What's it like to work in an agile development team?



Sam Wessel & Neil Kilbride

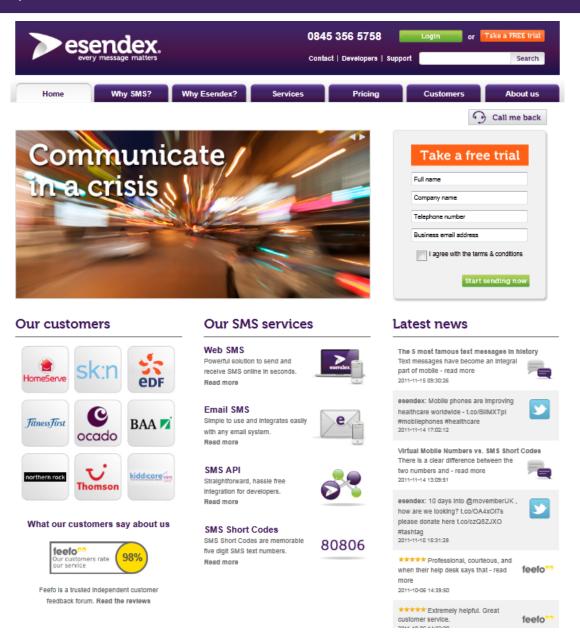
Who are we?





Neil Kilbride @neilkilbride

Who are sendex.?



UK's leading specialist business SMS provider

- Offices in Nottingham, Barcelona & Melbourne
- Almost 50 staff globally
- 200,000,000 message processed each year
- 6-700,000 messages processed each day
- 99% of messages processed within 5 seconds

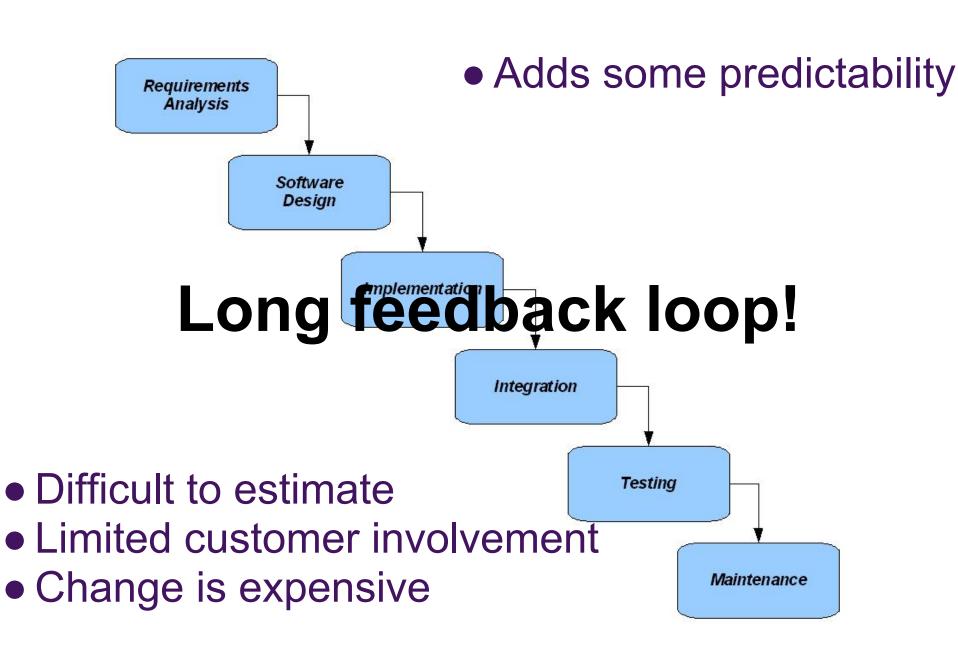
The Esendex development team



What is agile?

