

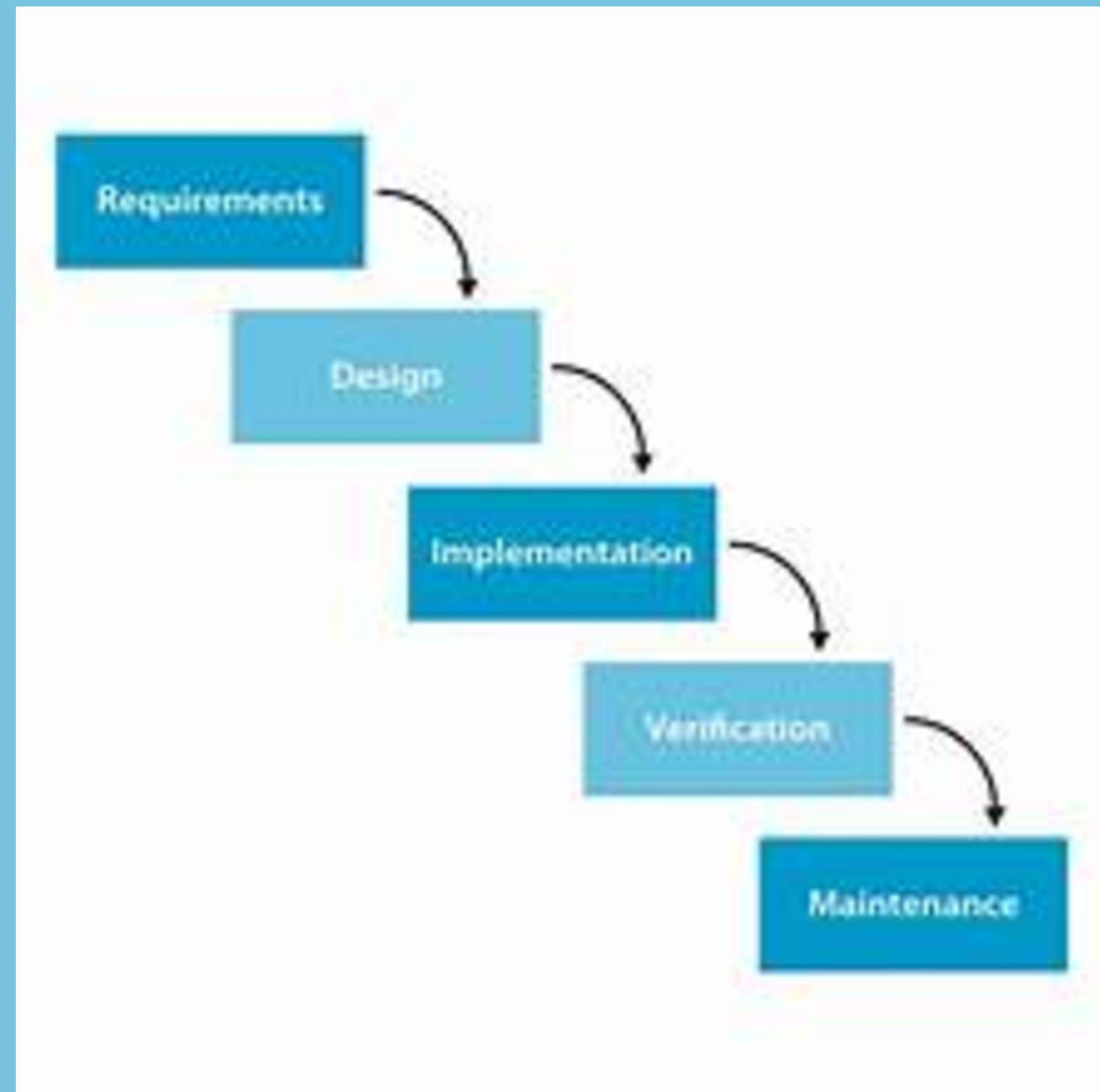
# Introduction to SDLC

- A structured process for software development.
- Stages : Includes Planning, Design, Implementation, Testing, and Maintenance.
- Advantage : Deliver high-quality software on time and within budget.
- Drawback: Can be time-consuming if not managed properly.



