Q-INDUSTRY - SOFTEC2012

Gearing up for the Annual Conference

SOFTEC 2012, the 5th edition of the annual software testing conference organised by MSTB, is taking shape nicely for the July date. This year, the event will be held at the Istana Hotel in Kuala Lumpur from July 10 to 12, 2012, with a theme of The Art of Testing.

Over 30 sessions of tutorial, workshop and keynote sessions have been planned for SOFTEC 2012 and to date, 14 international speakers have confirmed participation. A few additional names are expected to be included. SOFTEC 2012 will also introduce a new feature – the Test Lab which is intended to provide an avenue for delegates to gain some practical experience on testing tools.

As part of the efforts to increase local participation in the conference, a colloquium track will also be held in conjunction with SOFTEC 2012.

Registration is opened and for more information visit SOFTEC 2012 website via: **www.mstb.org** or **www.qportal.com.my**

Spreading the word: Promotion of SOFTEC 2012 started early as 15 busses spotting the event ply strategic routes across the Klang Valley

Mette Bruhn-Pedersen
Test Practitioner

Chris Rupp
SOPHIST Ltd

David Hayman
QualIT

Mark Fewster
Grove Consultants

Ray Arell
Intel

Andy Kaufman
Institute for Leadership Excellence & Development, Inc

Brian Robinson
Practitioner / Author

Dorothy Graham
Consultant / Author

Lee Copeland
Software Quality Engineering (SQE)

Graham Bath
Chair, ISTQB Expert Level

Rob Sabourin
AmiBug.Com Inc

John Fodeh
Cognizant

Bernard Homes
Tessco Technologies

Prof. Dr. Jasbir Dhaliwal
University of Memphis

Malaysia Upgrades ISO SC7 Membership

Malaysia has increased its commitment to the development of the ISO/IEC 29119 standards for software testing as the country upgraded its membership category from 'O' (for Observer) to 'P' (for Participative).

With the 'P' membership, Malaysia is able to participate directly in the processes involved in developing the standard. MSTB President Puan Mastura Abu Samah is Malaysia's representative in the Working Group 26 (WG26) of the ISO/IEC JTC1/SC7 Software and Systems Engineering committee.

The aim of ISO/IEC 29119 Software Testing is to provide one definitive standard for software testing that defines vocabulary, processes, documentation, techniques and a process assessment model for software testing that can be used within any software development life cycle.

The standard is centred around a three-tier risk-based process model for software testing that provides guidance on the development of organisational test strategies and policies, the management of testing projects including the design of project/level test strategies and plans and monitoring and controlling testing, and a dynamic test process that provides guidance for test analysis and design, test environment set-up and maintenance, test execution and reporting.

MSTB in CeBIT 2012

MSTB continues its effort to promote MSTH at the international level. A team led by Abdul Razak Abdul Jalil will be at CeBIT 2012, taking place from March 6 to 10 in Hannover, Germany to promote MSTH and in particular, services offered by the Q-Lab.

CeBIT is the world's largest trade fair showcasing digital IT and telecommunications solutions for home and work environments. It offers an international platform for comparing notes on current industry trends, networking, and product presentations. The event typically draws more than 3,000 people from over 100 different countries.
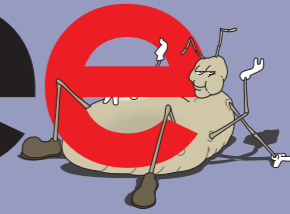
COVER STORY

Full concerntration: CTFL exam in progress for students from UMP.

Promising Results from Pilot University

The Pilot Programme to incorporate professional software testing syllabus into Malaysian university's software engineering courses is showing good early results, with improved passing rates of certification examination among participating students.

To date, two batches comprising a total of 51 students from the programme have sat for the Certified Tester Foundation Level (CTFL) examinations and of the total 41 of them passed the exam to earn the certification, returning a passing rate of 80 per cent.

