Automation of Code Review

Overview:

The quality of the code is directly correlated with the performance and maintainability of the product. When the defect is identified earlier, then cost to fix the defect will be less and it will reduce the overall cost of the application.

Tetrasoft in collaboration with client consciously trying to improve the code quality by enforcing the use of coding standards in the application code. For verifying the standard coding practices and automate the code review process Tetrasoft implemented Code Assessment Tool , which will help to release the high quality code at the minimal code review efforts.

Business Problem:

Huge amount of manual code review efforts and waiting for code review approvals can cost project timelines and non standard coding practices in application code causing critical production failures.
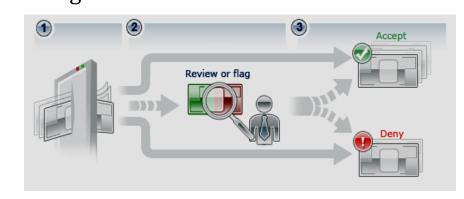
Analysis of alternatives:

❖ Defining the coding standards and performing the manual code review before moving the code to next higher environment. For this numerous trainings are required to the developers and reviewers to follow the standard coding formats.

❖ Automating the code review process and integrating the assessment process in the code migration.

Recommended Solution:

Opted for automating the code review process and integrating the code assessment in code migration process, which will ensure the error free code is migrated to the next higher environment.

Implementation:

Coding standards have been identified and implemented according to the technology. Process implemented to perform specific standards verification depending upon the given input code, which will allow the developers to check the coding errors before going to the migration.

Business Value:

❖Reduced the manual review efforts of the Code reviewers by 90% towards the review process.

❖ Code Assessment process ensured the standard coding formats followed in the code and production issues have been reduced considerably.

❖ Standard coding formats allowed to achieve simplified code maintainability.