Assignment – 05

TDD,BDD,FDD METHODOLOGIES:

1.TEST DRIVEN DESIGN:

Approach:

.Write a failing unit test first (Red).

.Write minimal code to pass the test (Green).

.Refactor the code.

.Repeat the cycle.

Benefits:

.Reduces bugs early in the code.

.Improves code quality and structure of the code.

.Makes refactoring in safer manner.

Suitable for:

.Backend logic.

.Developer-focused, test-heavy environments.

.Projects where correctness and low-level details are key.

2.BEHAVIOR DRIVEN DESIGN:

Approach:

.Define behavior in plain language (e.g., Given-When-Then)

.Automate those behavior specs as tests

.Implement code to satisfy expected behavior.

Benefits:

.Improves communication between developers, testers, and business stakeholders

.Aligns development with business goals.

.Tests are easier to read and understand.

Suitable for:

.Teams involving both technical and non-technical members

.Projects with user-facing features

.Agile development environments

3.FEATURE DRIVEN DESIGN:

Approach:

.Build features based on a complete feature list

.Design and develop each feature in short iterations

.Emphasizes delivering working features frequently

Benefits:

.Clear progress tracking.

.Scales well for large teams.

.Encourages planning and discipline.

Suitable for:

.Large or enterprise-level projects.

.Teams that value structure and documentation.

.Feature-rich applications.