

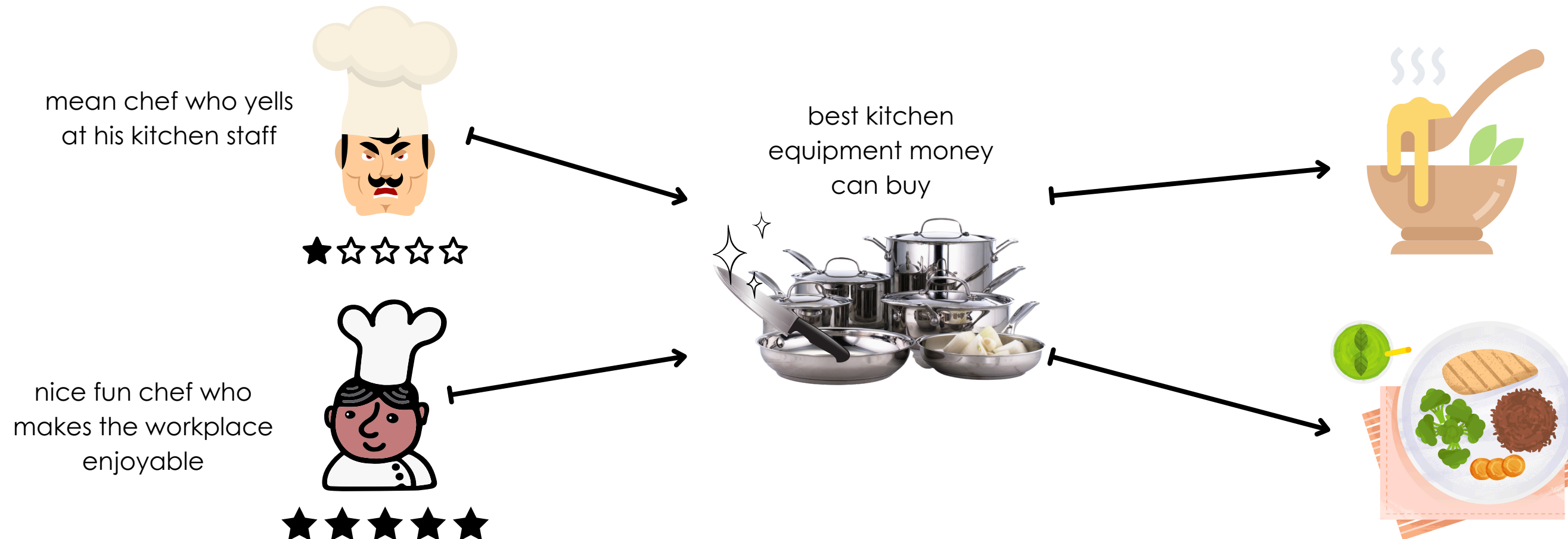
COMP 3550

1.4 — THE AGILE MANIFESTO & ITERATIVE DEVELOPMENT

Week 1: Software Development
Models & Agile Mindset

THE AGILE MANIFESTO

Individuals & Interactions > Processes & Tools

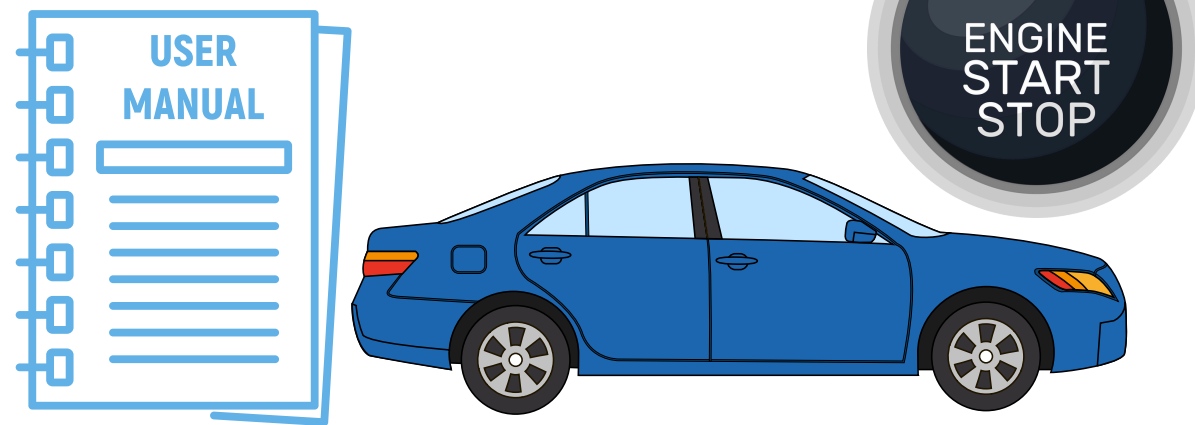


Even the fanciest of tools require a skilled chef to use them, otherwise you end up with gruel.

