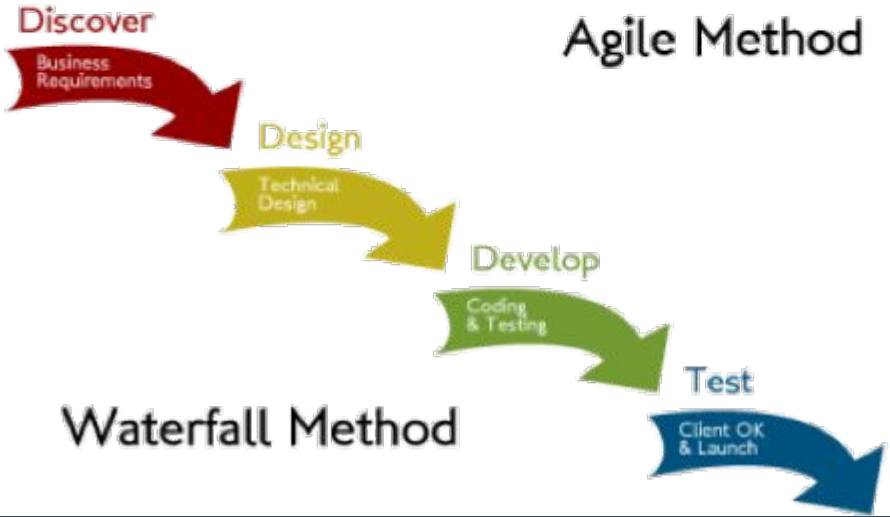
Limited Tech Skills

In non profits we are often solving problems for people who are not ourselves, or not like us

