Assignment 2: Produce a comparative infographic of TDD, BDD, and FDD methodologies. Illustrate their unique approaches, benefits, and suitability for different software development contexts. Use visuals to enhance understanding.

Test-Driven Development (TDD), Behavior-Driven Development (BDD), and Feature-Driven Development (FDD) are three distinct methodologies in software development. Each has its unique approaches, benefits, and suitability for different contexts.

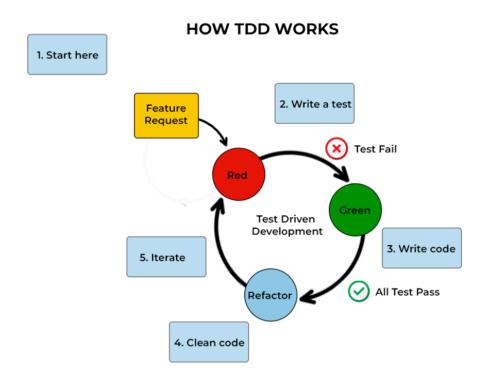
Comparative Infographic: TDD, BDD, and FDD Methodologies

1. Test-Driven Development (TDD)

Approach:

- Write tests before writing the actual code.
- Develop code to pass the tests.
- Refactor code to improve quality while ensuring tests still pass.

Visual:



Benefits:

Ensures code quality and reliability.

- Encourages simple, clean code design.
- Early detection of bugs.

Suitability:

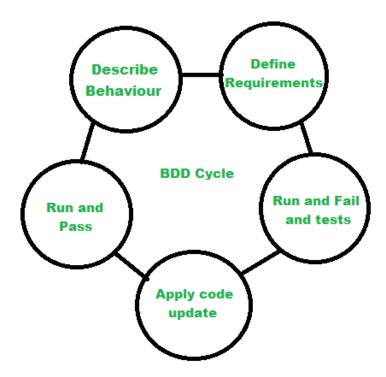
- Ideal for projects requiring high reliability and maintainability.
- Suitable for unit testing and detailed code verification.

2. Behavior-Driven Development (BDD)

Approach:

- Focus on the behavior of the application from the end user's perspective.
- Use natural language descriptions (Given-When-Then) for test cases.
- Collaboration between developers, testers, and non-technical stakeholders.

Visual:



Benefits:

- Enhances communication and collaboration.
- Ensures alignment with business requirements.
- Improves test coverage and understanding of user behavior.

Suitability:

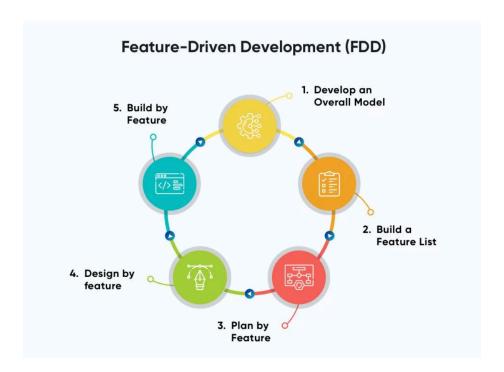
- Ideal for projects with significant stakeholder involvement.
- Suitable for acceptance testing and ensuring user requirements are met.

3. Feature-Driven Development (FDD)

Approach:

- Develop software features iteratively.
- Each feature is designed, built, and tested in short iterations.
- Focus on delivering tangible, working features.

Visual:



Benefits:

- Delivers frequent, tangible progress.
- Facilitates clear milestones and project tracking.
- Encourages modular design and development.

Suitability:

- Ideal for large, complex projects with many features.
- Suitable for iterative and incremental development.