- Before agile...
- "Code & fix"
- Unpredictable
- Industry response: apply engineering principles

Waterfall



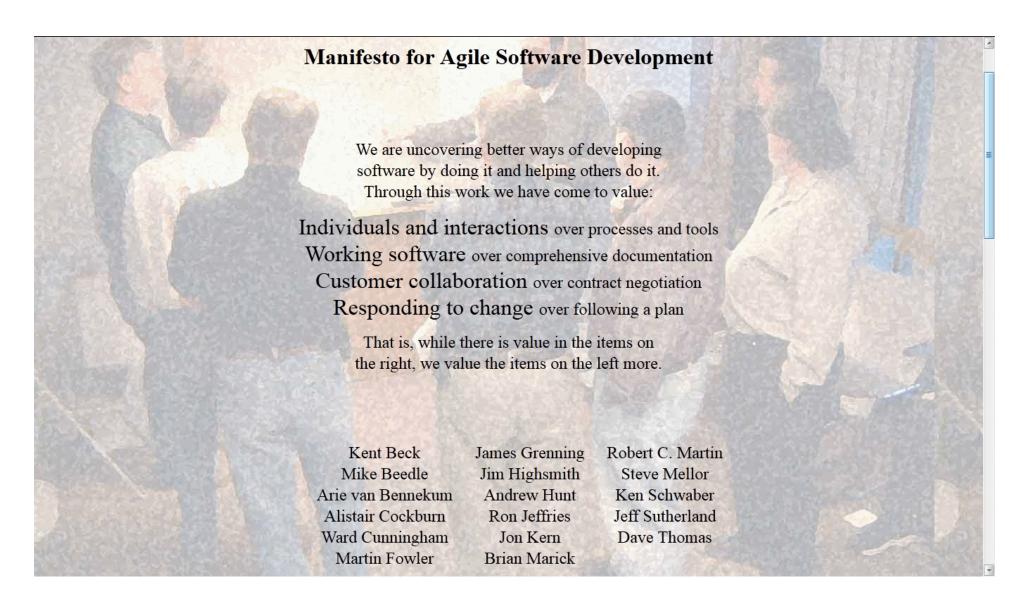
A worrying statistic...



G52GRP Suggested Timeline

Time Line, Autumn 2011 (1) Fr Time Line, Autumn 2011 (2) Time Line, Spring 2012 • No February: Main implementation effort; start writing up. *March:* Integration; testing and debugging; continue writing. O Late March: Fine-tune implementation; finish reports; prepare Open Day and Presentations. 30 March: Final reports and software due 2 April–27 April: Easter break 9 May: Open Day

Agile Manifesto

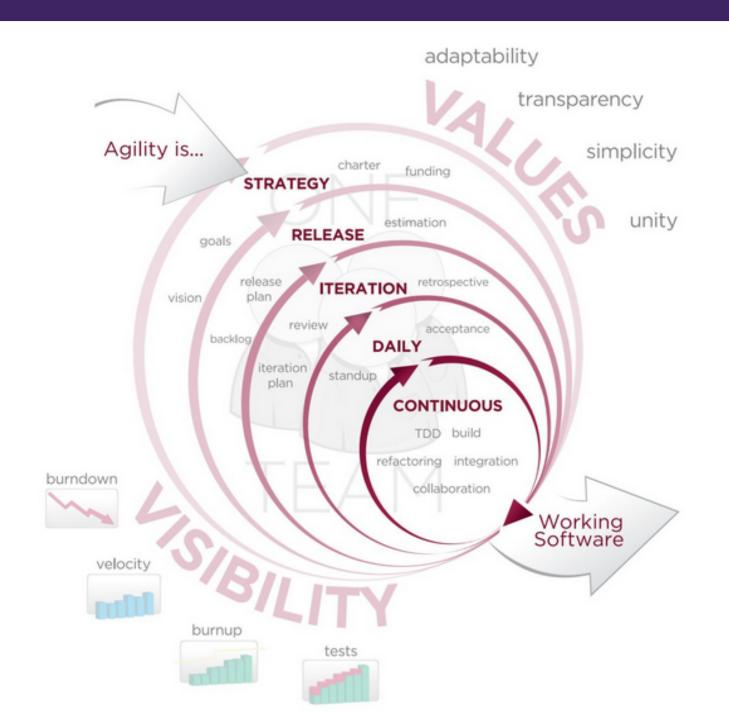


http://agilemanifesto.org/

Agile

"Agile software development is a group of software development methodologies based on iterative and incremental development, where requirements and solutions evolve through collaboration between self-organizing, cross-functional teams. It promotes adaptive planning, evolutionary development and delivery, a time-boxed iterative approach, and encourages rapid and flexible response to change"

Agile



So what about the group project?