Development Methodologies



Agile Method



Waterfall Method

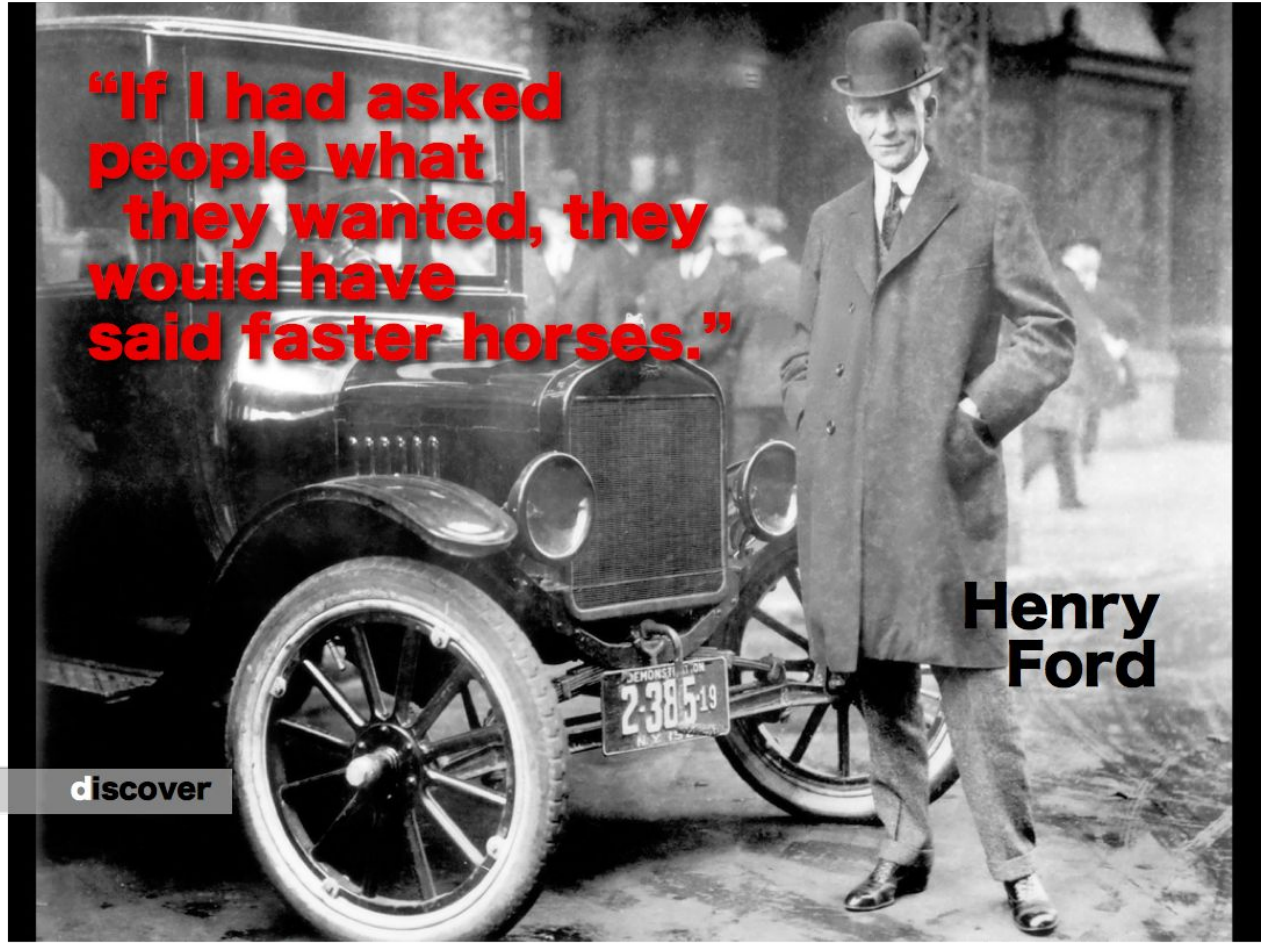
Agile Manifesto

We are uncovering better ways of developing
software by doing it and helping others do it.

Through this work we have come to value:
Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan
That is, while there is value in the items on
the right, we value the items on the left more.

Waterfall Requirements

Requirement	Function	Priority	Stakeholder
The system must run on Windows 8	System	Top	IT
The system must use Oauth to log in	Login	Top	IT
The system must require the user to change their password every 3 months	Security	High	IT
The system must be cost effective	Business	Top	CEO
The system must require passwords to have Capitals, numbers, special characters, wingdings, and roman numerals	Security	Critical	Some jerk in IT who read about best practices for banks even though you're at an NPO with no sensitive data
The system must be useable	Usability	Low	The Sad End User


"If I had asked people what they wanted, they would have said faster horses."
Henry Ford
discover

