Agile Methodology for Rice
Goals

• Understand the agile methodology and tools being used on the current project at Rice
• Discuss how your projects can benefit from agile
Agenda

• Calendar for Agile project
• Scrum Overview
  • Backlog Structure
  • User stories
  • Prioritization
  • Estimation
• Tools
• Your projects
Calendar

NOVEMBER 2018

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- **NOV 6th**: Sprint 1 Planning
- **NOV 12th**: Backlog Grooming 1
- **NOV 16th**: Sprint 1 Review
  - Sprint 1 Retrospective

DECEMBER 2018

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- **DEC 6th**: Sprint 2 Review
  - Sprint 2 Retrospective
- **DEC 7th**: Project Review
  - Lessons Learned

**Nov 7 – Dec 6**

Daily Standup Meetings
Scrum Overview

Scrum Roles
- Product Owner
- Scrum Master
- Dev Team

Scrum Sprint Cycle
- Sprint Planning
- Sprint Backlog
- Daily Scrum
- Sprint Retrospective
- Sprint Review
- Product Increment

A: Artifact
E: Event
As a Rice University CFO, I want to automatically know the amount of financial aid we provide, so that I can accurately report it to the Department of Education.

- Extract Financial Aid Data from data lake
- Anonymize data
- Auto assess data for accuracy
Writing a User Story

Functionality that is of value to the end user, written in the form of a scenario

• **As a** [end user of the required feature]

• **I want** [actual thing the user wants to be able to do once the feature is live]

• **So that** [why they want this feature / the benefit this feature brings]

For example:

As a frequent traveler I want see my upcoming trip details on my phone so that I can plan accordingly.
• Is the story “Ready” to start development?
• How many hours will it take to bring this user story to “Done”?
• Estimation can be done at the “Task” level then aggregated for User Story
• Rough Order of Magnitude

Estimation Example

<table>
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<tr>
<th>Complexity Level</th>
<th>Low Effort</th>
<th>Med Effort</th>
<th>High Effort</th>
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<tr>
<td>Low Complexity</td>
<td>1 - 0-8 hrs</td>
<td>1 - 0-8 hrs</td>
<td>24 hrs</td>
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<td>2 - 8-16 hrs</td>
<td>24 hrs</td>
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<td>Med Complexity</td>
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<td>Some unknowns, path to completion not very clear</td>
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<td>High Complexity</td>
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<td>Many unknowns, not been done before</td>
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Prioritization

Business Value- Relative value to the customer or business
  • Preference of this over that

Time Criticality- How user/business value decays over time
  • Is there a fixed deadline?
  • Will they wait for us or move to another solution?

Risk Reduction/Opportunity Enablement- What else does this do for our business
  • Reduce the risk of potential issue?
  • Is there value in the information we will receive?

Job Size- Time to complete the feature
  • How big/experienced is the team?
  • How many user stories are there?
## Kanban Board

<table>
<thead>
<tr>
<th>Story</th>
<th>Ready</th>
<th>Blocked</th>
<th>In Progress</th>
<th>Testing</th>
<th>Done</th>
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</thead>
<tbody>
<tr>
<td>User Story 1</td>
<td>Task A</td>
<td>Task B</td>
<td>Task C</td>
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<td>User Story 2</td>
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<td>Task D</td>
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<td>User Story 3</td>
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<td>Task E</td>
<td>Task F</td>
<td>Task G</td>
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<tr>
<td>User Story 4</td>
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<td>Task H</td>
<td>Task I</td>
<td>Task J</td>
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</table>

- **Ready**: A task is unable to be worked on while a roadblock exists.
- **Blocked**: The Dev Team is actively working to complete a task.
- **In Progress**: Development is complete and testing is in progress.
- **Done**: The task is complete and ready for inspection.

Tasks have definitions of done & are determined to be ready.
- Trello
- Slack
- Excel
- White board
What about your projects?