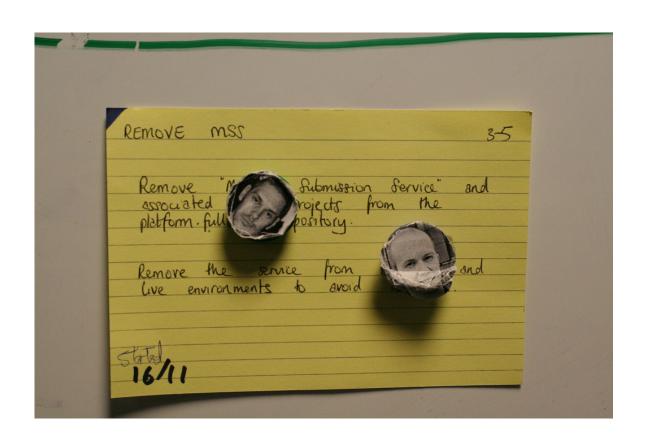
- Closest university-taught experience to working in a real software development team
- Assess requirements
- Organise team members' responsibilities
- Work together
- Deliver a working piece of software on time

> esendex. Project organisation

- Project planning
- Kanban
- Stand-up meetings
- Retrospectives

Project planning

- 2 week iterations
- Break problems into small, deliverable, estimable pieces
- Define acceptance criteria for each piece of work



Planning Poker



Planning Poker



Kanban 看板

- Lean manufacturing concept created by Toyota, meaning "sign board"
- Make progress visible & identify bottleneck
- Low tech!



Kanban 看板

Your own simplified version?

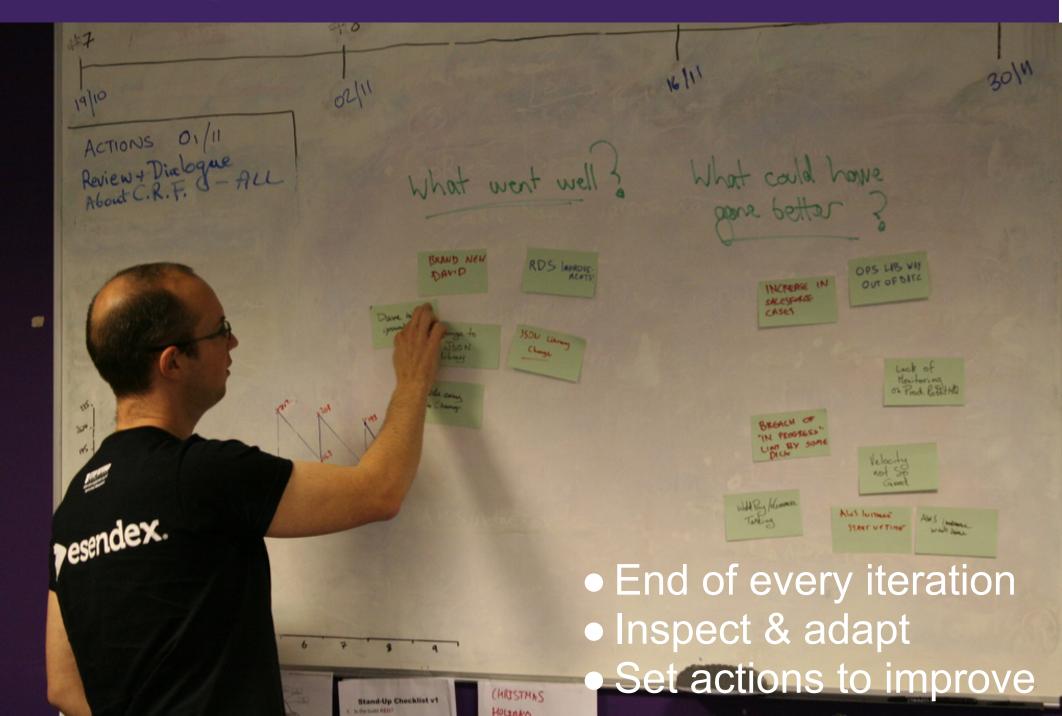


Typically story cards will go from TODO to LIVE in 2 days or less!