STAR TREK
Data are people
BRENT SPINER
LIEUTENANT COMMANDER DATA

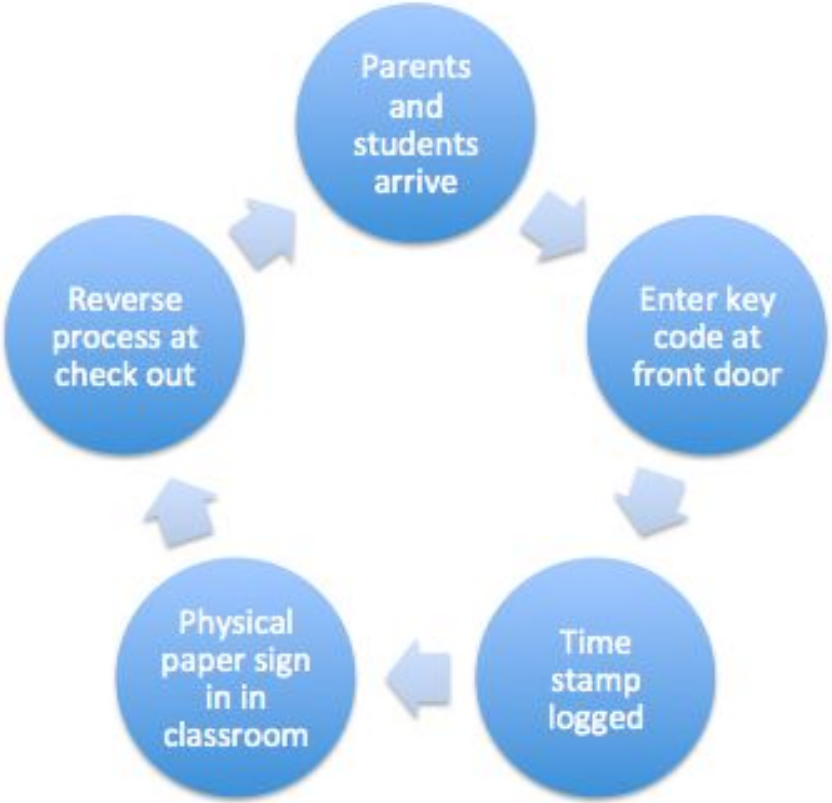
interview guidelines

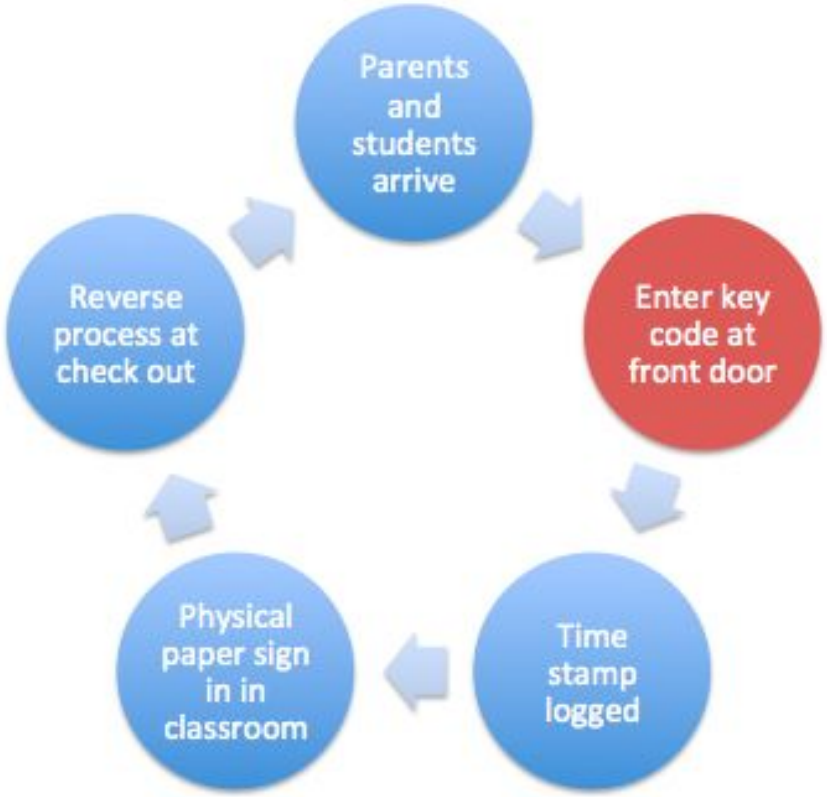
break ice
explore
facilitate
probe
listen
listen
listen

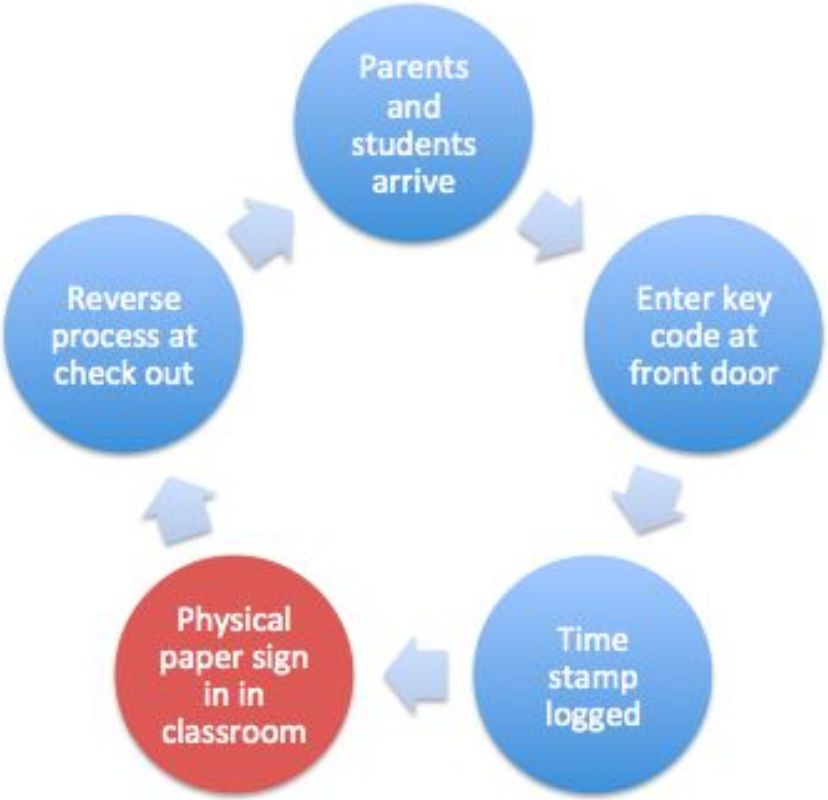
Data Collection & Usability

- Research at the Ounce - Dosage is important
- User Interface Design changes the data you have available
- People are involved at every step

