

## Assignment 2

**1. 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.**

### Infographic: Comparative Analysis of TDD, BDD, and FDD Methodologies

#### 1. Introduction:

- Understanding Development Methodologies
- Brief overview of Test-Driven Development (TDD), Behavior-Driven Development (BDD), and Feature-Driven Development (FDD).
- A comparison of TDD, BDD and FDD to help choose the best approach for your software project.

#### 2. Methodology Overview:

- Visual representation of each methodology with icons and titles.

#### 3. Approach:

- Visual comparison of the approach highlighting the distinctive features:
  - TDD: Writing tests before code.
  - BDD: Collaborative approach, focusing on behavior.
  - FDD: Feature-centric development, iterative delivery.

#### 4. Key Components:

- Detailed breakdown of key components:
  - TDD: Test cases, Red-Green-Refactor cycle.
  - BDD: Scenarios, Given-When-Then format, user stories.
  - FDD: Feature lists, domain object modeling, progress reporting.

#### 5. Benefits:

- Comparative visual showcasing the benefits:
  - TDD: Early bug detection, improved code quality, faster development cycles.
  - BDD: Enhanced collaboration, clear communication, focus on user needs.
  - FDD: Clear feature scope, iterative delivery, increased productivity.

## 6. Suitability:

- Visual representation of the contexts where each methodology shines:
  - TDD: Small to medium-sized projects, projects with well-defined requirements.
  - BDD: Complex projects with changing requirements, teams with diverse stakeholders.
  - FDD: Large-scale projects, projects with evolving requirements, feature-driven development.

## 7. Examples:

- Brief case studies or examples showcasing real-world applications of each methodology.

## 8. Comparison Matrix:

- Tabular representation summarizing the differences in approach, key components, benefits, and suitability.

## 9. Conclusion:

- Summarize the strengths and considerations for each methodology.
- Encourage flexibility in methodology selection based on project needs and team dynamics.