Stand-up meetings



Retrospectives





- Pair-programming
- Source control
- Test-driven development
- Continuous integration

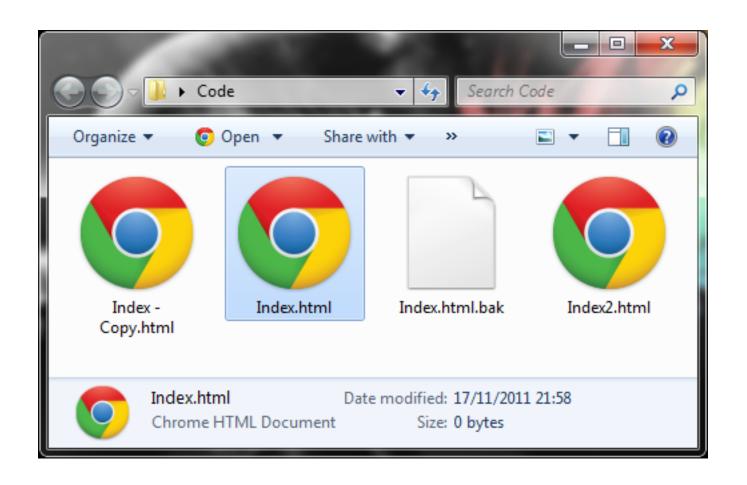
Pair-programming



Pair-programming

he only vacid measurement • Improve code quality city: WTFs/minute Share knowledge Maintain focus Fun & social review Review BAd code.

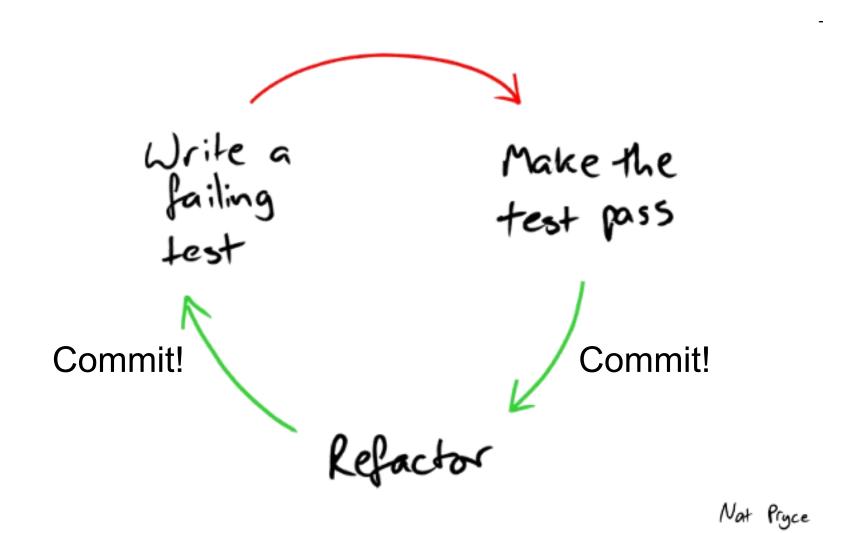
Source control



Source control

- Save incremental changes to your work
- Enables distributed working
- Safety
- You're crazy if you don't use it
- Top tip: commit regularly

Test-driven development



Test-driven development

- Provides code confidence
- Easy to isolate bugs
- Writing good tests forces you to write good code
- Tests are living documentation
- Time spent debugging is time wasted

Continuous integration

- Automate the build
- Make the build self-testing
- Instant feedback
- History of successful / unsuccessful builds
- Everyone can see what's happening
- Continuous deployment

Live demo

Do you want to know more?





Neil Kilbride

@neilkilbride

GeekUp Nottingham takes place on the first Monday of every month. It's a grass-roots knowledge sharing and networking social for folks involved or interested in all forms of technology and creative media.

18:30 Monday December 5th @ Cape (city centre)