Business Analysis

From Yes-M Systems LLC

Length: Approx 7 weeks/55 hours

Audience: Students with or without IT experience or knowledge

Student Location – To students from around the world

Delivery Method: Instructor-Led – Live online Training

Business Analysis (BA Course Details)

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Table of Contents:

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A. Course Summary

About this Course:

This 55+ hour/7 week course is designed to give students a solid knowledge in the role and responsibility of a Business Analyst. Topics are reinforced with intense hands-on practices including in class exercises, projects, home works with home work feedbacks. This course is taught by two experienced instructors (i) with 25+ years of IT experience and (ii) Agile and PMP certified professional with over 15 years of experience.

This course will allow the students to understand various BA concepts including:

(i)   Software development methodologies (waterfall, Agile, Sprial, RAD, RUP)
(ii)   Prototyping and JAD [Joint Application Development]
(iii)   Scrum.
(iv)   Types of requirements – User, Functional and Non-Functional.
(v)   Discuss Business Analysis, BA process, Role of a BA etc
(vi)   UML, Advanced UML [Unified Modeling Language]
(vii)   Project Management for BA's
(viii) Manual testing hands-on and related theory
(ix)   Tools like Axure, QC, Visio (or STAR UML) and Enterprise Architect.
(x)   Interview Questions and Resume Preparation sessions.

Projects/mini-projects/Hands-on sessions via class work and/or home work:

(i)   Students will learn how to write Functional Requirement Documents (FRDs), Use cases, Agile Stories.
(ii)   Use case diagrams
(iii)   Creating mock-up screens (wireframes) using Axure
(iv)   Flowcharting using Visio or STAR UML
(v)   Business process modelling/Process flow diagrams
(vi)   Testing and Writing Test cases
(vii)   Writing SQL queries

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AT COURSE COMPLETION
1. Perform the role of a Business Analyst including
    a. Understand various methodologies
    b. Requirement gathering techniques
    c. Analyzing, documenting and communicating requirements
        i. Documenting Functional requirements (FRDs)
        ii. Writing Use cases
        iii. Writing Agile stories
    d. Draw Use case diagrams, flowcharts, process flow diagrams
    e. Create mock-up screens (wireframes)
    f. QA Testing (manual)
    g. Writing SQL queries

B. Contact us for more details:

Company name: Yes-M Systems

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Phone numbers (USA): 678-643-7777, 678-248-0302

Phone number (India): 91-8220006968

Kudzu Reviews: http://www.kudzu.com/m/Yes-M-Systems-30363491/reviews/

Facebook: http://www.facebook.com/yesmsystems

Youtube: http://www.youtube.com/yesmsystems

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C. Business Analysis Course Details

1. **Introduction to System Development Methodologies**

    1.1. Waterfall method

        1.1.1. Various phases will be covered in detail

    1.2. Rapid Application Development (RAD)

    1.3. Spiral

    1.4. Agile:

        1.4.1. Explain Agile

        1.4.2. Scrum

        1.4.3. Rational Unified Process [RUP]

    1.5. Other:

        1.5.1. Prototyping (wireframe):

            1.5.1.1. Explain Prototyping

            1.5.1.2. Homework-

                1.5.1.2.1. Create a mock up screen using a prototyping tool

        1.5.2. Joint Application Development [JAD]

2. **Requirements in detail**

    2.1. User Requirements

    2.2. Functional Requirements

    2.3. Non-Functional Requirements

    2.4. Attributes of a good requirement

    2.5. Where to collect the requirements

    2.6. How to collect requirements

    2.7. Exercises (Functional Requirements - Writing FRDs)

        2.7.1. Exercise-1 – In class exercise

        2.7.2. Exercise-3 – Homework-1 (HW1)

        2.7.3. Exercise-2 – In class exercise

        2.7.4. Exercise-4 – Homework-2 (HW2)

        2.7.5. Exercise-5 – Homework-3 [if you complete HW1 and HW2]

3. **Business Analysis Process**

   3.1. What is Business Analysis

   3.2. Role of a Business Analyst

   3.3. Understanding the business

   3.4.   Analyzing competition

   3.5.   Analyzing the market

   3.6.   Defining and scoping the project

   3.7. Gathering requirements

   3.8. Analyzing requirements

   3.9. Documenting requirements

   3.10.   Communicating requirements

   3.11. Identifying a solution (refer to role of a BA after requirements)

   3.12. Verifying that the solution meets the requirements.

4. **What is the role of a BA after requirements are done** (Identifying a solution)

   4.1.   Change Management

      4.1.1.   Handling scope creep

   4.2.   Design Review

   4.3.   Why a BA must know testing

      4.3.1.   Test review

      4.3.2.   QA testing

      4.3.3.   UAT testing

5. **UML (Unified Modeling Language)**

   5.1.   Introduction to UML

   5.2.   Why UML

   5.3.   Actors

   5.4.   Use cases

   5.5.   Use case relationships

    5.5.1. Include, Exclude relationship

   5.6.   Class

   5.7.   Advanced UML - Includes in class exercise using Visio or Star UML

      5.7.1.   See Advanced UML Section - UML diagrams and exercises

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    5.8.   Writing use cases

