

# Introduction to Agile Software Development

UFR

de **mathématique** et d'**informatique**

Université de Strasbourg

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# What is Agile methodology?

The Agile methodology is a project management approach that involves:

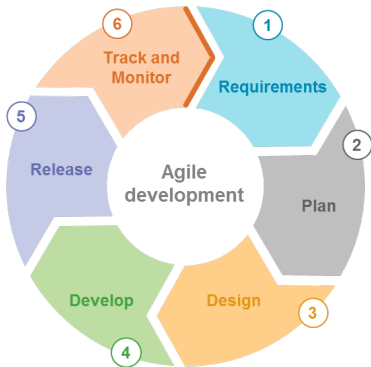
- breaking the project into phases
- emphasizes continuous collaboration and improvement

Teams follow a cycle of:

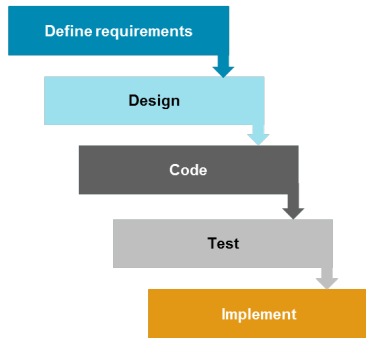
- planning
- executing
- evaluating

# Agile vs Waterfall

Agile

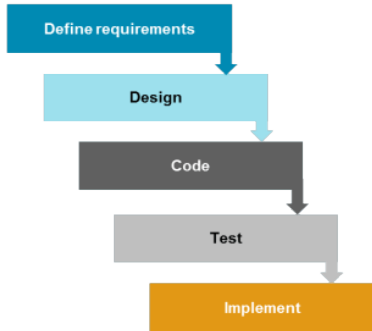


Waterfall



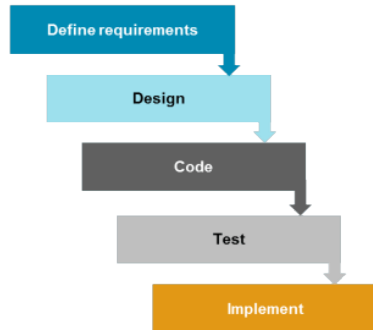
# Agile vs Waterfall

## Waterfall



# Agile vs Waterfall

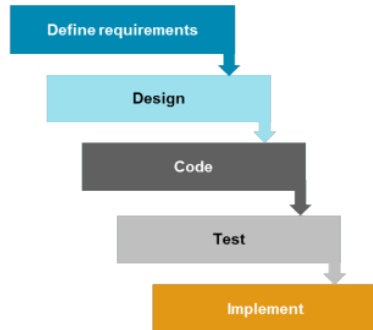
## Waterfall



- Emphasizes detailed upfront **planning**

# Agile vs Waterfall

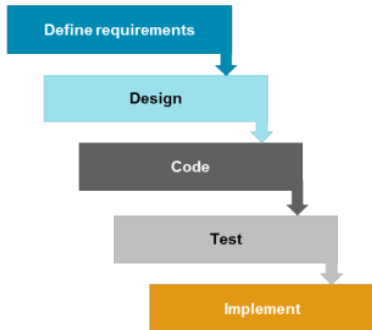
## Waterfall



- Emphasizes detailed upfront **planning**
- Progress is measured by meeting project **milestones**

# Agile vs Waterfall

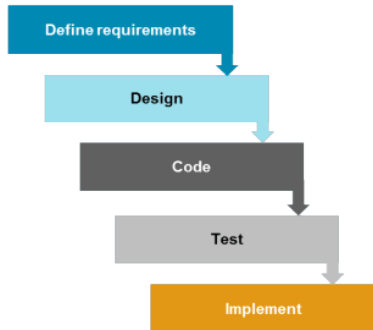
## Waterfall



- Emphasizes detailed upfront **planning**
- Progress is measured by meeting project **milestones**
- Rigidity can lead to **difficulties in responding to changes**

