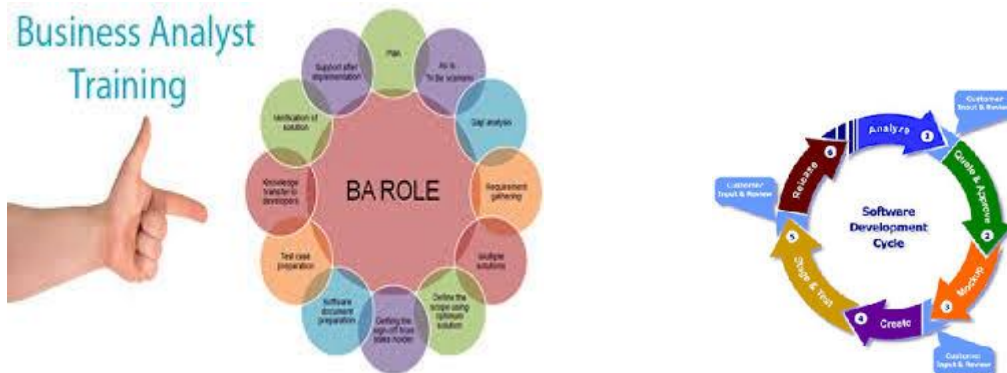




Our STACKIT Training Business Analysis program is a one and a half month hands on course that is packaged with SQL. This course exposes our students to the entire Business Analysis SDLC stack, and gives students technical knowledge using Oracle SQL Developer, TOAD, and Oracle databases in the cloud (AWS). This program also includes a real life Electronic Medical Records application, so our students get real hands on experience while learning this craft.



**Course Cost:**

Business Analysis Training (SQL Included): \$3000

1. Class One:

## Introduction to Business Analysis

- What is business analysis
- What skills does a BA need to be successful
- What does a BA do (Duties of a BA)
- BA tools and techniques
- What challenges does a BA face

## Requirements

- What are requirements
- Types of Requirements
- Why is it necessary to gather/elicit requirements
- Requirements elicitation/gathering techniques
  - JAD session
  - One-on-one interviews
  - Group interviews
  - Questionnaires
  - Prototyping
  - Following people around
  - Brainstorming
- Characteristics of a good requirement
- Requirements gathering tools
- Common Requirements Documents

## Stakeholders

- Who are they? And why do they matter?
- Communicating with Stakeholders
  - Emails
  - Phone calls
  - Face to face
- Stakeholder Interests
- Handling Stakeholder Conflicts

## Class 2:

### SDLC and Software Development Methodologies

- Software Development Lifecycle
- Software Development Methodologies
  - Waterfall
  - Agile Scrum
  - RUP

### BA Tools

- Microsoft Visio
- Microsoft Office Suite
- JIRA
- Sharepoint

## Class 3:

### BA Deliverables

- Functional Requirements Documents
- Requirements Traceability Matrix
- Software Change Request Documents
  - Impact analysis
  - Change management process
- Process Flow Diagrams
- User Training
- Use Case

## Class 4:

- Course review
- Resume preparation

- Interview preparation

## Structured Query Language (SQL)

### Week 1

#### **Lesson 01 - Database Basics, and Structured Query Language**

In our first lesson, we'll explore the basic structure and history of relational databases. Then, you'll understand what SQL is and how it is used with a relational database.

#### **Lesson 02 - Sorting and Retrieving Data**

In this lesson, you'll learn how to use SQL to sort and retrieve data from tables. We'll talk about important query terms that enable you to communicate with your database, as well as syntax rules that will enable you to create clear and understandable queries while avoiding system generated errors.

### Week 1

#### **Lesson 03 - Filtering Data**

In this lesson, you'll learn how to use SQL to filter retrieved data. You'll practice sorting retrieved data using the ORDER BY clause. You'll be able to sort single and multiple columns, and you'll know how to specify sort directions such as ascending and descending order. You'll also learn additional query terms that will help you customize your SQL queries.

#### **Lesson 04 - Calculated Fields and Functions**

Today, you'll learn how to reformat retrieved data with calculated fields and functions. You'll also learn how to create alternate names for columns and you'll discover the secret behind merging columns with the concatenation symbol.

### Week 2

#### **Lesson 05 - Summarizing and Grouping Data**

In this lesson, we'll discuss gathering significant statistics from data using aggregate functions. You'll also learn how to use the GROUP BY clause in conjunction with an aggregate function to gather important statistics from a table. Then you'll find out how to use the HAVING clause in conjunction with an aggregate function to filter groups of data from a table.

#### **Lesson 06 - Working with Subqueries**

Today's lesson is all about subqueries. You'll learn how to extract data from multiple tables simultaneously, how to use calculated fields in subqueries, how to use the DATEPART () function in subqueries, and how to use aggregate functions in subqueries. Then we'll talk about qualification—a technique used to combine a table name with a column name so there's no question about which table the column name refers to.

Week 2

### **Lesson 07 - Creating and Using Table Joins**

In this lesson, you'll learn how to use joins to gather information from two or more tables simultaneously. You'll learn how to use the inner join, self-join, natural join, and the outer join. Then you'll become familiar with the term Cartesian product.

### **Lesson 08 - Inserting, Updating, and Deleting Data**

In today's lesson, you'll discover how to manipulate data using the INSERT, UPDATE, and DELETE statements. You'll learn how to insert partial and complete rows into a table, and how to update information already stored in a table. You find out how to transfer data to a new table, how to transfer data to an existing table, and how to delete rows from a table.

Week 3

### **Lesson 09 - Table Creation and Maintenance**

Today, you'll find out how SQL can be used to create and maintain tables. You'll learn how to use the CREATE TABLE keywords to create a table, then we'll discuss how to use the ALTER TABLE, DROP TABLE, ADD COLUMN, and DROP COLUMN keywords to manipulate the tables themselves. You'll also find out how to define a primary key, data type, and field size.

### **Lesson 10 - Creating and Understanding Views**

In this lesson, you'll learn how and why views are used in SQL. You'll learn how to create and use views to simplify complex queries, summarize data, and manipulate data stored in tables. I'll also teach you how to update and delete a view.

Week 4

### **Lesson 11 - Understanding Transaction Processing, Constraints, and Indexes**

Today, you'll learn how transaction processing, constraints, and indexes are implemented in SQL. You'll work through an example that demonstrates how a transaction is created, how constraints are used in the creation of a table, and how indexes are used to improve the performance of a database by optimizing the speed at which queries are processed.

### **Lesson 12 - Understanding Stored Procedures, Triggers, and Cursors**

In our last lesson, you'll find out how stored procedures, triggers, and cursors are implemented in SQL. You'll see how stored procedures are created and executed, as well as how triggers work. You'll also see how cursors are declared in SQL.