Designing Self-Service Business Intelligence and Big Data Solutions

Duration: 5 Days **Course Code: 467** **Version: C**

Overview:

This five-day instructor-led course teaches students how to implement self-service Business Intelligence (BI) and Big Data analysis solutions using the Microsoft data platform. The course discusses the rationale for self-service BI, and describes how to use Microsoft SQL Server Reporting Services, Microsoft Excel, Microsoft SharePoint Server, and Microsoft Office 365 Power BI to create self-service data models and reports. The course then goes on to describe how to use Windows Azure HDInsight to perform Big Data analysis.

Please note that due to the nature of the lab / environment build delegates may be required to work in pairs.

Target Audience:

The primary audience for this course is database and business intelligence (BI) professionals who are familiar with data warehouses and enterprise BI solutions built with SQL Server technologies. Experienced data analysts who want to learn how to use Microsoft technologies for self-service analysis and reporting will also benefit from attending this course.

Objectives:

- Describe key features and benefits of self-service BI.
- Use SQL Server Reporting Services to implement a self-service reporting solution.
- Use PowerPivot in Microsoft Excel to create analytical data models.
- Use Power Query in Microsoft Excel to import data into a data model.
- Use Power View in Microsoft Excel to create interactive data visualizations.
- Use Power Map in Microsoft Excel to create geographic data visualizations.
- Use Microsoft SharePoint Server to implement collaborative self-service BI solutions.
- Find and use public data in the Windows Azure Marketplace.
- Use Microsoft Office 365 Power BI to implement cloud-based self-service BI solutions.
- Provision and use a Windows Azure HDInsight cluster for Big Data analysis.
- Use Pig and Hive to analyze big data in Windows Azure HDInsight.
- Design and implement Big Data processes to support self-service BI.

Prerequisites:

- Knowledge of data warehousing and data modeling principles.
- Familiarity with Microsoft Excel and Microsoft SharePoint Server 2013.

Content:

Module 1: Introduction to Self-Service Business Intelligence

- Extending Enterprise BI
- Microsoft Self-Service BI and Big Data Technologies

Lab : Exploring an Enterprise BI Solution

- Viewing Reports
- Analyzing Data in a Data Model
- Analyzing Data from Multiple Sources

Module 2: Self-Service Reporting

- Introduction to Self-Service Reporting
- Shared Data Sources and Datasets
- Report Parts

Lab : Implementing Self-Service Reporting

- Using Report Builder
- Simplifying Data Access for Business Users
- Using Report Parts

Module 3: Self-Service Data Modeling with PowerPivot

- Creating Data Models in Excel with PowerPivot
- Using DAX in a PowerPivot Data Model

Lab : Self-Service Data Modeling with PowerPivot

- Creating a Data Model with PowerPivot
- Enhancing a Data Model
- Extending a Data Model

Module 4: Importing Data with Power Query

- Introduction to Power Query
- Using Power Query to Import Data

Lab : Using Power Query

- Importing data with Power Query
- Merging Queries
- Adding a Query to a Data Model

Module 5: Visualizing Data with Power View in Microsoft Excel

- Introduction to Power View
- Creating Dynamic Data Visualizations

Lab : Visualizing Data with Power View

- Using Power View

Module 6: Visualizing Geographic Data with Power Map

- Introduction to Power Map
- Using Power Map

Lab : Visualizing Geographic Data with Power Map

- Creating a Power Map Tour
- Visualizing Data Over Time

Module 7: Collaborative BI with Microsoft SharePoint Server

- Sharing PowerPivot Workbooks
- Managing PowerPivot Services in SharePoint Server
- Using Power View in SharePoint Server

Lab : Using SharePoint Server for BI Collaboration

- Sharing a PowerPivot Workbook
- Managing PowerPivot Data Refresh
- Using Power View in SharePoint Server

Module 8: The Windows Azure Marketplace Data Market

- Introduction to the Windows Azure Marketplace
- Using Windows Azure Marketplace Data in Microsoft Excel

Lab : Using the Windows Azure Marketplace

- Finding Data in the Windows Azure Marketplace
- Using Windows Azure Marketplace Data in Excel

Module 9: Cloud Collaboration with Power BI for Microsoft Office 365

- Introduction to Power BI
- Natural Language Queries with Q;A
- Sharing Queries
- The Data Management Gateway

Lab : Using Power BI

- Provisioning Power BI
- Viewing Reports and Querying Data in Power BI
- Sharing Queries
- Cloud-Enabling a Data Source

Module 10: Introduction to Big Data and Windows Azure HDInsight

- Introduction to Big Data
- Windows Azure HDInsight

Lab : Using Windows Azure HDInsight

- Provisioning a Windows Azure HDInsight Cluster
- Processing Data with HDInsight
- Analyzing Big Data in Microsoft Excel

Module 11: Processing Big Data with Pig and Hive

- Processing Big Data with Pig
- Processing Big Data with Hive

Lab : Processing Big Data with Pig and Hive

- Processing Big Data with Pig
- Processing Big Data with Hive

Module 12: Implementing Big Data Processing Solutions with Windows Azure HDInsight

- Automating Big Data Processing Tasks
- Integrating Windows Azure HDInsight with Enterprise Data

Lab : Creating a Big Data Solution

- Using HCatalog to Abstract Storage Locations
- Using Oozie to Coordinate a Workflow
- Using Sqoop to Export Data

Further Information:

For More information, or to book your course, please call us on Head Office +254 713 027 191

training@clclearningafrica.com

www.clclearningafrica.com

Computer Learning Centre 2nd Floor Museum Hill Centre, Muthithi Road, Westlands, Nairobi, Kenya