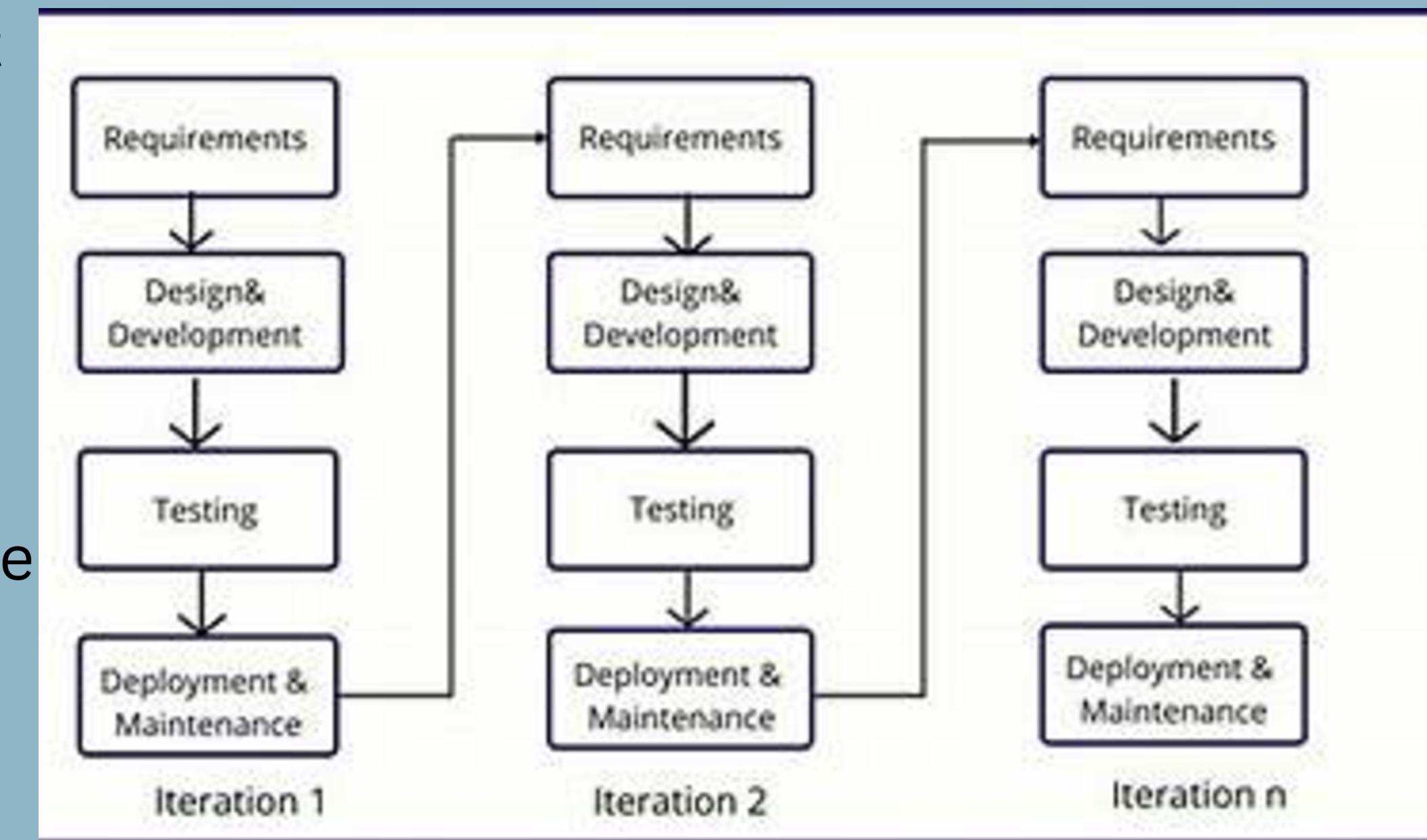
# Waterfall model

- Stages: Each phase must be completed before the next.
- Advantage: Ideal for small projects with clear requirements. Easy to understand and follow.
- Drawback: Difficult to make changes after a phase is completed.



# Iterative Model

- Cyclic Process: Development happens in repeated cycles.
- Advantage: Early testing and feedback are possible.
- Drawback: Can consume more resources due to continuous iterations.



