

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:

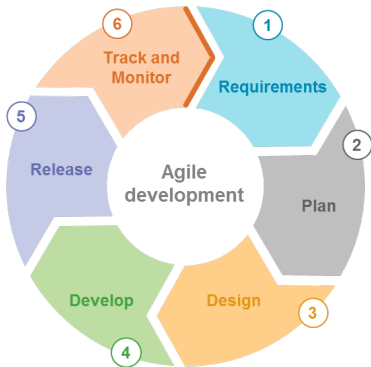
- breaking the project into phases
- emphasizes continuous collaboration and improvement

Teams follow a cycle of:

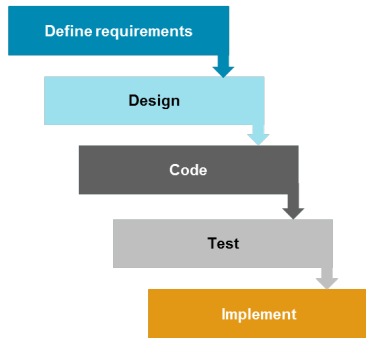
- planning
- executing
- evaluating

Agile vs Waterfall

Agile

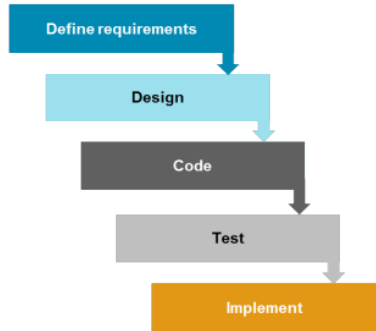


Waterfall



Agile vs Waterfall

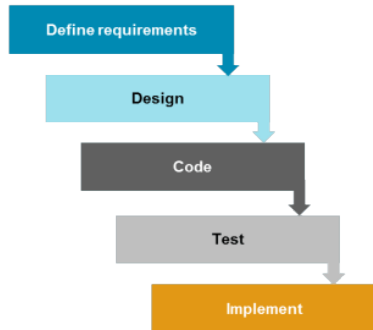
Waterfall



Agile vs Waterfall

- Emphasizes detailed upfront **planning**

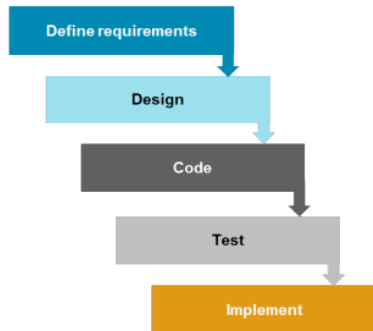
Waterfall



Agile vs Waterfall

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

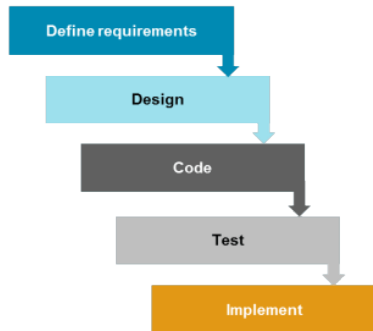
Waterfall



Agile vs Waterfall

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

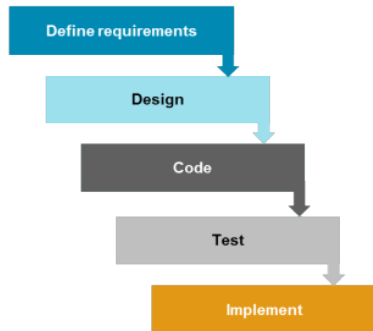
Waterfall



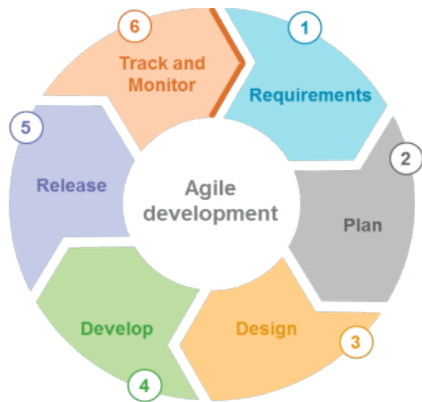
Agile vs Waterfall

- 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**

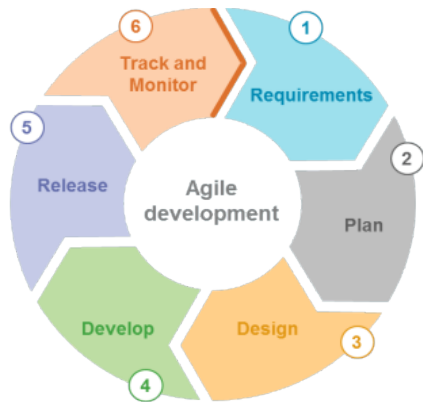
Waterfall



Agile vs Waterfall

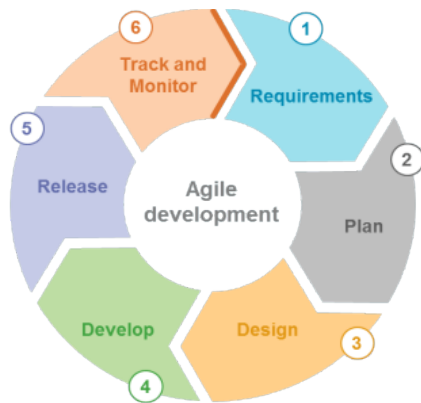


Agile vs Waterfall



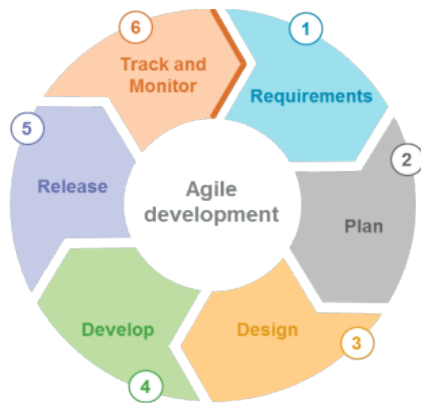
- **Iterative** and incremental development

Agile vs Waterfall



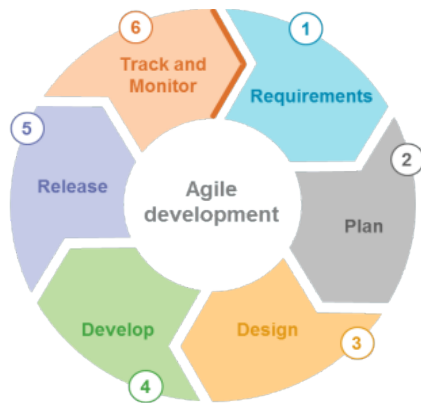
- **Iterative** and incremental development
- Customer **feedback** is incorporated throughout the process

Agile vs Waterfall



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- 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/>