# Accelerate test automation using SmartQE

### About SmartQE

SmartQE is a testing framework which helps in improving the performance of your software delivery life cycle. It automates software delivery life cycle from requirements mapping with sprints, code base, sources control, build and deployment, test automation, execution and monitoring. It is a unique framework allows to integrate Collaboration & Management, Continuous development, Continuous Integration, Test and monitoring tools and technologies in the industry.

SmartQE offers all possible services for the product or application in every corner of test life-cycle.



## Implementation

Technologies: MVC 5 framework, SQL server.

## Application

Our product is a source for corporate housing solutions to business travellers for temporary assignments and relocation. It provides furnished apartment for a temporary assignment, assistance with relocation, or interim housing solutions for employees. It provides emergency services 24/7 to make sure you're taken care of whenever you need assistance.

To achieve these requirements project is developed with several modules, screens, pages and thousands of elements. We have number of things to be tested every day in which every module is interlinked.

#### **Challenges Faced**

We follow agile methodology in every project development and delivery. We have to check entire application on daily or weekly basis, so it's being difficult for us to cover all areas with manual testing.

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We need to perform same functionalities in every release cycle. If something is changed at one place it effects multiple areas. We had to make sure all tests covered when there is a new change or development is done.

In a limited time window, We test only the prioritized testcases which may effect the quality of the product. It is difficult to write or update scripts for this type of project which has thousands of elements in every single page and changes more often. We had to have more resources and its been difficult to maintain reports as well as documents.

To address all these problems we needed a test automation tool and our choice was 'SmartQE'.

#### **The Solution**

Having seen the benefits, the importance of test automation is increased across domains to accelerate the test process. "SmartQE Framework" would find greater acceptance and importance in the industry to reduce the development cost and increase efficiency in todays business environment.

SmartQE grabs all elements of your page and automatically generates test scripts and executes them with just a click. This is where SmartQE saves your lot of time and scales up QA to perform QE job with basic coding knowledge.

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SmartQE also provides a workflow to test your APIs using which you can test all of the endpoints of your application no matter where they are hosted, from AWS to your local machine.

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#### Results

If a vast product is shipped to the QA team for testing purpose, and if we perform manual testing, the testers will need at least 3 weeks time in order to create and execute the test cases even though QA team strength is 8-12 resources.

However, in a similar situation, if we go for Automation testing, the testers will need a couple of weeks time to write and execute the scripts with 4-6 resources.

And finally, by using SmartQE, the testers can prepare and execute the testcases using automated test scripts in limited time with minimal resources.

Resources and Time Utilization by different testing methodologies:

- Automation : 4-6 QE :10 Days
- SmartQE : 2-3 QA/QE :5 Days

Manual		<b>•</b> • •	8-12 QA	15 Days
Automation		<b></b>	(4-6 QE)	10 Days
SmartQE	i i i i	<b>.</b>	2-3 QA/QE	05 Days