Check In Process




Parents and students arrive
Enter key code at front door
Time stamp logged
Physical paper sign in in classroom
Reverse process at check out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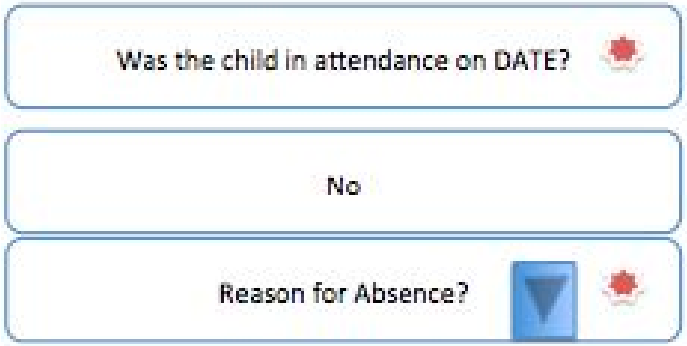
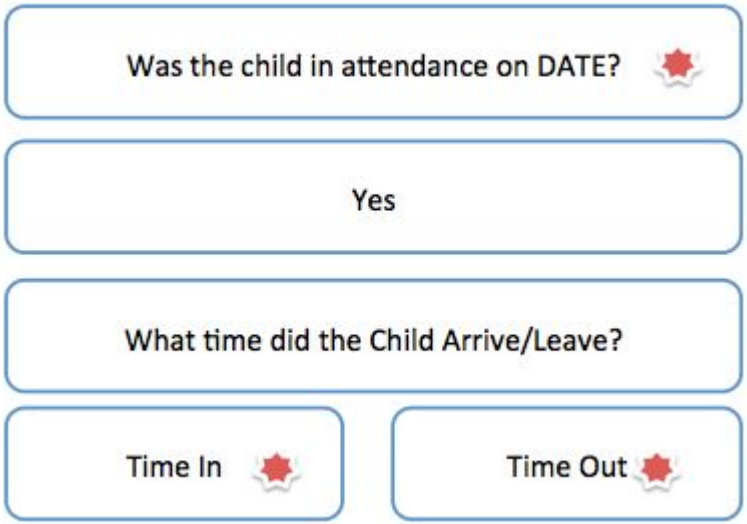
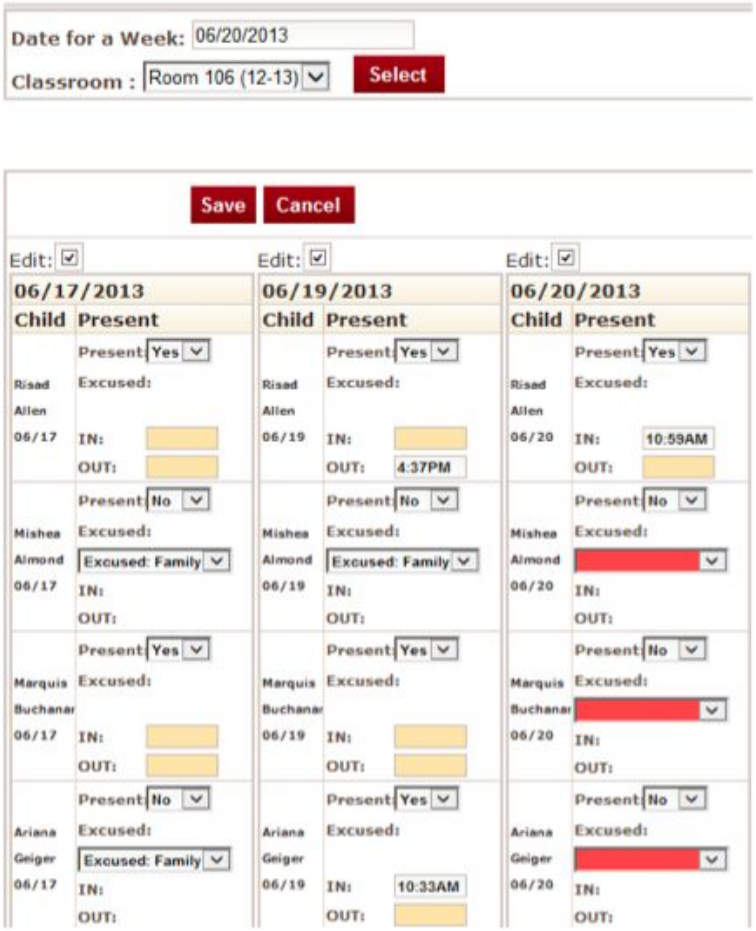
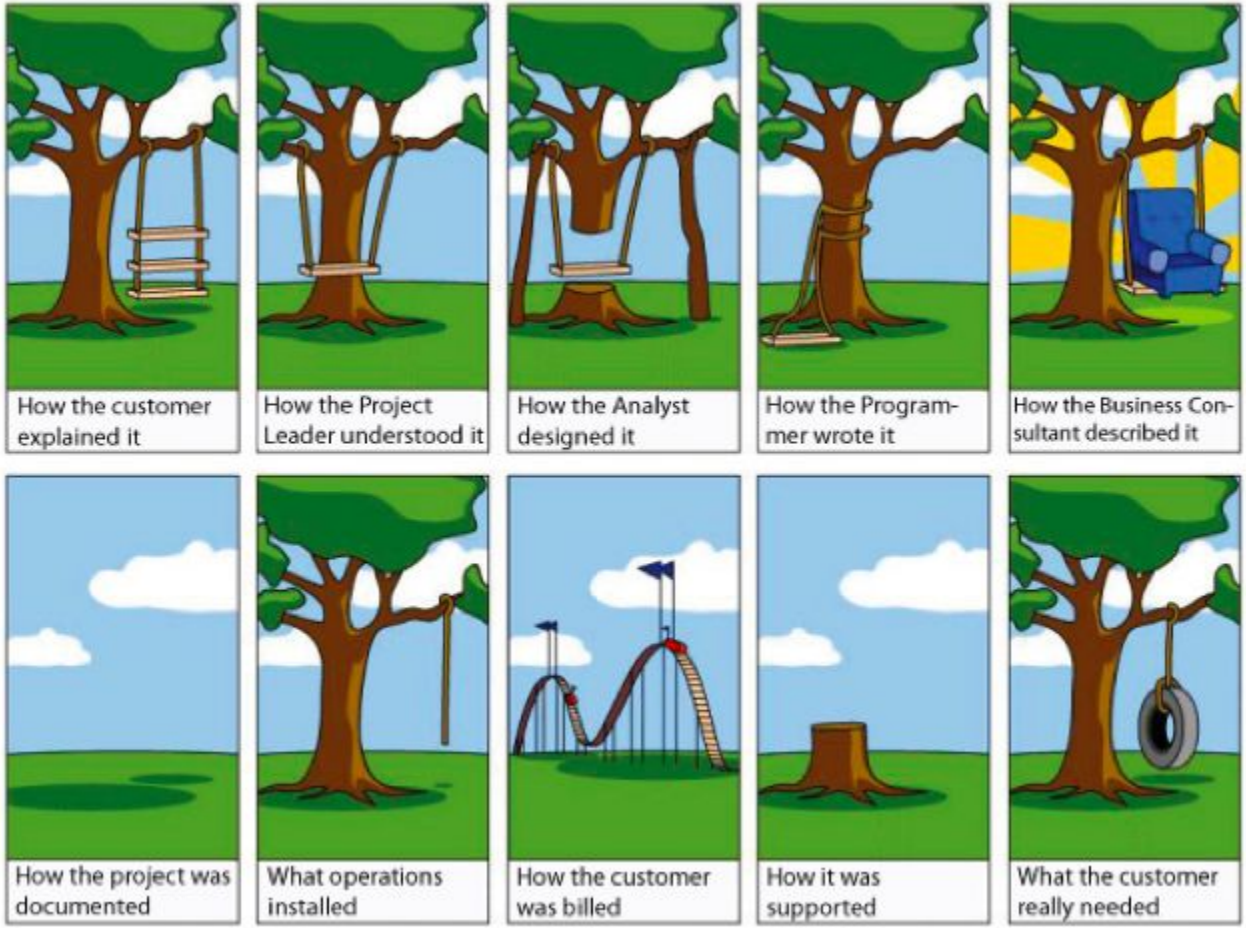
Staff Attendance Form : Student Not in Classroom



