**Day3- Assignment 2:**

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**Problem:**

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.

**Solution:**

**1 . Test-Driven Development (TDD)**

1. Write tests before writing code.
2. Iterative and incremental development.

**Benefits**:

Ensures code coverage and reliability.

Improves code quality and design.

Facilitates refactoring and maintenance.

**Suitability:**

Agile projects requiring frequent iterations.

Projects with a focus on code quality and test coverage.

**2. Behavior-Driven Development (BDD)**

1. Focuses on behavior rather than implementation details.
2. Collaboration between stakeholders, developers, and testers.

**Benefits**:

Improves communication and collaboration.

Enhances understanding of user requirements.

Provides living documentation.

**Suitability:**

Projects with complex business logic.

Customer-facing applications with changing requirements

**4. Feature-Driven Development (FDD)**

1. Iterative and incremental software development process.
2. Based on client-valued features.

**Benefits**:

Emphasizes on timely delivery of tangible results.

Scalable for large teams and projects.

Encourages domain expertise

**Suitability**:

Large-scale enterprise projects.

Projects requiring structured development phases.