

**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.

Comparison of TDD, BDD and FDD:

<b><i>Test Driven Development (TDD)</i></b>	<b><i>Behavior-Driven Development (BDD)</i></b>	<b><i>Feature-Driven Development (FDD)</i></b>
<b>Approach:</b> <ul style="list-style-type: none"> <li>• Write tests before writing code.</li> <li>• Tests focus on specific functions or units of code.</li> <li>• Refactor code iteratively to pass tests.</li> </ul>	<b>Approach:</b> <ul style="list-style-type: none"> <li>• Define behavior using human-readable scenarios (Given-When-Then).</li> <li>• Develop tests from user stories and requirements.</li> <li>• Focus on business value and user perspective.</li> </ul>	<b>Approach:</b> <ul style="list-style-type: none"> <li>• Identify and prioritize features based on client requirements.</li> <li>• Develop features iteratively using short cycles.</li> <li>• Emphasize on feature modelling, design, and implementation.</li> </ul>
<b>Benefits:</b> <ul style="list-style-type: none"> <li>• Early bug detection and prevention.</li> <li>• Improved code quality and design.</li> <li>• Increased developer confidence.</li> </ul>	<b>Benefits:</b> <ul style="list-style-type: none"> <li>• Improved collaboration between developers, testers, and business stakeholders.</li> <li>• Enhanced clarity of requirements and user expectations.</li> <li>• Better alignment of development with business goals.</li> </ul>	<b>Benefits:</b> <ul style="list-style-type: none"> <li>• Efficient management of feature development.</li> <li>• Clear visibility of progress and milestones.</li> <li>• Scalable for large and complex projects.</li> </ul>
<b>Suitability:</b> <ul style="list-style-type: none"> <li>• Best for small to medium-sized projects.</li> <li>• Well-suited for projects with clear specifications.</li> <li>• Ideal for projects where test coverage is critical.</li> </ul>	<b>Suitability:</b> <ul style="list-style-type: none"> <li>• Suitable for projects with complex business logic.</li> <li>• Ideal for projects where stakeholder involvement is crucial.</li> <li>• Well-suited for teams practicing Agile methodologies.</li> </ul>	<b>Suitability:</b> <ul style="list-style-type: none"> <li>• Best for large-scale enterprise projects.</li> <li>• Ideal for teams with well-defined feature sets.</li> <li>• Suitable for projects requiring a structured development process.</li> </ul>

Each methodology offers a unique approach to software development, catering to different project requirements and team dynamics. Understanding the strengths and weaknesses of each can help teams choose the most suitable approach for their specific context and goals.