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.

Ans:

Aspect	Test-Driven Development (TDD)	Behavior-Driven Development (BDD)	Feature-Driven Development (FDD)
Approach	Write tests before writing code, focusing on small, incremental changes.	Collaboration between developers, testers, and business stakeholders using a common language (e.g., Gherkin syntax).	Iterative and incremental approach focusing on building features based on client needs.
Benefits	Early bug detection, improved code quality, faster development cycles.	Improved communication, clearer requirements, alignment with business goals.	Enhanced project visibility, faster delivery of features, scalability.
Suitability	Well-defined requirements, projects requiring extensive testing.	Projects requiring close collaboration between technical and non-technical team members, user-centric features.	Large-scale projects with multiple development teams, projects with evolving requirements.
Key Principles	Writing tests first, simplicity, refactoring.	Collaboration, automation, continuous feedback.	Client-centric features, domain object modelling, iterative and incremental development.

Visual Elements:

- Use distinct colours or shading for each methodology to enhance clarity.
- Incorporate icons or illustrations to represent key concepts or practices of each methodology.
- Consider using check marks or stars to denote the suitability or effectiveness of each methodology for different contexts.