

The Waterfall Method

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Introduction and history

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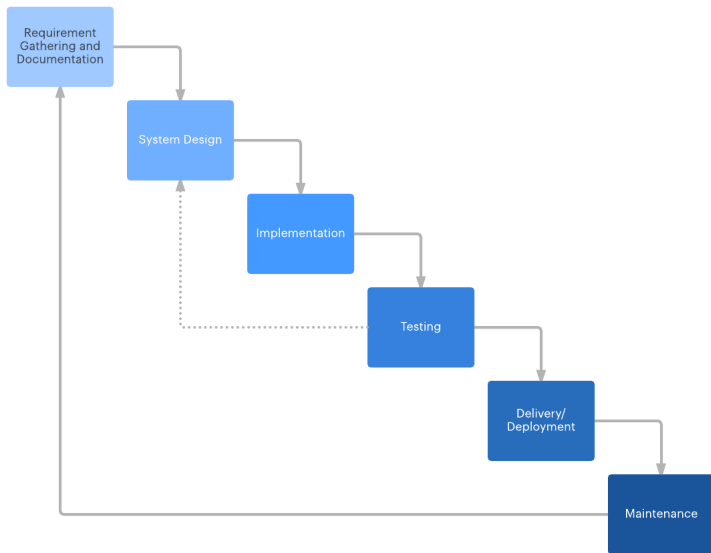
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- ▶ Term "waterfall" firstly used in a 1976 paper
- ▶ Made into a standard by the US Department of Defense in 1985.

Phases of waterfall project management



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- ▶ Requirement gathering and documentation

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- ▶ Simple
- ▶ Easy to implement
- ▶ Logical
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CONS

- ▶ Not Flexible
- ▶ Fail to satisfy expectations
- ▶ Vulnerabilities to changes and unexpected events

How we worked together

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- ▶ We divided the presentation in 4 parts :

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 - Intro : Corentin,
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 - Examples : Abdelhamid,
 - Pro/cons/conclusion : Antoine.
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- ▶ Videoconferences

Bibliography



[lucidchart.com](https://www.lucidchart.com).

What the waterfall project management methodology can for you.

<https://www.lucidchart.com/blog/waterfall-project-management-methodology>.



[planzon.fr](https://www.planzone.fr).

methodologie waterfall.

<https://www.planzone.fr/blog/quest-ce-que-la-methodologie-waterfall>.



[tutorialspoint.com](https://www.tutorialspoint.com).

Sdlc - waterfall model.

https://www.tutorialspoint.com/sdlc/sdlc_waterfall_model.htm.



[Wikipedia](https://en.wikipedia.org/wiki/Waterfall_model).

Waterfall model.

https://en.wikipedia.org/wiki/Waterfall_model.



[wimi teamwork.com](https://www.wimi-teamwork.com).

methode waterfall.

<https://www.wimi-teamwork.com/fr/blog/methode-waterfall-guide-introduction-debutants/>.