SMART Development Testing

"Great quality code is not the result of intense system testing, it is result of well structured filtration of issues from the early stages"

A compromised 'unit test' puts unnecessary strain on QA folks who seem to be compelled to go after these issues at the expense of system test resulting in not-so stunning quality of delivered software.

Developers do not deliberately write bad code, it is just that accidents happen. Accidents happen due to very many reasons : brute force push of unit testing without it being simple and practical, over reliance on automated unit tests without effective dev test cases, skewing towards code coverage resulting in introverted ineffective tests, the sheer emphasis of dynamic testing as the method to uncover defects when easier static methods of uncovering issues could have been as effective. Finally the mother of all reasons, of not being sharp and purposeful as to what type of defects need to be the focus of "unit testing".

In these modern times, the meaning of 'unit' is flawed, so we shall use DevTest to indicate what we do we at the earliest stage to deliver clean code.

What does this do?
Smart`DevTest is a service offering that supercharges your 'unit test' practice enabling developers to validate their code rapidly, effectively and most importantly without disrupting the rhythm of coding.

SmartDevTest is based on lean philosophy that focuses on being sensitive to prevent issues, staying sharp to detect early, using light aids to do easily, resorting to automation only for complex repeatable tests. It is a harmonious blend of scientific thinking, smart aids, rapid process, sensible automation, static assessment and dynamic testing to test less and accomplish more.

The service offering consists of SmartDevTest learning capsules to re-orient your approach to DevTest, SmartDevCheck to prevent/detect statically, super light rapid IST/Dev (Immersive Session Testing) process to doing. Using the TestPyramid as the basis, it enables you to focus your automation on the top-of-pyramid "the behaviour" to get the highest value for effort while ensuring the lower parts of pyramid are done most efficiently via SmartDevCheck and IST/Dev.

What are the expected outcomes?

The outcomes to be expected are heightened awareness to 'defects' by developers, a consistent effective DevTest practice, drop in leakage of dev-defects to QA and better early stage quality code.

Sensitisation to the types of defects is what enables a good defensive coding mentality and test driven approach. Focus on behavior model, enables a BDD style approach to design and automation. Value based approach enables a sensible mix of static and dynamic (automated) tests.

The significant outcome is freeing up the QA/testers to focus on what they do best, of testing the system from an entire product/app and user-usage view.

Service engagement plan

Assessment : Week #1
- Teams and projects in which this is to be implemented identified
- STAG meets with each team discussion (30 minutes/team) understand the state of practice of DevTest.
- STAG analyses last few build's defects from QA to understand dev test defects leaking to QA
- The week concludes with STAG preparing a DevTest Practice Assessment Report

Orientation : Week #2
- STAG does a ONE-day Experiential Workshop on SmartDevTest that outlines key concepts, How-to-do with two sessions of SmartDevTest done by participants
- Participants need to take a 2-hour supplementary online course on SmartDevTest

Implementation : Week #2 to Week #6
- Developers apply in their daily work and STAG tracks the implementation, clarifies issues in implementation, fine tunes the SmartDevTest Aids as necessary and publishes the state of practice after 6 weeks comparing it with the original baseline assessment report.

STAG Software is a specialist test boutique that focuses on methods and tools for smart assurance of systems. Powered by HBT, its scientific test methodology, STAG offers third party product validation services, advisory and consulting solutions to enhance organisation test practices and conducts specialist masterclasses on HBT to enable smarter testing by software folks.