This reflects a marked improvement over the earlier average passing rate of 54.9 per cent for students. Those students took the CTFL exam under the Q-Capability Development scheme prior to the start of the Pilot Programme. Under the scheme, students underwent a four-day professional course before sitting for the exam. Although the course is based on the same syllabus, the training materials used were specifically designed for working professionals.

For the Pilot Universities Programme, the lecture materials used have been specifically developed for university students by the German Testing Board (GTB) and are adopted by universities across Germany.

Through an agreement between MSTB and GTB, the lecture materials have been translated into English for use by the Pilot universities. The materials are continuously being refined and customised to suit Malaysia's specific needs.

The first batch of candidates, comprising 30 students, to sit for the CTFL exam under the Pilot Programmes was from UTM. They were followed by a group of 21 students from UMP.

In total, about 400 students from the Pilot Universities are expected to sit for the CTFL certification exam. Although students taking the subject are subject to their university's own exams and assessments, taking the certification exam is optional.

Apart from UMP and UTM, other universities that are participating in the pilot implementation are Universiti Malaysia Sarawak (UNIMAS), Universiti Tenaga Nasional (UNITEN), Universiti Sains Malaysia (USM), Universiti Teknikal Malaysia Melaka (UTeM), Universiti Teknologi Malaysia (UTM) and Universiti Kuala Lumpur (UNIKL).

The Pilot Programme is expected to run until the end of this year.

EDITORIAL BOARD

SOFTEC2012
SOFTWARE TESTING CONFERENCE
ISTANA HOTEL - KUALA LUMPUR - 10 - 12 JULY 2012

THE ART OF TESTING

Q-INDUSTY

Sarawak MSTH Chapter for Regional Development

Collaboration for growth: *YB Datuk Haji Fadillah (3rd from right) leading the signatories and MSTH Sarawak Chapter pro-tem committee members to get the "ball rolling" to mark the official launch of the Chapter in after witnessing the MOA signing in Kuching last Novermber*

Sarawak is poised to become a hub within the national software testing ecosystem being established under the Malaysia Software Testing Hub (MSTH) initiative as efforts to catalyse the development of the industry in the State are being put in place.

Strong interest in software testing in Sarawak has led to the formation of the MSTH Sarawak Chapter to facilitate efforts to develop the software testing industry in the state.

Set up as industry-oriented grouping, the chapter will assume leadership in promoting, planning and facilitating execution of relevant activities aligned to the Malaysia Software Testing Hub (MSTH) initiative.

Towards formalising the formation of the Chapter, the Malaysian Software Testing Board (MSTB) has entered into a Memorandum of Understanding (MOU) with three Sarawak-based organisations comprising Universiti Malaysia Sarawak (UNIMAS), Swinburne University of Technology (Sarawak Campus) and Independent Data Services (IDS).

Deputy Minister of Science, Technology and Innovation YB Datuk Haji Fadillah Yusof, witnessed the signing held in Kuching on November 12, 2011.

Describing the formation of the MSTH Sarawak Chapter as a strategic move YB Datuk Haji Fadillah expressed his confidence that the development of software testing industry in the state will move much faster. And in turn, this would contribute to the growth of other industries in the State.

"It would be great to see Sarawak becomes a major hub for software testing industry within the national software testing ecosystem being established under the MSTH programme," he said in his speech.

At the signing ceremony, MSTB was represented by its President Puan Mastura Abu Samah while UNIMAS Deputy Vice Chancellor Prof Dr Peter Songan, representing Vice Chancellor, Professor Datuk Dr Khairuddin Ab Hamid, signed on behalf of the university.

Signing on behalf of Swinburne University, Sarawak was its Director of Academic Associate Professor Enn Ong (representing Pro Vice-Chancellor and Chief Executive Professor Helmut Lueckenhausen) while IDS was represented by its Chief Technology Officer Mr Rueben Wee.