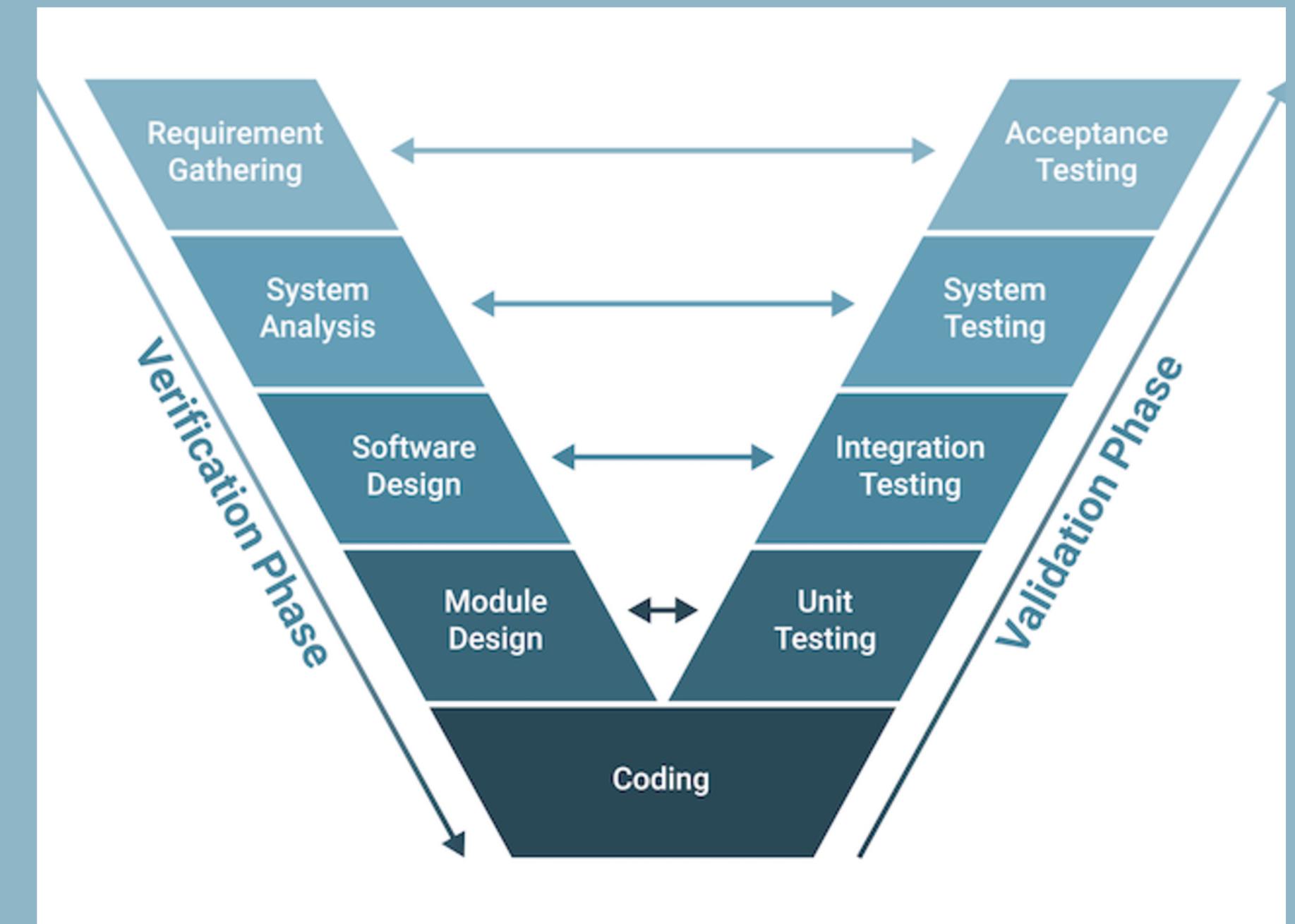
# Spiral Model

- Focuses on managing risks in each phase.
- Advantages :Elements of Waterfall and Iterative models.
- Drawback: Complex and expensive to manage.



# V-Model

- Verification & Validation: Testing at each stage of development.
- Advantage: Catches issues early in the process.
- Drawback: Rigid, with little room for changes or iteration.



# BestModel

- Depends on Project: No single model fits all projects.
- Iterative & Spiral: Suitable for complex requirements.