COMP1531

2.2 - Agile

What is agile?

Is a hotdog a sandwich?

agilemanifesto.org

https://agilemanifesto.org/

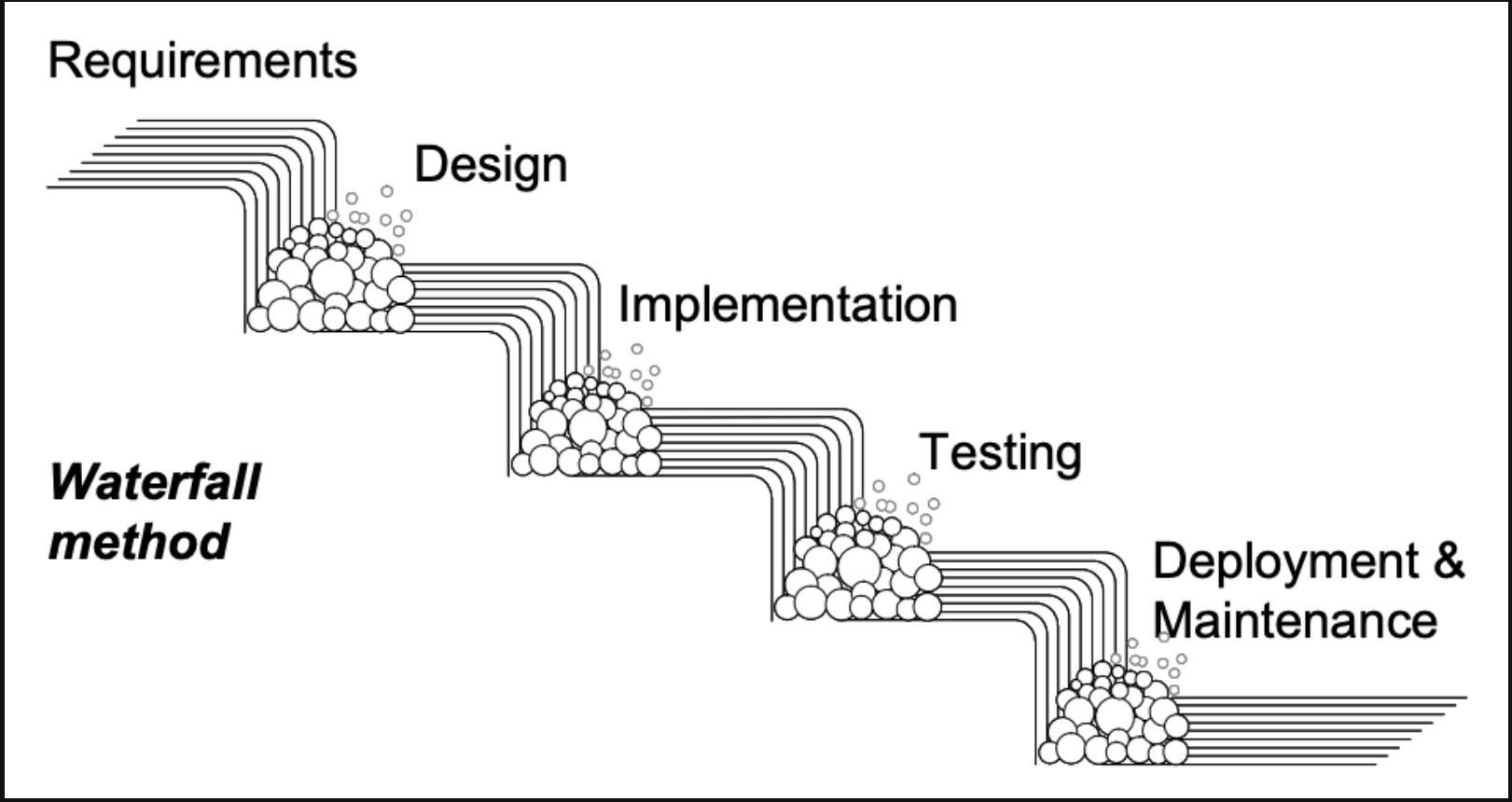
agilemanifesto.org/principles.html

https://agilemanifesto.org/principles.html

Yeah, but what is it really?

