

COMP1531



Coding Together - Working As A Team

Lecture 2.4

Author(s): Hayden Smith



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In This Lecture

- **Why?** 🤔
 - It's important to learn about methods to help a standard software team function
- **What?** 📄
 - Modern agile practices
 - Standups
 - Sprints
 - Task Boards
 - Meetings & minutes



Agile

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If you've heard of agile before, you've probably heard it in the context of "sprints" and "scrum masters" as if it's a process to follow that guarantees success.

For an introductory course we're not too interested in *processes*, but we're far more interested in *principles* and *philosophies*.



Agile

The Agile Manifesto.

The agile manifesto is a **philosophy** that informs the bedrock of most modern software engineering.

Manifesto for Agile Software Development

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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Agile

Yeah, but what is it really?...

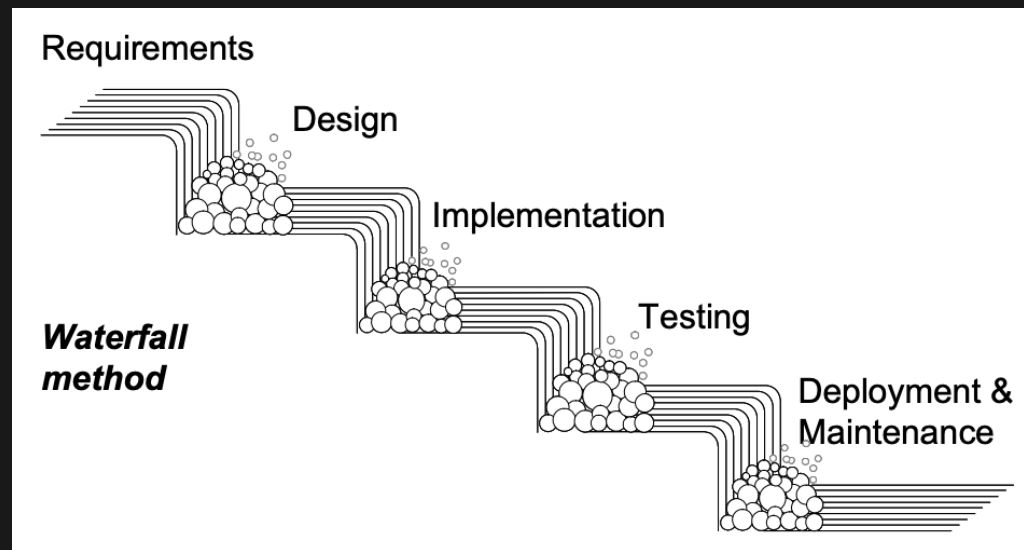
Agile is a **philosophy and culture** that are used to inform a range of different processes.

Whilst the principles are probably universal, the processes would vary depending on team and organisation.



Agile

When you think of classic engineering (e.g. building a big apartment building) you probably think of a **waterfall** approach to engineering.



In software engineering, whilst we do tend to move through projects in a somewhat similar way, what's more important is that we iterate much more frequently.



Agile

Your objective is to define features, plan, build, test, release, and start again - all as quickly as possible.

The aim of the game is to iterate as fast as possible whilst still maintaining standards of code quality and correctness.



Sprints





A sprint is a fixed amount of time (e.g. week, fortnight) where you set a number of tasks to be completed in the team.

- After that period is up, you review progress, and set tasks for the next sprint.
- Time is fixed, scope is flexible
- Plan only for the next sprint
- Typically have a release at the end of each sprint

This is one **process** you will often see adopted in many organisations. For COMP1531, we don't expect you to be so methodical.

Teamwork

Let's discuss some important parts of teamwork!

-  Staying in sync (Standups, Weekly Meetings)
-  Tracking (Task Boards)
-  Practices (Pair Programming)
-  Dynamics (Handling conflict)



Standups

- Frequent (often daily) short progress update meetings
- Traditionally, everyone stands up
- Answer 3 key questions
 - What did I do?
 - What problems did I face?
 - What am I going to do?

Standups

COVID-19 has accelerated a movement toward
asynchronous standups

- Advantages:
 - No need to find a suitable time for everyone
 - May work better for big teams
- Disadvantages:
 - "Blockers" take longer to be addressed
 - Easy to forget to give an update
 - Less personal
 - Updates from others can be missed



Weekly Meetings

Even if you have asynchronous standups, having a proper meeting once a week (in-person or on a call) is a good bedrock for good groupwork.

Find a time to meet at least once a fortnight, but for 1531 ideally once a week.

If you were adopting the sprint-approach to Agile, you might call this a sprint review or something similar. Calling it a weekly meeting is fine though.



Weekly Meetings

The structure of this meeting should typically consist of an agenda and subsequent discussion. During meeting it's usually a good idea to have someone take meeting minutes (i.e. "notes"). Meeting minutes will typically consist of documenting:

- Attendees
- (Optional) Agenda
- Discussion Points
- Actions



Task / Ticket Boards

Task Boards are pieces of software that are used to track tasks in terms of:

- Description of task
- State of task (backlog, to-do, doing, done)
- Assignee of task



Task / Ticket Boards





Task / Ticket Boards

- Available in GitLab (let's take a look!)
- Use them to store and track your progress



Pair Programming

- Two programmers, one computer, one keyboard
- Take it in turns to write code, but discuss it as they go
- Can result in better code quality
- Good for helping less experienced programmers learn micro-techniques from more experienced programmers

Handling Conflict

Human relationships are wonderful and messy. Family, friends, partners, and **COMP1531 team members**.

The most important thing you can do in a groupwork situation is constantly communicate with your team members and your tutor.



Handling Conflict

I Know More Than My Group Members...



Handling Conflict

I Know More Than My Group Members...

Take a break! Go work on some other assignments. Give them time to catch up. If you're really passionate then talk to your tutor about how you can express your talent in ways that aren't disruptive.

Handling Conflict

My Group Member(S) Aren't Doing Enough...

Handling Conflict

My Group Member(S) Aren't Doing Enough...

Communicate this to them on MS teams. Outline (politely) the problem you feel exists and ask them what their thoughts are and how you can work together to resolve it. If responses are not constructive, email your tutor privately.



Handling Conflict

My Group Member(S) Have Just Disappeared...



Handling Conflict

My Group Member(S) Have Just Disappeared...

Message your disappeared group members on MS teams. Ask them where they are etc. If they don't reply within 48-72 hours you and your available team should continue working as if they won't reappear. If they reappear and have lost the opportunity to work that's on them. You should avoid putting yourself in a situation where it's life or death for someone to reply within 48-72 hours

Handling Conflict

My Group Member(S) Are Merging In Broken Code...

Handling Conflict

My Group Member(S) Are Merging In Broken Code...

Message them and politely ask them to stop doing that. If they don't respond positively or change email your tutor.



Handling Conflict

My Group Member(S) Are Being Rude...



Handling Conflict

My Group Member(S) Are Being Rude...

Message them and politely ask them to stop doing that. If they don't respond positively or change email your tutor.

Handling Conflict

Notice the trend?

- Message the person(s) making yourself clear.
- Email the tutor if things aren't solved.

Feedback



Or go to the [form here](#).

