Agile MDA: an obvious oxymoron or a winning approach
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Agile MDA - an Oxymoron?

yeah, of course it is, what were you thinking clegg??
Agile

• Driven by velocity
• Measured by code
  • that does what it’s supposed to do
    • correctness > defined by > tests
    • tests > defined by > use cases/stories
    • use cases > defined by > users
  • not driven by models
    • Agile models
      • aid thinking,
      • aid communication,
      • are disposable
MDA

- Driven by models
  - there’s a clue in the title
  - executable models?
- Measured by
  - the solution that does what it’s supposed to do
    - correctness  > defined by  > models
    - models  > defined by  > developers
    - models  > verified by  > users
- other measures:
  - full lifecycle productivity
  - repeatability
MDA v Agile

- **MDA**
  - Models
  - Traceability
  - Managing change
  - Process

- **Agile**
  - Collaboration (f2f)
  - Code
  - Welcoming Change

- **both value…**
  - Communication
  - Accuracy
  - Flexibility
  - Effectiveness
Where do Models add value

- Agile
  - Collaboration (f2f)
  - Code
- Welcoming Change
- People

Generated:
- 1-way
- round-trip
- synchronized
Where do Models add value

- Agile
  - Collaboration (f2f)
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Generated:
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visualization
Where do Models add value

- Agile
  - Collaboration (f2f) ✓
  - Code ✓
  - Welcoming Change
  - People

Visualizations
Where do Models add value

• Agile
  • Collaboration (f2f) ✓ ✓
  • Code ✓ ✓
  • Welcoming Change ✓
  • People ✓

Visualizations
Agile Modeling & Visualization

- To express requirements
  - Usually hand-drawn & transient
  - Primarily: Class, Sequence, Use Case & Activity
- Supplementary requirements techniques
  - Eg CRC, Robustness etc
- Technology specific models
  - database, pageflow, etc.
Hand-drawn vs tool-drawn

**Hand drawn**
- Fast,
- Flexible,
- Implicitly temporary

**Tool Drawn**
- Consistent
- Maintainable
- Can drive code

**use modeling tools**
- to communicate – reverse engineering
- to transform – code generation
- to develop – visual editors
JDeveloper demonstration
Summary

- Agile modeling because
  - it’s as easy as drawing it by hand
    - communicating to groups or remotely
  - it’s worth the extra investment up front
    - because it’ll generate code
  - it *is* the code
Agile References

- http://www.agilemanifesto.org
- http://www.agilealliance.org
- http://www.agilemodeling.com
- http://www.martinfowler.com/articles/newMethodology.html#N401
More Technical Information

- Visit Oracle Technology Network
  http://otn.oracle.com

- The JDeveloper Home page
  http://www.oracle.com/technology/products/jdev

- Register for the Java Newsletter
  http://otn.oracle.com/javanews