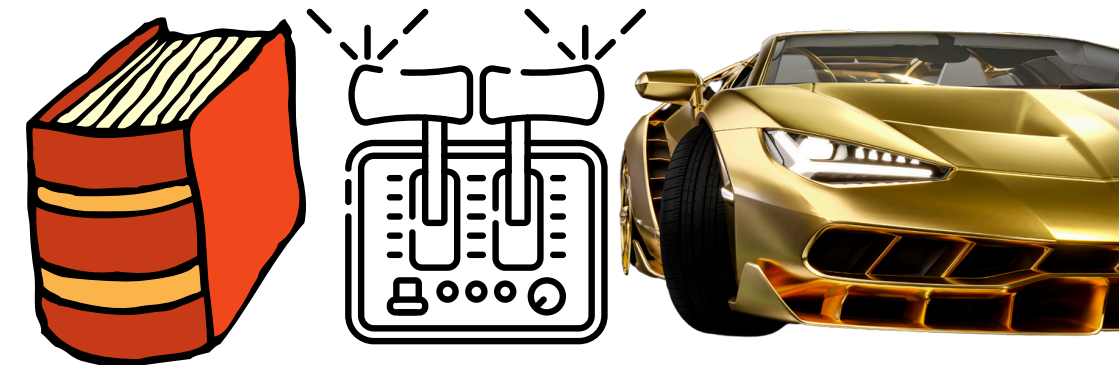
THE AGILE MANIFESTO

Working Software > Comprehensive Documentation

a tiny manual for this car that has intuitive design and easy to follow automotive interfaces within.



a giant manual for this car that works really well as long as you know how to drive it and what all the buttons do.



If it works as expected and intended, less documentation can be okay.

THE AGILE MANIFESTO

Customer Collaboration > Contract Negotiation

The bride asks for a cream coloured dress and:

- is given images to look at and
- shown samples before the dress is made



The bride asks for a cream coloured dress and does not see it again until the day of the wedding



Working with the customer ensures a happier ending

THE AGILE MANIFESTO

Responding to Change > Following a Plan

You see a traffic jam up ahead and pivot down a side road



You planned a roadtrip and refuse to take detours even though there is a traffic jam.



You might miss beautiful sights if you don't adapt

AGILE PRINCIPLES

1. Customer satisfaction through early and continuous delivery
2. Welcome changing requirements, even late in development
3. Deliver working software frequently
4. Business and developers must work together daily
5. Build projects around motivated individuals
6. Face-to-face communication is the most effective method
7. Working software is the primary measure of progress
8. Sustainable development, able to maintain pace indefinitely
9. Continuous attention to technical excellence and good design
10. Simplicity—the art of maximizing the amount of work not done—is essential
11. Best architectures, requirements, and designs emerge from self-organizing teams
12. Regularly reflect and adjust behavior for effectiveness

AGILE PRINCIPLES

Build Projects Around Motivated Individuals

"Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done."

Example:

An e-commerce company lets a motivated cross-functional team (designers, developers, marketers) own the site redesign — they pick their own tools, run experiments, and deliver better results than if micromanaged from above.

AGILE PRINCIPLES

Deliver Working Software Frequently

"Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale."

Example:

Think of a streaming service (like Netflix) rolling out small, regular updates — bug fixes, new features, UI tweaks — instead of launching one giant version every year.

This lets customers see value early and often, not just wait months for improvements.

ITERATIVE DEVELOPMENT

E.G. Making a Productivity App

Iteration	Features Delievered	Feedback
1	Basic task list + complete task	Users want deadlines
2	Add deadlines + sorting	Users want reminders
3	Add reminders + recurring tasks	Users ask for calendar sync

Deliver → Feedback → Improve → Repeat

AGILE IN THIS CLASS

- 3 iterations → each ~2–3 weeks
- Expect change, embrace incomplete deliverables
- COMMUNICATION WILL BE KEY
- Use retrospectives to improve process

PAUSE & REFLECT

Have you read the Agile Manifesto yet?
(see required readings)

Once you have, which value do you think will be the hardest to follow this term?"