



Software Diagnostics Tool

A PwC Product

A software quality
accelerator



Your challenges



Delays in in-sprint automation, reducing test coverage



A considerable amount of time spent in setting up automation tests and boilerplate code



Creation of test scenarios based on requirements for each project



No single source of truth for functional requirements



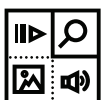
Frequent failure of automation tests due to change in locator or test data issue



No standard format of test reports



Dependency on highly skilled professionals to write and execute automation tests (resource constraints, scalability)



Error-prone and time-consuming manual validation of the developed user interface (UI)

About Software Diagnostics Tool

PwC's Software Diagnostics Tool is a platform to automatically generate ever-changing scripts for UI automation from a project management tool, and to test the requirement and design with a built-in framework and set of industry tests. This automation platform makes scaling up easier, ensures quality from the start and reduces effort by 65–80%. Automation testing is completed in the sprint and is truly agile, helping the customer to reduce the time to market and quality costs.

What does Software Diagnostics Tool do?

1. Provides ready-to-use industry-wise critical test cases, feature and step-definition files.
2. Writes application programming interface (API) tests in behaviour-driven development (BDD) syntax and provides request payload in the tool to validate the response body automatically. Also, it reports HTTP requests and response logs, and makes troubleshooting and debugging easier.
3. Simulates a heavy load on the application under test and analyses overall performance under different load types.
4. Generates UI automation scripts in bulk using various tools.
5. Incorporates auto UI design regression.
6. Provides customised test framework as per the requirement/criteria.

Why do clients need Software Diagnostics Tool?

- » **Data management**
Auto generates BDD feature and step definition files from application lifecycle management (ALM).
- » **Framework**
Generates test scripts in bulk for a given URL/HTML.
- » **API and industry tests**
Provides a set of test cases and scripts for different modules for multiple industries; has an in-built mechanism for scripting and execution.
- » **Defect allocation**
AI/machine learning (ML)-based auto defect generation and allocation, with evidence.
- » **Design**
Ensures automatic comparison of software design using AI and ML.

Value proposition

Features



Can be integrated with some of the popular project management tools like Jira and Azure DevOps.



Can extract feature files and step definition from the user stories acceptance criteria, irrespective of the complexity and number of nested levels of details present.



Can generate scripts for webpages through Selenium and Python-based robot frameworks, and extract various locators of the HTML code that are present in the UI and accordingly generate a script with the page locators.



Contains a cloud-hosted tool to verify and compare each design 24x7. Mismatched designs are detected as bugs and auto logged into the ALM. The bugs are then auto assigned to the respective developer.

Benefits



Automation-enabled Agile development.



Increases revenue by strategically incorporating the use of artificial intelligence (AI).



Reduces wait time and increases the throughput of your team.



Empowers continuous integration and deployment (CI/CD) with intelligent test integrations and enables high-level quality across teams.

Supported industries and modules

1

Banking:

- User personas
- Customer profiles
- Lending practices
- Credit products
- Payment gateways
- Know your customer (KYC)
- Portfolio management
- Customer service

3

Healthcare:

- Provider modules
- Pharmacies
- Facilities
- Test results
- Appointments

2

Insurance:

- Medical insurance
- Renewals
- Product catalogues
- Admin module and agent login
- Annual audits

4

E-commerce:

- Product search
- Search engine optimisation (SEO)
- Promotion engines
- Brand subscriptions and memberships
- Cart and checkout
- Order management

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