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
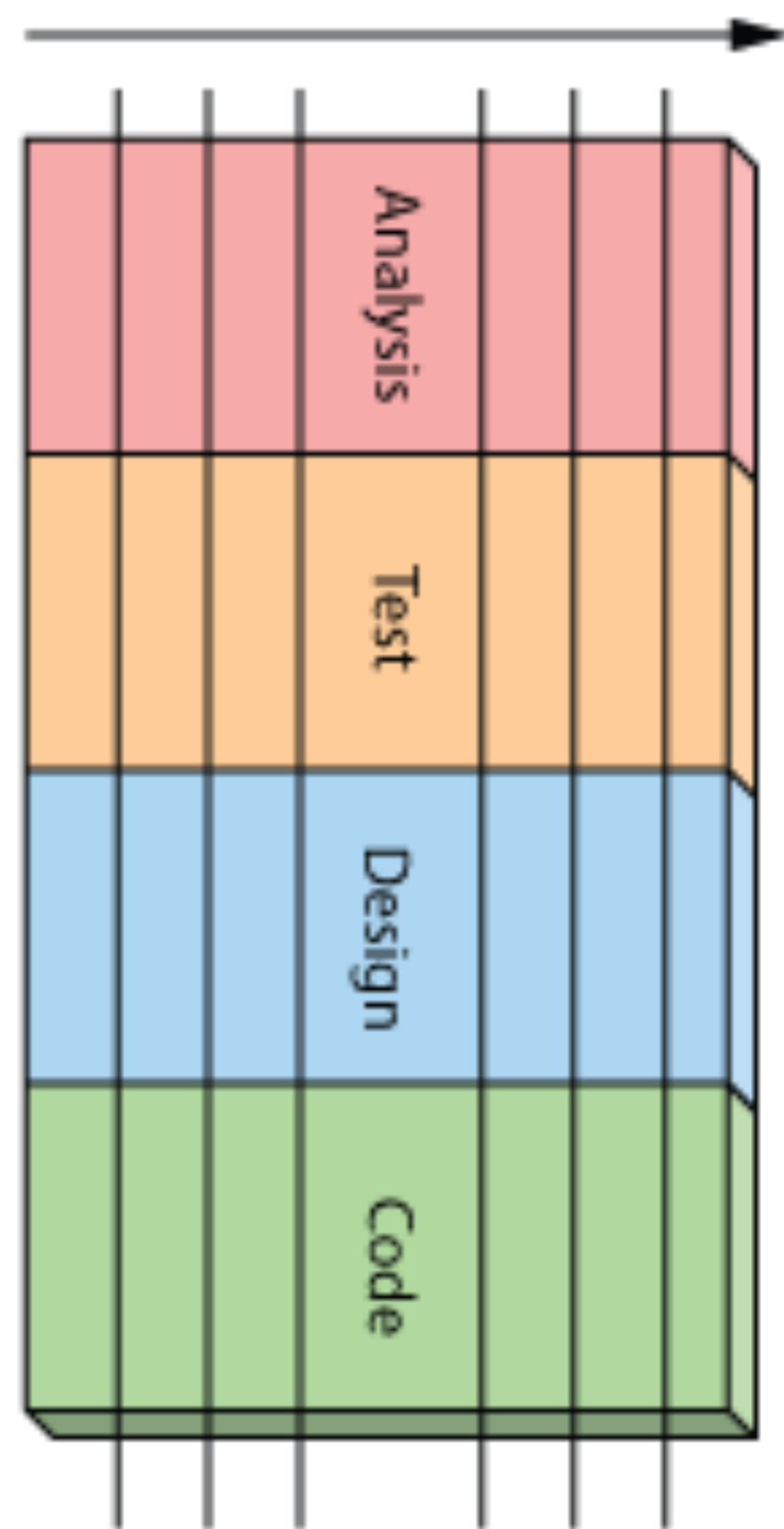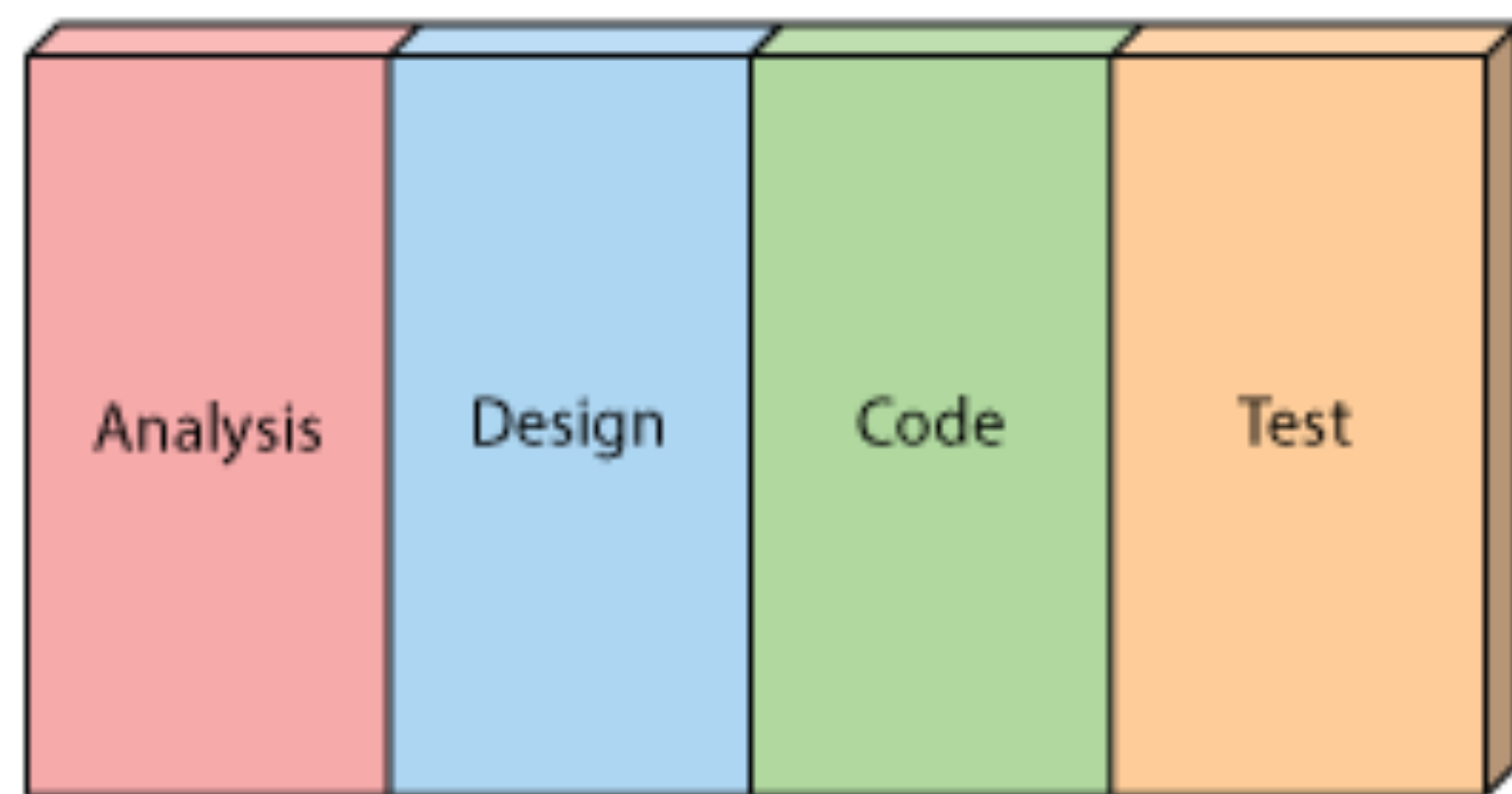
What is Agile?

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.

Traditional

Agile

Analysis | Design | Code | Test

Analysis

Test

Design

Code

One-off activities

Continuous activities

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?

- Think back to the successful teams you wrote about in your warmup questions. How have you already utilized this process? How would this process have helped your team?

- How can you utilize this process at Turing?

Project Management Tools

Think about how to reinforce these processes:

- Git Workflow for Teams

- Waffle.io

  - Convert the requirements of the project to stories/issues on Waffle (e.g. Average GPA - average_gpa returns the average GPA for all students)

  - Let the stories drive development, even copy and paste the story into the tests

Creating Succesful Teams

Create your own set of principles for how to use agile at Turing based on the Agile Manifesto:

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We are uncovering better ways of developing software by doing it and helping others do it.
Through this work we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.
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Reflections & Applications

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

- Which principle do you value the most? How will you work to exemplify it?

- 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?