Learning from the Experience of the Koreans

On the job training: *A discussion session in progress at the KTL facility in Seoul as members of the Q-Lab team learn from the experience of the Koreans*

A team comprising four lead testers from the Q-Lab had undergone a month-long On-Job-Training (OJT) on product certification with Korea Testing Laboratory (KTL) in Seoul last November. Among others, the Q-Lab testers were involved in certification of a key application running at the Incheon International Airport – Korea's largest airport and rated as the best airport by the Airports Council from 2006 to 2010.

Another team from Q-Lab is expected to undergo similar OJT attachment at KTL in the first quarter of 2012. The training is part of the multi-tracked collaboration between MSTB and the KTL, signed in February 2011.

A separate team from MSTB was also in Korea in December 2011 for continuation of the study on Korea's Software Promotion ACT. The MSTB delegation, led by President Mastura Abu Samah, met with representatives from KTL as well as from various agencies involved in formulation, implementation and enforcement of the Act.

Q-LAB

TMMi Level 2 Accreditation for Q-Lab

The Q-Laboratory joins the ranks of a few other testing organisations around the world as it obtained the Test Maturity Model Integration (TMMi) Level 2 accreditation last November 2011.

Moving on, the Q-Lab is now aiming for Level 3 accreditation and the team is confident that this could become a reality within the first half of 2012.

Being TMMi accredited speaks volumes about the Lab's capability as a world-class testing facility, said Q-Lab Director Amiruddin Jaafar Sidek.

"The accreditation will put Q-Lab in a better standing as we offer our services to international customers," he said.

Based on the Capability Maturity Model (CMM), the TMMi provides a framework for assessing the maturity of the test processes in an organisation, and so providing targets on mproving maturity.

There are five levels of TMMi accreditation and at Level 2, the accredited organisation is ascertained to have established testing as a core processes that would include Design, strategy, planning and setting up initial models. While at Level 3, testing phase is no longer seen as something that happens after coding is complete. Test planning is done early on and is integrated into a software life cycle.

A test facility in Spain has made recent achievement of becoming the first to be accredited at Level 4.

Accreditation in progress: *TMMi certified assessors from UK-based Experimentus (facing camera) going through audit process to ensure Q-Lab's compliance to TMMi's Level 2 compliance*

Visitation continues at Q-Lab

The last quarter of 2011 has indeed been busy months for the Q-Laboratory as streams of visitors from various organisations dropped in for visits. These include visits from Tenaga Nasional, Maybank and Public Services Department.

The Q-Lab also hosted large groups of visitors from Universiti Teknikal Malaysia Melaka and Universiti Malaysia Pahang. Both of these universities are participating in the Pilot implementation of CTFL syllabus and the visits were essentially part of the 'experiential' activities included in the syllabus.

Apart from the visits, the Q-Lab also conducted series of technical training for it software testers as well as tutorial sessions for various groups as part of the of Q-Capability Development initiative.

Learning more about Q-Lab: *Briefing session in progress for visitors from Public Services Department*

Getting practical: *Q-Lab team members explaining finer details about software testing to groups from UTeM (top picture) and UMP during their visit to the Lab*

Q-CAP - ACADEMIC OUTREACH

Review on CTFL Syllabus for Pilot Universities

One for the album: Participants of the 2nd GTB Workshop, held in Kuala Lumpur last December 2011

Efforts to improve the lecture materials used in the CTFL subject in the Pilot Implementation at seven Malaysian universities continued with another round of review.

The second review of the lecture materials was helmed by academic leads from the German Testing Board (GTB), Prof. Dr. Ina Schieferdecker and Horst Pohlmann, with active participation by representatives from MSTB and universities participating in the Pilot Programme.

GTB, which developed the syllabus, is the international partner in the initiative under the MSTH Academic Outreach which seeks to enhance the software engineering syllabus in Malaysian universities by introducing a software testing subject based on globally-recognised syllabus for professional certification.

Over the four days of workshop, held in Kuala Lumpur in December 2011, participants also held discussion on various issues and topics on the lecture materials, which have been implemented in over 40 universities across Germany.

