

In waterfall project management, the process unfolds in a linear, sequential manner, much like water flowing steadily downwards (hence the name "waterfall"). Here's a breakdown:

1. **Requirements Phase:** This is where all the project requirements are gathered and documented in detail. Think of it as laying the groundwork for the entire project. All stakeholders come together to define what needs to be done.
2. **Design Phase:** Once the requirements are clear, the design phase begins. Here, the project team creates a comprehensive design or plan based on the gathered requirements. It's like creating a blueprint for the project, outlining how everything will be structured and built.
3. **Implementation Phase:** With the design in hand, the actual work of building the project begins. Each component or feature is developed according to the specifications laid out in the design phase. It's akin to constructing the project based on the previously created blueprint.
4. **Testing Phase:** After implementation, the project undergoes thorough testing to ensure that it meets the defined requirements. This phase aims to identify and fix any defects or issues before moving forward. It's like quality assurance, ensuring that the project functions as intended.
5. **Deployment Phase:** Once testing is complete and all issues are resolved, the project is deployed or delivered to the client or end-users. It's the final step where the project is put into action or made available for use.

The key characteristic of waterfall project management is that each phase must be completed before proceeding to the next one. It follows a strict, linear progression, with little room for iteration or going back to previous stages once they're completed. This approach works well for projects with well-defined requirements and a clear understanding of what needs to be done from the outset.