

HCLTech Al Force for Software Engineering

Generative AI and automation platform for transforming the software engineering life-cycle

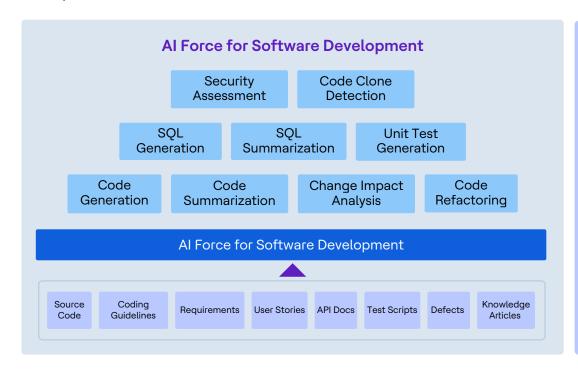


Generative AI is revolutionizing the software industry, driving unprecedented growth and innovation. According to Gartner, the AI market in software is expected to grow at a compound annual growth rate (CAGR) of 19.1% over the next six years. This surge is primarily fueled by the rapid adoption of generative AI, as enterprise software vendors integrate AI tools into current and future releases.

Generative Al's impact is particularly pronounced in marketing, product design, and customer service, enabling more personalized and efficient operations. Gartner's predictions indicate a significant shift towards Al-driven processes, with 39% of global organizations entering the experimentation phase. As we move forward, the integration of Al tools will continue transforming industries, fostering innovation and efficiency in unprecedented ways. Now is the time for organizations to embrace this Al revolution and harness its potential to stay ahead in a rapidly evolving digital landscape.

HCLTech AI Force for Software Development

HCLTech AI Force for software engineering augments the effort of today's development teams by elevating product development efficiency through intelligent engineering to enhance product experience and drive seamless development.



Key Metrics Impacted

- · Lines of Code
- Development Cycle Time
- Code Maintainability
- · Code Quality
- · Defect Resolution Time
- # Code Commits
- Code Coverage
- Sprint Velocity Points

Code Generation:

Generation of code based on functional requirements.

SQL Summarization:

Explain database schema such as tables, columns etc.

Code Clone Detection:

Locate exact or similar pieces of code within or between code repositories

SQL Generation:

Generation of SQL queries from natural language

Code Refactoring:

Optimize and restructure existing code without changing its behavior

Change Impact Analysis:

Analyzing the impact on project artifacts (code, test cases, defects etc.) that need to be updated for a proposed feature change request

Code Summarization:

Explain existing code and its purpose

Unit Test Generation:

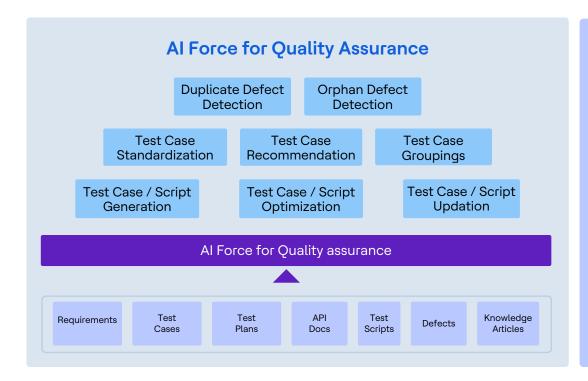
Generation of unit test cases and scripts for existing and new features

Security Assessment:

Identifying, classifying and listing fixes for possible vulnerabilities in code, packages and license constraints for using open-source libraries

HCLTech AI Force for Quality Assurance

Redefine preventive quality assurance by seamlessly automating testing procedures, pinpointing defects, tracking progress and optimizing testing cycles to bolster the reliability and security of your applications



Key Metrics Impacted

- Test Coverage
- · Testing Cycle Time
- · Defects Logged
- Orphan Defects
- · Regressions Reported
- · Tests Optimized
- Tests Recommended

Test Case Generation:

Generation of test cases from product requirements for testing new and existing features.

Test Script Generation:

Test script generation from test cases/product requirements for existing and new test cases

Duplicate Defect Detection:

Identification of duplicate bugs raised by independent QA teams

Test Case Grouping:

Identify and cluster similar test cases to explore possibilities of optimization and efficient triaging

Test Case Optimization:

Optimize the existing suite of test cases by identifying common steps and reducing the test cycle time

Test Script Optimization:

Optimize the existing suite of test scripts by identifying common steps and reducing the test cycle time

Orphan Defect Identification:

Identification of defects not mapped to any test case followed by generation of relevant test cases against each

Test Case Recommendation:

Test case recommendation against a defect, code change or new feature addition

Test Case Updation:

Update existing test cases according to the changes in the product/feature requirements

Test Script Updation:

Update existing automation test scripts according to the changes in the product/feature requirements

HCLTech AI Force solutions deliver exponential benefits for early users across industries



44% reduction in test automation effort and script errors



30% reduction in code reverse engineering effort



HCLTech Supercharging Progress™

Learn more about how AI Force can transform your software engineering lifecycle:

https://www.hcltech.com/ai-force | Email: AlForce@hcl.com

HCLTech is a global technology company, home to more than 227,000 people across 60 countries, delivering industry-leading capabilities centered around digital, engineering, cloud and AI, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending March 2024 totaled \$13.3 billion. To learn how we can supercharge progress for you, visit holtech.com.

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