        5.8.1.   Exercise-1 – Write a use case - In class exercise

        5.8.2.   Exercise-2- Writing a use case – home work

        5.8.3.   Exercise-3 - Writing a use case – home work

6. **RUP (The Rational Unified Process)**

    6.1. RUP overview

    6.2. RUP Life-cycle

        6.2.1. Four Phases of RUP

            6.2.1.1. Inception

            6.2.1.2.   Elaboration

            6.2.1.3. Construction

            6.2.1.4. Transition

        6.2.2. Overview of RUP disciplines

        6.2.3.   How to make iterations work in practice

7. **Other important topics:**

    7.1. Enterprise Architect (a tool)

        7.1.1. Creating Projects

        7.1.2. Creating UML Diagrams using Enterprise Architect

    7.2. Traceability Matrix

    7.3. Gap Analysis

    7.4. Sox Compliance

        7.4.1. Basics of Sox

        7.4.2. Why Sox is important for a BA

8. **Advanced Topics for BA's**

    8.1. Scrum:

        8.1.1. Scrum for BA's

        8.1.2. Sprint

        8.1.3. Product Backlog

        8.1.4. Sprint Backlog

        8.1.5. Burn down chart

        8.1.6. Sprint Planning Meeting

        8.1.7. Stand-up meeting.

    8.2. Project Management for BAs

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8.2.1. Project Management for a BA

8.2.2. Why does a project need a BA and a PM – how the roles are similar and different

8.2.3. Project Charter and Project Plan

8.2.4. 5 Processes in a Project and the brief overview of Inputs, Tools and Techniques and Outputs – PMBOK table

8.2.5. BABOK – Big Picture

8.3.   Agile Story Boarding - Agile Methodologies – Emphasis on Scrum Methodology:

8.3.1. Comparison of Traditional Waterfall and Agile Life cycles

8.3.2. Agile Manifesto and principles

8.3.3. Comparison of the different Agile Methodologies

8.3.4. Scrum Methodology and the terms related to Scrum

8.3.5. Creation of User stories – Template User story and example

8.3.6. What are the characteristics of a good User story – INVEST

8.3.7. Burn down charts and user story points

8.4 JAD – Joint Application Development (JAD)

8.4.1   JAD Session Introduction

8.4.2   Why/ When do we need a JAD ?

8.4.3   Key Participants

8.4.4   Role of a BA in a JAD session

8.4.5   Steps for a successful JAD session

8.4.6   Mock JAD Session in class or Homework problem

8.5 Advanced UML including Sequence diagram

8.5.1   Introduction to UML

8.5.2   UML Notation and cheat sheet

8.5.3   Different types of UML diagrams – Structural and Behavioural

8.5.4   Behavioural diagrams examples – Activity, sequence, Use case diagram, state machine diagram

8.5.5   Visio or Star UML for creating UML diagrams

8.5.6   Activity diagram or sequence diagram homework

8.5.7   Process flow diagrams and Business process modelling

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9. **Software Testing:**

9.1. Manual Testing: Case Studies/Homework:

9.1.1. What is testing? Why to test?

9.1.2. What is a test case?

9.1.3. How to develop test cases from IT requirements?

9.1.4. Analyze requirements, Design a test case, Write a test case, Test a requirement and Record the results.

9.2. Test Cases: In class 9 to 10 Manual Testing Exercises and Homework

9.3. Manual Testing theory

9.3.1. Unit, MAT, Functional/Module, Integration

9.3.2. System Integration, Alpha, Beta, Black Box, White Box,

9.3.3. Volume Testing, Regression Testing

9.3.4. Test Plans

9.3.5. STLC (Software Testing Life-Cycle)

10. **Quality Center tool**

10.1. Discuss the Need for Test Management System

10.2. Discuss the overall features of Quality Center

10.3. Discuss in detail various modules of QC:

10.3.1. Requirements

10.3.2. Test Plan

10.3.3. Test Lab

10.3.4. Defects, Analysis

10.3.5. Reporting features

10.4. Discuss the Test coverage, email features

10.5. Defect Management

11. **SQL and Advanced SQL**

11.1. Intro to SQL

11.1.1. SQL

11.1.2. Database

11.1.3. Table, Rows and Columns

11.1.4. Primary Key, Alternate/Secondary Keys and Foreign Keys

11.2. Statements:

11.2.1. SQL

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11.2.2.   Select and Select *

