

1. Refactor

Refactoring is "the process of changing a software system in such a way that it does not alter the external behaviour of the code yet improves its internal structure. The concept of refactoring covers practically any revision or cleaning up of source code.

One approach to refactoring is to improve the structure of source code at one point and then extend the same changes systematically to all applicable references throughout the program. The result is to make the code more efficient, scalable, maintainable or reusable, without actually changing any functions of the program itself. The basic purpose of code refactoring is to make the code more efficient and maintainable. This is key in reducing technical cost since it's much better to clean up the code now than pay for costly errors later. Code refactoring, which improves readability, makes the QA and debugging process go much more smoothly. And while it doesn't remove bugs, it can certainly help prevent them in the future.

And this is why there is a need for routine code refactoring.

2. TDD (Test Driven Development)

Test driven development is an iterative development process. In TDD, developers write a test before they write just enough production code to fulfil that test and the subsequent refactoring. Developers use the specifications and first write test describing how the code should behave. It is a rapid cycle of testing, coding, and refactoring. The key ingredient for being effective with test-driven development is understanding what it truly is. TDD means letting your tests drive your development . You can do that with unit tests, functional tests, and acceptance

tests. It leads you to create very different kinds of tests that tend to be more flexible to change in the future because you're verifying behaviours rather than testing pieces of code.

3. WBS (Work Breakdown Structure)

A work breakdown structure (WBS) is a visual, hierarchical and deliverable-oriented deconstruction of a project. It is a helpful diagram for project managers because it allows them to work backwards from the final deliverable of a project and identify all the activities needed to achieve a successful project.

All the steps of a project are outlined in the organizational chart of a work breakdown structure, which makes it an essential project management tool for planning and scheduling. The final deliverable rests on top of the diagram, and the levels below subdivide the project scope to indicate the phases, deliverables and tasks that are needed to complete the project. Project managers make use of project management software to lay out and execute a work breakdown structure.

Levels Of WBS:

The Top Level: The project title or final deliverable.

Controls Account: The main project phases and deliverables.

Work Packages: The group of tasks that lead control account level.

Activities: The tasks needed to complete in the work package.