IT Operations: Business Analyst & Quality Assurance Analyst Course (BA/QA) Spring 2023

Instructor(s):
Carolina Softech
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Class Delivery:
Hybrid – Participants must attend in person **AND** online dates.

Start and End Date:
March 6 – June 8, 2023

Mondays & Thursdays
In person 6:30-8:30pm

Tuesdays
Online 6:30-9pm

Course Duration:
14 Weeks

Course Overview
A Business Analyst, or Systems Analyst (BA or S.A.), collects data about an organization's operations to improve its systems and processes. Their primary duties include researching business processes, making reports with recommendations to the company's management and analyzing the potential impact of their recommendations.

Quality Assurance Analyst (QA)
A software tester is responsible for designing test scenarios for software usability, running these tests, and preparing reports on the effectiveness and defects for the production team.

Course Pre-requisites
This course requires strong interpersonal skills, such as good communication skills, flexibility, and adaptability. Critical thinking skills and an advanced understanding of Microsoft Excel 2013 or higher is also required.

Professionalism is very important in this field, and therefore in this course. Class attendance, punctuality, civility, ability to get along with others, cooperation, collaboration, creativity, attention to details, resourcefulness, and meeting deadlines are all critical elements of success.

Course Summary
Course 1- Business Requirement Analysis

- **Part 1:** What is Business Analysis?
  - Business and Solution Domains—how they relate
  - Key roles in requirements development in SDLC and Agile projects
  - Competencies of a business analyst
  - Effective communication
  - Six important BA skills
- **Part 2:** The Business Case for Good Requirements
- **Part 3:** Foundations of Requirements Development
- **Part 4:** Project Initiation: Eliciting High-level and Mid-level Requirements
- **Part 5:** Documenting Requirements with Use Cases
- **Part 6**: Packaging and Presenting Requirements
- **Practice Sessions**

Course 2- Manual Testing Methods

- **Part 1:** Introduction to manual software training
  - Scope of manual testing
  - Functionalities that are involved in manual testing

  - Functional specifications in functional testing

- **Part 2:** Test Design and Document Techniques
  - Introduction
  - Test Development Process
  - Understanding Environments
  - Creation of Test Data
  - Types of Testing
  - Specification-Based (Black Box) Techniques
  - Structure-Based (White Box) Techniques
  - Test Documents > Test Strategy, Test Plans, Test Scenarios
  - Creating Epics, User Stories
- **Part 3:** Tool Support for Testing
  - Introduction
  - What is Test Tool?
  - Test Tools > JIRA, QTest, ALM
- **Part 4:** Fundamentals of Test Execution

Course 3- Web Services and API Testing

- Introduction
- Techniques of API Testing

Course 4- Defect Management

- Defect Life Cycle
- Practice Sessions

Course 5- Automation (Selenium Java framework) Includes basics of Java and SQL

- SQL Server Programming
- JAVA Programming
- Selenium Automation Tool

Course Learning Outcomes

- Business Analysis basics – learn what a business analyst is, what they do, and how they do it
- Gain an overview of various modeling diagrams to help you recognize and understand project
- Documentation
- Master the basic concepts of software testing
- Become an expert manual tester
- Knowledge of all aspects related to software testing
- Real world practical examples, reports, documents that are used in IT companies

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- Demo projects on writing test cases and defects using real-world tools
- Full details of all concepts, types and stages of testing (STLC)
- Understanding of Agile methodology as followed in industry today
- Learn JIRA tool (most in demand in industry) with project setup
- Automation concepts and framework explanation

Course Schedule		
Week	**Days**	**Time / In person / online**
Week 1 - 6	Monday / Thursday	In person - 6:30 – 8:30 pm
Week 1 - 6	Tuesday	Online - 6:30 – 8:30 pm
Week 6 - 14	Monday / Tuesday	Online - 6:30 – 8:30 pm
Week 6 - 14	Thursday	In person - 6:30 – 8:30 pm

Workshops

NOTE: DATES ON WORKSHOPS ARE ESTIMATED AND ARE SUBJECT TO CHANGE.

Week	Subject
Week 7 Saturday (8:30 - 1:30) (4.5 hrs)	Agile Workshop (In Person)
Week 4 Wednesday (2 hrs)	SDLC Workshop (Online)
Week 5 or 6 Wednesday (2 hrs)	Project Initiation (Online)

Required Material

Chrome Books and Mac Books do not meet the standard technology requirements needed for these courses.

This course requires a Windows based computer and a working internet connection. We will be using various software programs throughout this course. Most of the downloads are for Windows based machines only and will NOT work with Apple/MAC systems, Chrome books or tablets.

- 250 GB hard drive or higher
- 4 GB RAM or higher
- 2.0 GHz Intel or AMD processor
- Windows 10
- Microsoft Excel Access (Desktop or Microsoft 365)
- Internet Explorer or Safari 11 or later
- Anti-virus program (updated regularly)
- Computer microphone and speakers to participate during class
- Web Camera to be visible during class
- High-speed Wi-Fi connection obtained either at home or in a quiet study setting)

Course Instructor

The instructors have over 10 years of experience in the IT Industry. Reddy has worked for Infosys, Cognizant, Accenture, Deloitte, and Capgemini. He has taught more than 1000 students using online and face-to-face training.

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Additional Information
This is an interactive course. Students will learn from the instructor and guest lecturers, hands-on activities, individual and group assignments, presentations, etc.

**This syllabus is a highlight of the course details and is subject to change.*