Adapting Agile for MERL

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What is Agile?

• From the manifesto:
  • *Individuals and interactions* over processes and tools
  • *Working software* over comprehensive documentation
  • *Customer collaboration* over contract negotiation
  • *Responding to change* over following a plan

• Agile is a set of principles that manifest as specific practices
“Sticky” Agile Practices

- **User Stories** – to better identify value
- **Prioritization** – to focus on the most valuable
- **Limiting Work in Progress (WIP)** – to ensure delivery
User Stories

Create Dialog to Identify Value
What is a User Story?

• A user story provides an clear understanding of the value the feature or function will bring to a stakeholder.

Example: *As a participant at MERL Tech DC, I want to connect with others in the field so that I can learn the latest techniques*.

• Initiates a conversation to create shared understanding.
User Story Template

As an [actor],
I want [capability],
so that [value].
“Three Cs” of User Stories*

• **Card** – Fit it on a note card
• **Conversation** – Talk about the story as a group
• **Confirmation** – Define acceptance criteria

* - Credit to Ron Jeffries

As an [actor],
I want [capability],
so that [value].
INVEST Model for User Stories

- **Independent** - stands alone
- **Negotiable** - not fixed; allows for innovation
- **Valuable** - brings value to the stakeholder
- **Estimable** - able to be estimated and prioritized
- **Small** - just a few days of work
- **Testable** - clear acceptance criteria
“Goldilocks” Approach to Stories

- Not too big
- Not too small
- Just right

https://upload.wikimedia.org/wikipedia/commons/3/3f/The_three_bears_pg_11.jpg
“Too Big” User Story Example

As a Donor,
I want to know your impact,
so that I can tell Congress.
“Too Small” User Story Example

As a Field-Based Program Manager, I want a button, so that I can run a report.
“Just Right” User Story Example

As a Field-Based Program Manager, I want to know which clinics have low stock levels for antimalarials so that I can plan next week’s deliveries.
Exercise: Writing User Stories

Work in teams to define user stories for your dashboard.

Using the example case study:
• Focus on one stakeholder group at a time.
• Write between 5 and 7 new user stories based on your perception of the stakeholders’ needs.
• Discuss these user stories with your teammates.
Prioritization

Focus on the Most Valuable
An Agile “Backlog”

- A prioritized list of all potential work
- Single source of requirements
- Ordered list of user stories, features, enhancements, fixes, etc…
- Refined over time
- Dynamic
- Frequently re-ordered
- Transparent, visible
A Backlog Visualized

- Next batch of stories
- Future Features
- Future Releases

Priority Order:
- Higher
- Higher

Granularity:
- Fine
- Coarse

Lower
- Lower
Planning Releases with a Backlog

Your Dashboard Backlog

- Release 1
- Release 2
- Release 3

Granularity:
- Fine
- Coarse

Iterations:
- Iteration 1
- Iteration 2
- Iteration 3
Exercise:

Prioritization

Work in teams to prioritize the user stories for your dashboard.

Using your user stories:
- Collaboratively stack rank them (most important on top, least important on bottom).

Think about:
- Who is your audience?
- What is most important to them?
- What criteria are you using to prioritize?
Limit WIP

Focus and Finish
Inspect and Adapt
All Agile Approaches Limit WIP

• Why?

• Because smaller amounts of work:
  • Provide faster feedback
  • Improve predictability
  • Accelerate the delivery of value

https://commons.wikimedia.org/wiki/File:Ramp_meter_from_Miller_Park_Way_to_I-94_east_in_Milwaukee.jpg
Lower WIP Allows Faster Delivery

**High WIP**: Work 8 jobs in parallel, with 4 team members splitting their time among them.

**Low WIP**: Focus 2 team members on each job, complete it, then move to the next.

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**Team Spread**: Results accrue at the end

**Team Focused**: Results accrue as projects complete
Agile Supports Adaptive Management

- A structured, iterative process of robust decision making in the face of uncertainty
- Reduce uncertainty over time through feedback and monitoring
MVP = Minimum Viable Product

- Minimum set of important information
- What can you release to your stakeholders (or most important stakeholder) to provide value?

https://commons.wikimedia.org/wiki/File:From_minimum_viable_product_to_more_complex_product.png
Selecting an MVP

Work in teams to define an MVP for your dashboard.

Using your prioritized list of user stories:
• Identify the 3 most important to place in your MVP.

Does the need to pick just 3 change your prioritization?
Questions?

Thank you!