

Comparative Infographic: TDD, BDD, and FDD

1. Test-Driven Development (TDD)

Approach:

- Write tests before writing code.
- Focuses on individual units of code.

Benefits:

- Early bug detection.
- Ensures code correctness.
- Improves code design.

Suitability:

- Best for: Developers focusing on code reliability and unit testing.
- Context: Small to medium projects with clear requirements.

Visual:

- **Cycle:** Write Test -> Write Code -> Run Test -> Refactor -> Repeat
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2. Behavior-Driven Development (BDD)

Approach:

- Write tests based on behavior specifications.
- Involves collaboration between developers, testers, and non-technical stakeholders.

Benefits:

- Ensures software meets user requirements.
- Enhances communication between team members.
- Produces readable specifications.

Suitability:

- Best for: Projects requiring close collaboration with stakeholders.
- Context: Medium to large projects with complex requirements.

Visual:

- **Cycle:** Write Behavior Scenarios -> Write Test -> Write Code -> Run Test -> Refactor -> Repeat