

Software Development Methodologies:

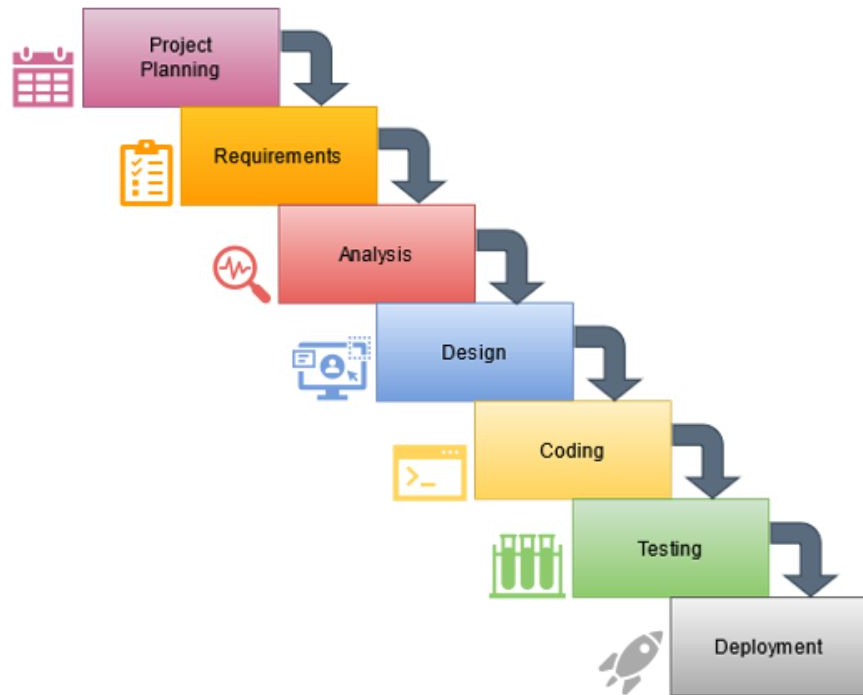
Waterfall vs Agile

The Waterfall Methodology

Traditional methodology
in long use

Breaks down software
development process into
sequential phases

Phases progress linearly in one
direction, each with distinct goals



Waterfall Methodology:

Pros and Cons

Pros

Pre-defined requirements, no surprises affect timelines and/or budgets

Well documented, easier transferring of project knowledge

Highly structured process with concrete milestones to track

Improved user experience

Increased productivity

Waterfall Methodology:

Pros and Cons

Cons

Requirements cannot be changed

Rigid approach with minimal client interaction

Waterfall Methodology:

When to use

Clear requirements up-front

Well-defined timeline and budget

Client is minimally involved

The Agile Methodology

Newer methodology (circa 2001)

"Manifesto for Agile Software Development" in 2001

Collaborative, short feedback loop

Hallmarks: Frequent iterations and incremental builds

The Agile Methodology

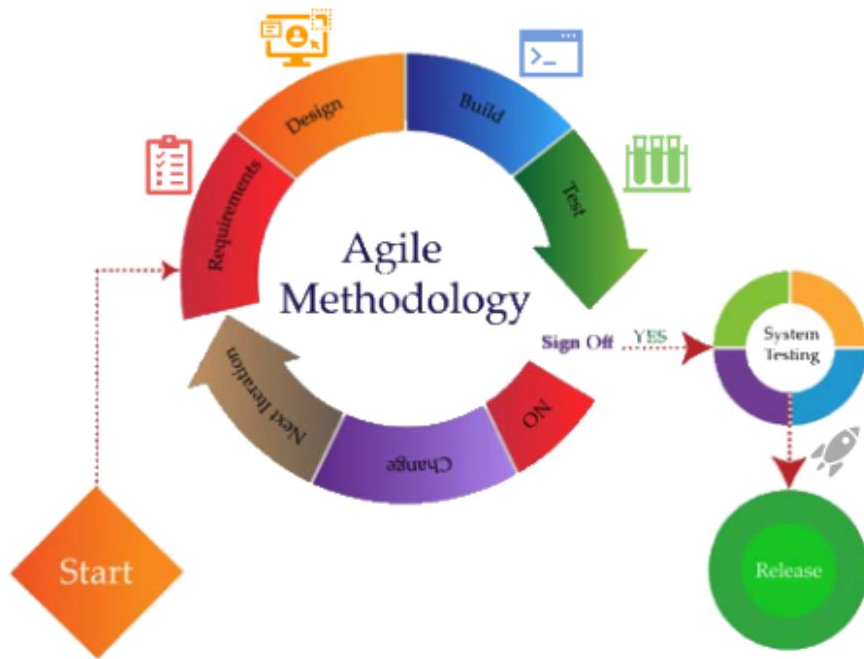
Iterate using “sprints”

Sprints generally last a few weeks

Defined deliverables completed by
end of sprint

Stakeholders review deliverables and
sign off for testing and release, or
request changes

If changes are requested,
new sprint begins



source: <https://www.outsource2india.com/software/mobile-applications/project-methodologies.asp>

Agile Methodology:

Pros and Cons

Pros

Higher client involvement results in improved client satisfaction

Requirements changes possible

Deliver product frequently

Sprint = progress

Enhance agility

Agile Methodology:

Pros and Cons

Cons

Clients may not have time/interest in being closely involved

Requires careful change management

Agile Methodology:

When to use

Lacks clear requirements

Client is highly involved in development process