# Agile vs Waterfall

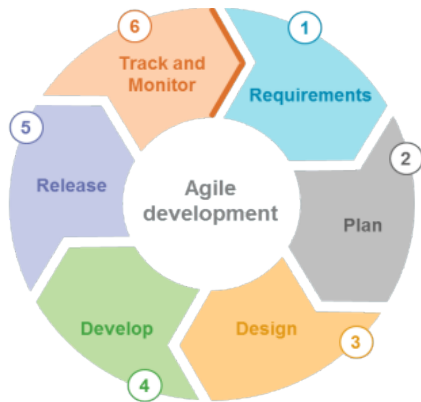
## Waterfall



- Emphasizes detailed upfront **planning**
- Progress is measured by meeting project **milestones**
- Rigidity can lead to **difficulties in responding to changes**
- Suitable for projects with **well-defined requirements**

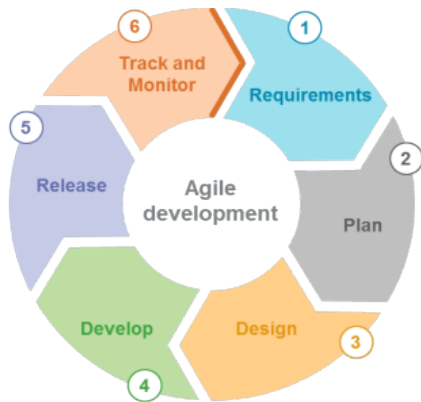


# Agile vs Waterfall



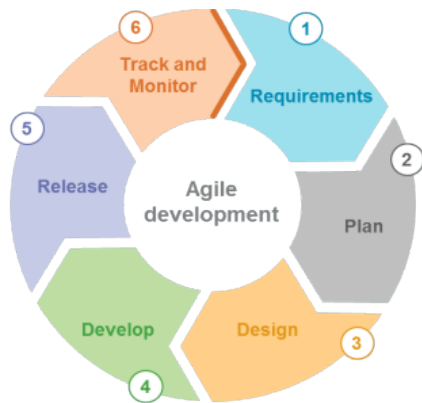
# Agile vs Waterfall

- **Iterative** and incremental development



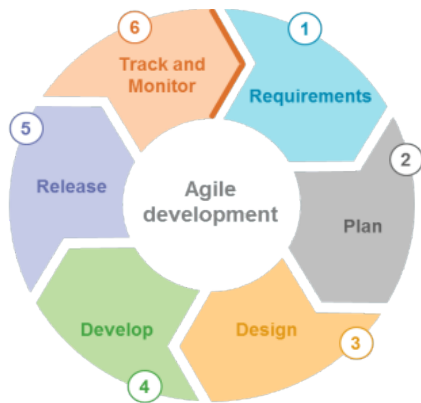
# Agile vs Waterfall

- **Iterative** and incremental development
- Customer **feedback** is incorporated throughout the process



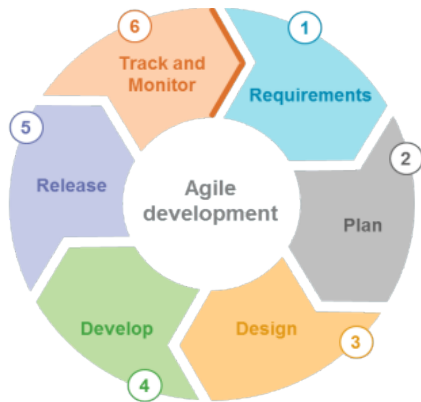
# Agile vs Waterfall

- **Iterative** and incremental development
- Customer **feedback** is incorporated throughout the process
- Embraces **flexibility** and customer collaboration



# Agile vs Waterfall

- **Iterative** and incremental development
- Customer **feedback** is incorporated throughout the process
- Embraces **flexibility** and customer collaboration
- **Adaptive approach** to changing requirements



# General Agile guideline

Marie

# The Agile Timeline

Antoine

# Pros and Cons of the Agile Method

Antoine



## Conclusion

Remain flexible, stay agile !

# References

- <https://www.youtube.com/watch?v=goJu-DFGJoo>
- <https://www.youtube.com/watch?v=1evfn3qTYGM>
- <https://project-management.com/agile-project-management/>