



## VIRTUAL CLASSROOM PRODUCT DEVELOPMENT AND TESTING FOR A MARKET LEADER IN ONLINE EDUCATION

### THE CLIENT

The customer is a \$5 billion market leader in online education with a major focus on higher education. The products and offerings from the customer improve the learning experience of more than 400,000 students with a strong 24,000 faculty members spread over 200 campuses and learning centers worldwide.

### BUSINESS NEED

The customer envisaged an online classroom platform to provide services for all learning related activities to provide a connected campus for students. The customer intended to deliver excellent online learning environment and student experience, through its revolutionary virtual classroom product.

Some of the challenges with were:

- Move from a one-size fits all model to individualized learning plans to improve student participation
- Differentiate product offering by implementing an individualized, data-driven approach to learning outcomes
- Architect the new classroom using a platform approach to support multi-tenancy, white labeling and cloud ready for potential additional revenue and operational benefits

### TECHNOLOGY USED

- Cloud Environment: Amazon Web Services
- OS: Windows Server 2003, Windows Server 2000, Microsoft Windows XP, RH Linux
- Tools: .NET and MS SQL Server, Eclipse, Java, JavaScript, GWT
- Testing Environment: Selenium, QMetry and Rally
- Technologies/Frameworks: Spring frameworks, MVC design Pattern
- Issue Tracking: Mantis

### SOLUTION DELIVERED

The proposed solution adopted an agile development and testing with two week sprints. We provided a framework based test solution that was keyword + data driven, configurable and scalable across multiple platforms. The test results were integrated using tools like "QMetry" and "Rally".

The core highlights of the project include:

- 70+ Onsite & Offsite ODC team
- Developed/tested:
  - Backend platform architecture
  - Cloud Integration & Scaling
  - Front End UI development and testing
  - Mobile Enablement & App
  - Student Analytics
- With our homegrown automation test framework and Selenium, we reduced the test cycle by up to 40% resulting in a faster time to market.
- Reduced the test scripts development by 40% using our reusable repository of test cases, scenarios, and validation libraries
- Mobile automation testing to enable the classroom product be accessible from iPad/iPhone and Android

#### ABOUT AL TEN CALSOFT LABS

AL TEN Calsoft Labs is a next gen digital transformation, enterprise IT and product engineering services provider. The company enables clients innovate, integrate, and transform their business by leveraging disruptive technologies like mobility, big data, analytics, cloud, IoT and software-defined networking (SDN/NFV). AL TEN Calsoft Labs provides concept to market offerings for industry verticals like education, healthcare, networking & telecom, hi- tech, ISV and retail. Headquartered in Bangalore, India, the company has offices in US, Europe and Singapore. AL TEN Calsoft Labs is a part of AL TEN group, a leader in technology consulting and engineering services.

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