- Philosophy
- Practices
- Processes
- A cultural movement?

A brief history lesson



History is a lie

- "Waterfall" has never been proposed as a viable software methodology
- Reference: http://www.idinews.com/waterfall.html

Defining features (that people usually agree on)

- Iterative and incremental
- Quick turnover
- Light on documentation

So what is agile good for?

- Your resume?
- Changing requirements
- Delivering software on time
- Your project?

Agile Practices

- Practices today, processes later on
- We will focus on the ones you will find most helpful in your project

Standups

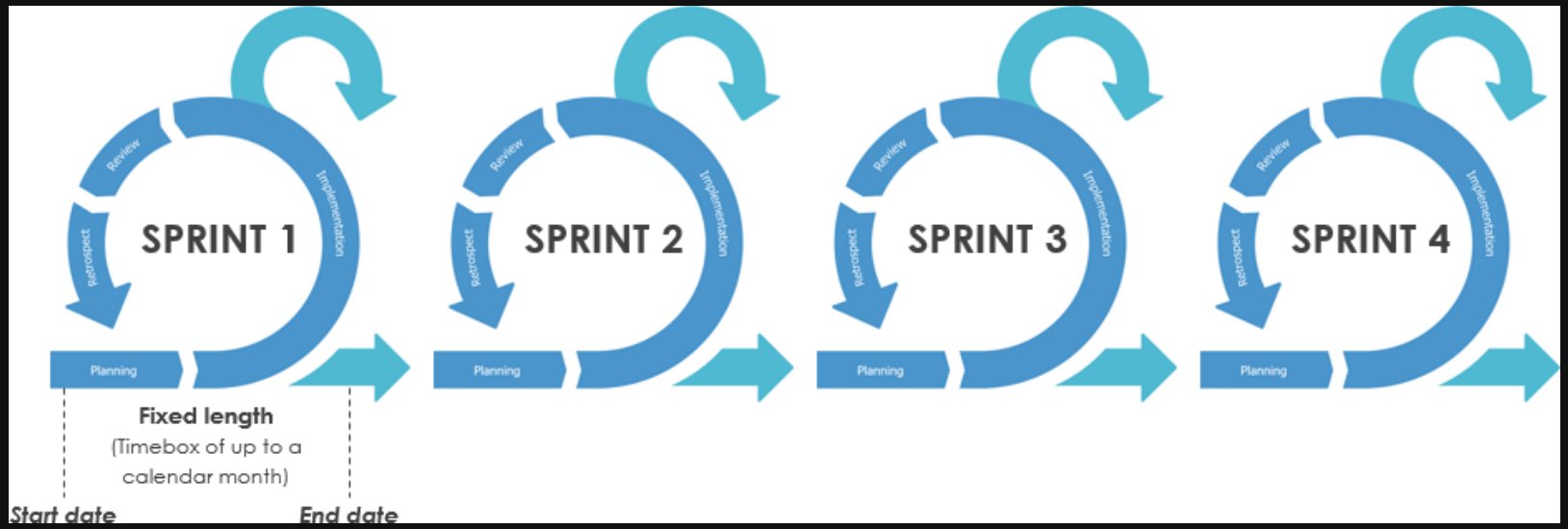
- Frequent (often daily) **short** progress update meetings
- Traditionally, everyone stands up
- Answer 3 key questions
  - What did I do?
  - What problems did I face?
  - What am I going to do?

Asynchronous Stand-ups

- A somewhat controversial topic
- 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

Sprints/iterations

- Time is fixed, scope is flexible
- Plan only for the next sprint
- Typically have a release at the end of each sprint



Task Boards

Taskboards

- Available in GitLab
- Use them to store and track your progress on user stories
- You don't need many columns. E.g.
  - Backlog
  - Todo
  - Doing
  - Testing?
  - Closed/Done

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

Test-Driven-Development (TDD)

- Writing tests *before* the implementation
- Write only enough code to make the next test pass
- Takes some practice
- We'll come back to this next week