Staff Attendance Form: Student in Classroom




Date for a Week: 06/20/2013
Classroom : Room 106 (12-13)
Select
Save
Cancel
Edit:
Edit:
Edit:
06/17/2013
06/19/2013
06/20/2013
Child
Present
Risad Allen 06/17
Present: Yes
Excused:
IN:
OUT:
Risad Allen 06/19
Present: Yes
Excused:
IN:
OUT: 4:37PM
Risad Allen 06/20
Present: Yes
Excused:
IN: 10:59AM
OUT:
Mishea Almond 06/17
Present: No
Excused: Family
IN:
OUT:
Mishea Almond 06/19
Present: No
Excused: Family
IN:
OUT:
Mishea Almond 06/20
Present: No
Excused:
IN:
OUT:
Marquis Buchanar 06/17
Present: Yes
Excused:
IN:
OUT:
Marquis Buchanar 06/19
Present: Yes
Excused:
IN:
OUT:
Marquis Buchanar 06/20
Present: No
Excused:
IN:
OUT:
Ariana Geiger 06/17
Present: No
Excused: Family
IN:
OUT:
Ariana Geiger 06/19
Present: Yes
Excused:
IN: 10:33AM
OUT:
Ariana Geiger 06/20
Present: No
Excused:
IN:
OUT:


How the customer explained it
How the Project Leader understood it
How the Analyst designed it
How the Programmer wrote it
How the Business Consultant described it
How the project was documented
What operations installed
How the customer was billed
How it was supported
What the customer really needed

Who are the stakeholders for the Ounce?

- Children
- Parents
- Teachers
- Gov't
- Tax payers
- Researchers
- Staff collecting data
- IT
- School administration
-

User Stories

•As a <type of user> I want to <describe action> so that <reason>

•Ideally each stakeholder writes stories and prioritizes their own stories

Useful For:

- Product Development
- Project Management
- Project Scoping

Ounce User Stories

- As a parent, I want to get my child in the classroom quickly so that I can get on to my day
- As a teacher, I want the system to involve minimal monitoring so that I can focus on the children
- As a security professional, I want the attendance process to keep people moving through the entry way so that I can keep the children safe
- As an EHS program, we require that the adult sign a paper attendance sign in form in the classroom so that we meet the EHS requirements

Ounce Solution

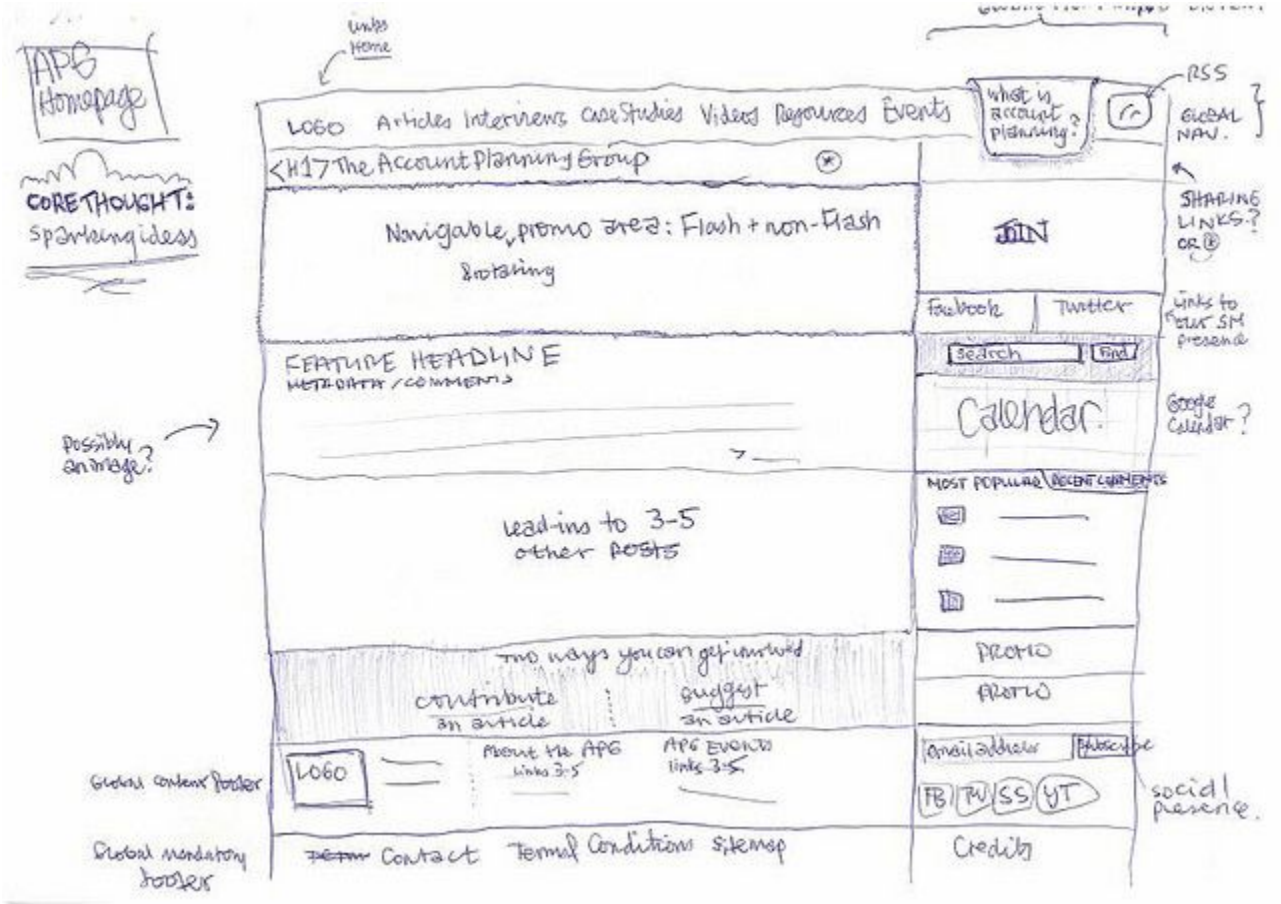
- Install off the shelf system (ChildPlus)
- Install Barcode readers for attendance
- Lead Developer spec'd cheap computers
- Several months of configuration and unreliable uptime
- What user stories were missing?

