



CODE QUALITY ANALYSIS

Overview

The Client is a US-based car company. It designs, manufactures, and sells smart and connected premium electric vehicles, driving innovations in next generation technologies in connectivity, autonomous driving and artificial intelligence.

Business Need

- ✔ To improve the quality of code and code coverage
- ✔ To maintain coding standards and coding conventions
- ✔ To reduce complexity of code and easy understanding of code
- ✔ Improve coverage and prevent defect leakages into production to ensure world class quality product
- ✔ To thoroughly review Source code in order to discover hidden vulnerabilities and design flaws

Client Situation

- ✔ Customer experienced several code quality issues with its development team
- ✔ Coding conventions and coding standards were not properly done by Dev team because of timelines.
- ✔ While executing the scripts faced code defects and bugs
- ✔ Code refactoring is inconsistent and no clarity of script so that if anyone wants to see the code who isn't the creator of the code not able to understand it.
- ✔ Existence of unused variables, unused imports & functions in scripts.



Recommended Solution

- ✔ DevRabbit developed a solution, whenever code pushes into Jenkins it will triggers a job where it verifies all the code flaws, coding standard deviation, consistency of code
- ✔ After verification of the code, Jenkins will generate reports that provide solutions
- ✔ This will execute in less than a minute and we are making sure that defective code is not pushed into production



Results

- ✔ Reduce risk of defects due to enhanced coverage
- ✔ Faster Results due to easily detect flaws through code analysis
- ✔ Evaluates the entire code layout of the application including areas that wouldn't be analyzed such as entry points for different inputs, internal interfaces and integrations, data handling and validation logic
- ✔ Produce code review reports that include an executive summary that lists strengths and weakness and provides detailed findings that include precise code based solutions and fixes



Technologies

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