Participating Pilot Universities are Universiti Malaysia Pahang UMP), Universiti Malaysia Sarawak (UNIMAS), Universiti Tenaga Nasional (UNITEN), Universiti Sains Malaysia (USM), Universiti Teknikal Malaysia Melaka (UTeM), Universiti Teknologi Malaysia (UTM) and Universiti Kuala Lumpur (UNIKL).

Incorporation of software testing subject in the Malaysia's universities is one of the programmes initiated by the MSTB under the Malaysia Software Testing Hub (MSTH).

The long-term objective of the collaboration is to ensure a sustainable supply of competent software testing professionals churned out by Malaysian uniervsities to support the anticipated growth of the software testing industry.

The Pilot Implementation, which is to for a year, is expected to involve about 400 undergraduate students in the software engineering discipline at these universities.

Top performing students in the programme will also sit for the actual professional certification examination.

Demand for Certification Continues to Grow in Germany

The number of well-trained software testers in Germany reached a new record last year. The German Testing Board (GTB) has issued the 20,000th Certified Tester Foundation Level (CTFL) certificate. In addition, the board also received the 25,000th registration for a CTFL exam.

The GTB is in charge of the Germany-wide implementation of this certification, which is recognized worldwide, and which is continually further developed by the International Software Testing Qualifications Board (ISTQB).

The executive committee of the GTB sees the record numbers as an important affirmation of its own work: "We have been noting a steady increase in participation and exam figures for some considerable time, but for us the 20,000 and the 25,000 mark are nevertheless records.

"In my opinion, this shows that we are in the process of establishing a standard in the training and qualification of software testers in Germany. IT systems become increasingly complex, and software becomes more and more elaborate and error-prone.

"This demands a lot of software testers. Whoever wants to do a good testing job must have a lot of know-how – comprehensive training is therefore indispensable," " Tilo Linz, Chairman of the GTB's executive committee, says in an article published by the GTB

In 2006, a total of 2,145 participants took the Foundation Level and Advanced Level exams, this figure last year totalled already 3,093. To date, Germany has 21,700 certified students, employees and self-employed persons.

PRESIDENT'S NOTE

A Year of Achievements 2011

They came in hundreds. They paid thousands of ringgit to be there. They were highly competent and experienced testers; in fact, a number of them were leading authorities in their own fields. Yet, they came to learn. They came to share. They were participants of the EuroSTAR 2011, held in Manchester, UK last November.

Perhaps, this was one of the elements found in EuroSTAR that I would like to see happening in Malaysia – the hunger for knowledge and the willingness to pay for it, both in terms of monetary and time investments.

After all, we all acknowledge that information and knowledge are the most valuable assets in the knowledge-based economy and as such, I believe it is in our best interest to put greater emphasis on acquiring knowledge and above all, spare no efforts in creating new knowledge.

Moving on, I am happy to note that the MSTH initiative had made good and significant progress in 2011. We met and exceeded most of our KPI targets - missing one due to market forces. In addition, we also made major inroads in our industry development activities.

In the area of developing the nation's competent software test professionals supply line, we have embarked on a Pilot Programme, involving seven universities, to incorporate professional certification syllabus into universities' software engineering courses. The initial result of the programme has been good with the first two batches of students to sit for the CTFL exam achieving an average passing rate of over 80 per cent.

Our efforts towards building an industry clusters has started taking shape with the introduction of the Quality Test Assist Programme (Q-TAP), which aims to facilitate Malaysian product companies develop their testing capability. The formation of MSTH Sarawak Chapter is also another major milestone as this will facilitate faster development of software testing sector in the region. More MTSH Chapters are expected to be established this year.

Q-Lab achieved TMMi Level 2 accreditation in November 2011 and if all go as planned, the Lab will get Level 3 accreditation within the next few weeks. Achieving Level 3 accreditation will definitely put strengthen Q-Lab's international standing as to date, there are only two testing facilities that have achieved this feat - one in Korea and the other in Spain. More importantly, this accreditation gives the Q-Lab official global recognition that it is a world-class facility.

