Introduction

Islamic University of Technology (IUT), a subsidiary organ of the Organisation of Islamic Cooperation (OIC), is mandated to develop human resources of the OIC member states in the fields of engineering, technology, and technical education. The objectives of IUT, therefore, include imparting technical knowledge at various levels, upgrading skills, conducting research, and sharing specialized technical expertise among the member states of the OIC. Furthermore, the roadmap of the OIC recommends to minimize the digital gap among the member states.

With a view to achieving the aforementioned objectives, the Computer Science and Engineering (CSE) Department has been organizing a workshop almost every year since its inauguration. In this sequel, the CSE Department is organizing a workshop on “Software Quality Assurance for Web Applications” to be held during 17-20 December, 2018 at IUT campus.

Course Objectives

Software Quality Assurance (SQA) is a set of activities for ensuring quality in software engineering processes that ultimately results in the quality of software products. The goal of SQA is to objectively evaluate software processes and provide project staff with feedback about non-compliance issues. As a result of customers demand for reliable software systems, projects plan quality activities on proven quality standards and models. Those standards and models will enable proper support of a project during its lifecycle.

A web application or web app is a client-server computer program run on a website which the client (including the user interface and client-side logic) runs in a web browser. Web applications are now an indispensable aspect of businesses around the world. More businesses are now migrating from desktop applications to web applications. With such large volumes of applications that need to be put online, there is now a dire need for measurable and quantifiable metrics that can help in gauging the quality of these websites.

The objective of SQA is to ensure that the product does not deviate far from the original design specifications. If it is discovered that a deviation has occurred, the SQA authority will notify the development team to prevent future deviations and to correct the previous deviations. Also, the SQA authority will perform a walkthrough to analyze the product’s quality at any particular stage of development. Error detection and possible enhancements are also expressed to the development team.

This workshop aims to focus on presenting the underlying technologies and current research trends to apply SQA techniques on web application development phases. This workshop would help us to understand a Quality management approach, Measurement and reporting mechanisms, Effective software-engineering technology, software - development standards, and multi-testing strategy. It will help us to prepare formal technical reviews that might be applied throughout the software development process.

Course Outline

The tentative topics of the workshop targets, but are not limited to, the following SQA activity domains of a web application:

- Usability – refers primarily to the human factor (e.g., problem of user interface and accessibility), aesthetics, consistency and documentation.
- Reliability – includes accessibility, precision, predictability, recovery, frequency and severity of failure of the entire or parts of the system.
- Performance – information throughput in the system, response time, recovery time, start-up time, resource use, etc.
- Supportability – a set of application requirements, such as testability, expandability, adaptability, portability, compatibility, configurability, scalability, localization, simple installation, simple handling and maintenance.

Medium of Instruction

The medium of instruction for the workshop will be English.

Participants

The workshop is meant mainly for the computer personnel, teachers, students, practitioners, and experts in the ICT field. The participants should have graduation/diploma degree with sufficient knowledge in the field of Computer Science, Computer Engineering and Software Engineering.
Workshop on Software Quality Assurance for Web Applications

17 - 20 December 2018

Venue and Climate

The workshop will be held in the premises of IUT campus at Board Bazar, Gazipur, Bangladesh, about 30 km north of Dhaka city and 13 km from the Airport. Bangladesh is a beautiful country with meandering rivers and canals. It has mighty rivers, royal Bengal tigers, and a rich cultural heritage. The weather during December is generally mild, and the temperature ranges from 14°C to 25°C. Additional information on the IUT campus is available at the website www.iutoic-dhaka.edu.

Arrangement

The participants will be provided with course materials and food at IUT campus. Transportation between Hazrat Shahjalal International Airport, Dhaka and IUT will be available for the expatriates. IUT may provide accommodation in its campus dormitory depending on the availability if requested in advance. All other expenses shall have to be borne by the participants themselves or their nominating authorities.

Nominations

The interested participants have to fill in the prescribed Application Form available at the IUT website http://iutoic-dhaka.edu/short_course. Also, each applicant willing to participate should send (by e-mail or postal mail) the filled application approved by the respective home institution authority to the course coordinator by December 13, 2018. Early application is encouraged.

Registration

The participants will have to register for the course on or before 16 December 2018 by paying the registration fee Tk. 5,000 (US$ 200 for expatriate participants). Please check Instructions at above mentioned web address for more details.

Contacts

All inquiries concerning the workshop should be addressed to:

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Course Officials

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