Agile Practices & Project Management

Objectives

- Demonstrate an understanding of different agile practices

- Describe how to use these agile practices with your teams

- Utilize strategies for building trust in teams

Portfolio Deliverables:

2-paragraph reflection in your portfolio on:

1. Details on project management strategies you used in your projects; What went well? What didn't go well?

2. How you incorporated feedback from your team members and what you learned about yourself in the process

What is Agile?

Agile is both a series of processes and a philosophy around how to develop software in a more efficient way.

And to explain it, let's start with what it's not. Agile is a response to the Waterfall method.

The Waterfall model is a sequential (non-iterative) design process in which progress is seen as flowing steadily downwards (like a waterfall) through the phases of conception, initiation, analysis, design, construction, testing, production/implementation and maintenance. Each phase is treated as a one-off activity and does not react well to change -- *Do you need to adjust something after you've already gone to the next phase? Too late.*

Needless to say, waterfall became an ineffective way to run software development. So, seventeen software developers came together and created the Agile Manifesto.

Read through the 12 principles of the Agile Manifesto.

- What do you notice about these principles? Do any particularly resonate with you?

- How might these principles be applied? How have you already seen them in action at Turing?

Exploring Agile Practices

Based on these principles, processes have been created for teams to embrace agile methodology:

- Scrum

- Tuckman's Stages of Team Development

- XP

Within your small groups, discuss your assigned process and then present to the whole group:

- Summarize how this process works -- what do you see as pros and cons?

- How would this process look at Turing?

Project Management Tools

There are also lots of project management tools available to reinforce these processes:

- Jira

- CA Technologies

- Waffle.io

How to Create Successful Teams

In order for teams to be successful, they need to build trust with each other. How do you do that? The first step is communication. Two very common practices that reinforce clear communication are having daily Stand Ups and regular Retros.

Stand Ups usually include sharing:

1. What you worked on yesterday

2. What you'll work on today

3. Anything that is blocking your progress or that you might need

Activity: Psychic Stand Up

Within groups of 4, take turns sharing what you accomplished yesterday. After one person shares, the person to their left will predict what they'll do today and the next person will predict what they could use help with. Complete 2 rounds of this. In the first round, start by sharing something that has nothing to do with Turing (running errands, taking public transportation, walking your dog), and in the second round, share something related to Turing.

Purpose: Building empathy within the group by having other predict what work and struggles we share

Debrief:

- What made it easier to predict someone's future?

- How did it feel when someone told you what you'd be doing or what you might need help with?

- What emotions did you notice feeling towards the people you predicted for?

Reflections & Applications

As your prepare for your next team project DTR, consider:

- How will you incorporate agile practices?

- What project management tool will you use?

- Your group should choose someone to be the project manager. What responsibilities will that individual have?