Internationally, we continued our engagement with the global fraternity of experts and thought-leaders through our extensive networks and this has resulted in the formation of the MSTH International Promotion Advisory Council (IPAC), which will help us in our overseas ventures as well as be an expert resource for our domestic programmes.
All in all, it has been a hectic but rewarding 2011 for us and we are definitely looking for bigger achievements this year. ☺

AROUND THE GLOBE

In today's world, businesses and individuals have become dependent on various tech gadgets and services that are enabled or controlled by software. Problems in any part of the software will affect the users. Impacts of software glitches varies, depending on the nature of the applications (thus, the users) as well as the level of severity of the problems caused.

If one thinks one is not at risk because of non-dependency on software, think again. Ponder over the following list of software glitch incidents.

Can anonye claim not to be at risk, still?

1. RIM BlackBerry
October – Blackberry network went down and left millions of users without service. The outage started in the Middle East, Europe and Africa regions before spreading to South America and then, the US and Canada.

2. UK Tax Office
February – Pounds in revenue left many UK's taxpayers facing surprise tax demands. Report by the Public Accounts Committee revealed that problems with software used in the new National Insurance and PAYE Service (NPS) had caused extended delay in HM Revenue and Customs getting back to people who had overpaid/underpaid their taxes.

ZDNet Top 10 Software Glitches 2011

3. Amazon Web Services
April – The highly popular Amazon Web Services (AWS), which run on a Cloud Computing architecture, collapsed and brought down websites belonging to companies that rely on AWS for their businesses.

4. Sony Playstation Network
April – A hacker has obtained the personal information of PlayStation Network account holders and subscribers of the Qriocity streaming service. The attack also crippled Sony's PlayStation Network, which has some 70 million subscribers.

5. Citigroup
June – Citigroup admitted that in May, their network was compromised by hackers, who gained access to personal information in 200,000 accounts.

6. Pentagon
July – The Pentagon has admitted it suffered a major cyber attack in which thousands of files were taken by foreign hackers, in what has been described as one of the largest cyber attaks in US history.

7. California Prisons
May – Hundreds of violent and dangerous prisoners have been released on unsupervised parole in California because of a computer glitch.

8. Mercedes-Benz
April – Mercedes-Benz in the US recalled some 137,000 M-class SUVs because the cruise control doesn't immediately disengage when drivers tap the brake pedal as it should.

9. **UK's NHS Blood and Transplant**
January – UK's NHS Blood and Transplant (NHSBT), which is responsible for the Organ Donation Register (ODR), was found to have recorded the preferences of 444,031 people incorrectly due to a software error which dated back to 1999.

10. BHP printers
November – Researchers at Columbia University, NY have discovered vulnerability in HP LaserJet printers that could allow attackers to steal sensitive documents, gain control of corporate networks, or even set the affected device on fire.

2011 : The Year That Was

Career Talk @ UNiTEN

MAMPU visit Q-Lab

EUROSTAR

MOH visit Q-Lab

Official Opening by YB Datuk Haji Fadillah bin Haji Yusof Deputy Minister of Science, Technology and Innovation, Malaysia 7th July 2011
SOFTEC2011 Panel Discussion

MSTB & KTL exchanging MOAs on product certification collaboration

Consultation session @ Q-Lab

MSTH Sarawak Chapter MoU signing ceremony

Q-Tap Launch in Kuala Lumpur

USIM visit Q-Lab

Discussion at STST 2011 breakout session

Representatives from the Pilot Universities at the STST 2011

MSTH business visit to Memphis, USA

Train-the-trainer session conducted by Rex Black

UTM student @ the Q-Lab

UKAS training session

Talent corp @ UK

MITI visit @ the Q-Lab

2011 Q-Merit Award

Korea business trip

UPM lecturers visit the Q-Lab

UNiKL CTFL trainees getting hands-on session

Participants of the 2nd meeting-cum-workshop for the Academic Outreach's Pilot Universities

TNB IT Division visit to the Q-Lab