Example Stakeholders : Police

Example User Stories: Police

Wireframes

- “Messier” is better - people will give you more honest feedback if it feels like a WIP
- Tools :
  - White Boards
  - Pencil & Paper
  - Powerpoint
  - Balsamiq
  - InVision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Links Home
LOGO Articles Interviews CaseStudies Videos Resources Events
What is account planning?
RSS
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Navigable, promo area: Flash + non-Flash
Rotating
JOIN
SHARING LINKS? OR
Facebook
Twitter
Links to our SM presence
FEATURE HEADLINE
METADATA / COMMENTS
Search
Find
Calendar
Google Calendar?
Possibly an image?
MOST POPULAR
RECENT COMMENTS
lead-ins to 3-5 other posts
two ways you can get involved
contribute an article
suggest an article
PROMO
PROMO
Global content footer
LOGO
About the APG links 3-5
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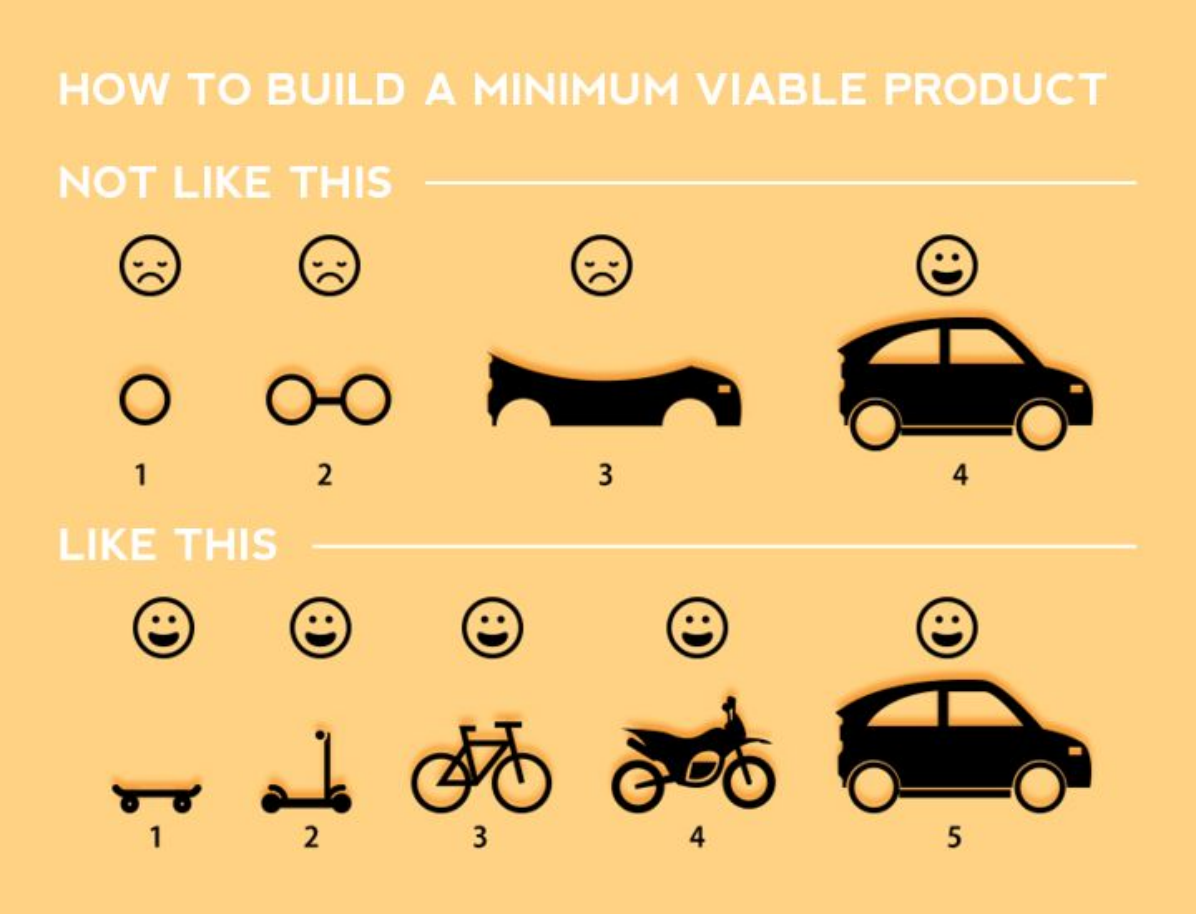
HOW TO BUILD A MINIMUM VIABLE PRODUCT
NOT LIKE THIS
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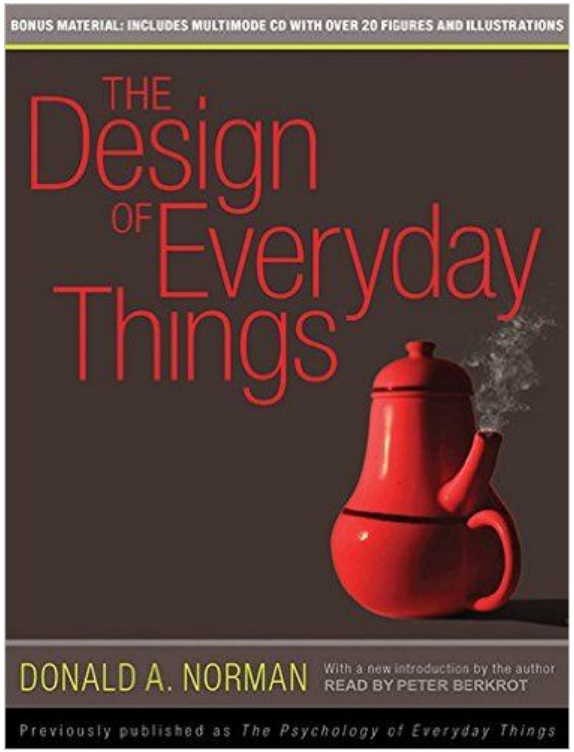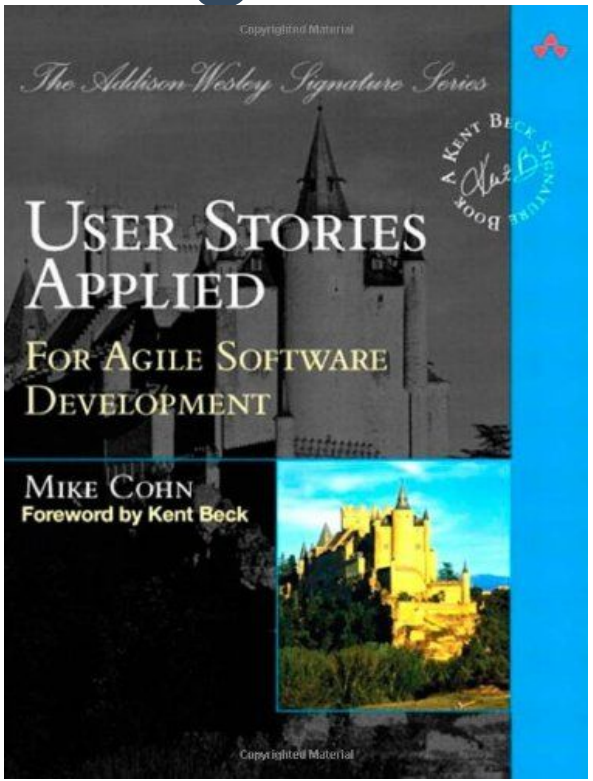
Recommended Reading