11.2.3.   Where

11.2.4.   Order By (Desc, Asc)

11.2.5.   And & OR, Like

11.2.6.   Not

11.2.7.   IN

11.2.8.   Not In

    11.2.8.1. Insert, Update, Delete

11.3.   Advanced SQL with Oracle

11.3.1.   Database basics

11.3.2.   SQL Basics

11.3.3.   Oracle installation

11.3.4.   SQL commands:

    11.3.4.1. Create, Update, Delete,

    11.3.4.2. Truncate, Select with various operators,

    11.3.4.3. Count, Sum, Distinct,

    11.3.4.4. Order by, Group by, Having

11.3.5.   Introduction to Joins

    11.3.5.1. Inner Join

    11.3.5.2. Outer Joins - Left/Right/Full

11.4.   Why QA professionals need to know SQL basics

11.4.1.   Sample queries for data verification

11.4.2.   acquiring test data

11.4.3.   SQL Injection attack

11.4.4.   What to test in Relational DB apps

12. Will include exercises and reviews – **All the hands-on exercises are summarized under one section**

12.1.   You will write a total of 6-7 major home/class works [Creating requirements]

12.1.1.   FRDs – Three to four functional requirements

12.1.2.   Use case requirements - Two to three use cases

12.1.3.   One to two Agile Stories

12.1.4.   UML diagrams [Refer to UML Sections]

12.2.   Create Mock-Up screens using a prototyping tool

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    12.3.   Flow Charting

    12.4.   Process flow diagram and business process modeling

    12.5.   JAD Exercise

    12.6.   Writing Test Cases, Testing and recording results.

    12.7.   Writing SQL queries

13. Interview and Resume preparations

    13.1.   HR Questions

    13.2.   General IT

    13.3.   BA related questions

    13.4.   Resume preparations, Mock-up Interview, Job Placement Help

Disclaimer: Yes-M Systems and/or their instructors reserve the right to make any changes to the syllabus as deemed necessary to best fulfil the course objectives. Students registered for this course will be made aware of any changes in a timely fashion using reasonable means.

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D. About Yes-M Systems:

   a. Established in 2005 (Atlanta, GA, USA), 10th year in business.

   b. A+ accreditation from US Better Business Bureau (http://www.bbb.org/atlanta/business-reviews/internet-consultants/yes-m-systems-in-duluth-ga-27431372)

   c. Received the "Best of 2012" and "Best of 2013" awards from US-based Kudzu (http://www.kudzu.com/m/Yes-M-Systems-30363491/reviews/)

   d. Trained close to 3000+ students from all over the world.

   e. Experienced, passionate and committed trainers

   f. IT Training in various technologies including Java, Dot Net, SAP, Oracle, QA, BA etc (See Courses We offer section for more information)

   g. Professional guidance/help with resumes and interview preparations.

   h. Recruiter help with marketing/jobs

   i. Certification at the end of the training.

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E. Courses we offer:

A. QA and BA courses:

- QA [Quality Assurance or QA Testing]

- BA [Business Analysis or Business Analyst]

- QA and BA as a single course (Integrated QA+BA) at a reduced fee.

- Advanced/specialization courses:

  a. 60-hour Selenium course with Core Java

  b. ETL Testing

  c. Advanced Mobile Testing

  d. Advanced QTP

  e. Any combination of a, b, c, d.

- Certification QA

  a. QTP

  b. ISTQB

  c. Quality Center

- Healthcare and Finance specialization

  a. Healthcare as a Domain Class

  b. Healthcare BA [Business Analyst with specialization in Healthcare]

  c. Healthcare QA [Business Analyst with specialization in Healthcare]

  d. Healthcare QA [Quality Assurance or QA Testing]

  e. Business analyst with Finance specialization.

  f. Quality Assurance with Finance specialization

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B. Java courses:

    a. Core Java

    b. Advanced Java

    C. Combination of Core Java and Advanced Java

■ Healthcare and Finance specialization

    a. Healthcare as a Domain Class

    g. Healthcare BA [Business Analyst with specialization in Healthcare]

    h. Healthcare QA [Business Analyst with specialization in Healthcare]

    i. Healthcare QA [Quality Assurance or QA Testing]

    j. Business analyst with Finance specialization.

    k. Quality Assurance with Finance specialization

D. Microsoft Courses:

    a. Dot Net

    b. Microsoft Business Intelligence [MS BI]

    c. Sharepoint

    d. MS SQL Server

E. SAP Courses:

    a. SAP FICO

    b. SAP MM

    c. SAP HR

    d. SAP BO

    e. SAP BI

    f. SAP HANA

F. Oracle Courses:

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     a. Oracle Financial

     b. Oracle DBA

     c. PL/SQL

G. Other Courses:

     a. Hadoop

     b. Hadoop with Java

     c. Salesforce

     d. Project Management (PMP)

     e. Maximo

     f. Tableau

     g. Informatica

     h. Cognos

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F. BA Instructor Profiles:

- Instructor 1 (Nandu): M.B.A (University of Alabama), M.S (Operations Research and Computer Applications)

    - IT Experience: 25+ years of experience in variety of areas that includes Training, Design, Development, Product Manager, Sr. Business Analyst, QA, IT Audit and Security.

    - Companies worked for (Consulting or as an Employee): IBM, EDS, BellSouth, Cingular, Sprint-Nextel, United Healthcare, and several start-ups.

    - CISA (Certified Information Systems Auditor)

    - CISM (Certified Information Systems Manager)