



Data Analytics and Advanced Excel Course Details:

1.Introduction to Data Analytics

1.1. Introduction

- 1.1.1. Database Study
- 1.1.2. Database Design
- 1.1.3. Implementation and loading
- 1.1.4. Testing and evaluation
- 1.1.5. Operation
- 1.1.6. Maintenance and evolution

1.2. Who is Database Analyst

- 1.2.1. What are the roles of Database Analyst
- 1.2.2. Difference between Business Analyst and Database Analyst

1.3. Data warehouse Introduction

- 1.3.1. What Is a Data Warehouse?
- 1.3.2. Data Mart
- 1.3.3. Operational Data Stores
- 1.3.4. Characteristics of a Data Warehouse
- 1.3.5. Differences between Database and Data warehouse and Data Mart and ODS
- 1.3.6. OLTP Vs OLAP Vs DataMart Vs ODS
- 1.3.7. Uses and benefits of an ODS
- 1.3.8. ODS and Data Warehouse Design
- 1.3.9. OLTP v/s OLAP
- 1.3.10. Data Warehouse Architecture

1.4. Data Modelling Introduction

- 1.4.1. Conceptual
- 1.4.2. Logical
- 1.4.3. Physical

1.5. ETL

1.6. Normalized, De-Normalized

- 1.6.1. Anamolies
- 1.6.2. 1st Normal Form
- 1.6.3. 2nd Normal Form
- 1.6.4. 3rd Normal Form

1.7. How to work with business people (SME's)

- 1.7.1. 5 Challenges of Working with Subject Matter Experts
- 1.7.2. Easy tips to work with the SMEs

1.8. Data profiling, Data cleansing

2. Introduction SQL Queries

2.1. Evolution of the Database



2.2. DDL Statements

- 2.2.1. Create table
- 2.2.2. Truncate
- 2.2.3. Drop Table

2.3. DML Statements

- 2.3.1. Insert
- 2.3.2. Update
- 2.3.3. Delete

2.4. DQL Statement

- 2.4.1. Select Query

2.5. Clauses

- 2.5.1. Where
- 2.5.2. Like
- 2.5.3. Order by
- 2.5.4. Group by
- 2.5.5. Having
- 2.5.6. Distinct

2.6. Functions

2.6.1. Aggregate Functions

- 2.6.1.1. Count
- 2.6.1.2. Max
- 2.6.1.3. Min
- 2.6.1.4. Sum
- 2.6.1.5. Avg

2.6.2. String Functions

- 2.6.2.1. Length
- 2.6.2.2. Lower
- 2.6.2.3. Upper
- 2.6.2.4. Ltrim
- 2.6.2.5. Rtrim
- 2.6.2.6. Reverse
- 2.6.2.7. Replace

2.6.3. Miscellaneous Functions

- 2.6.3.1. Coalesce
- 2.6.3.2. Nullif

2.7. Constraints

- 2.7.1. Not null
- 2.7.2. Default
- 2.7.3. Unique
- 2.7.4. Primary Key
- 2.7.5. Foreign Key
- 2.7.6. Check

2.8. SQL Joins

- 2.8.1. Inner join
- 2.8.2. Left Outer join
- 2.8.3. Right Outer join



- 2.8.4. Full Outer join
- 2.8.5. Self join

3. Introduction documentations

- 3.1. Business Requirement Document
- 3.2. Report Requirement Document
- 3.3. Test Case Document
- 3.4. Mapping Document

4. Data Transformations

- 4.1. Aggregate
- 4.2. Character Map
- 4.3. Conditional Split without Default
- 4.4. Conditional Split with Default
- 4.5. Derived Column
- 4.6. Sort
- 4.7. Merge join

5. Testing on the transformations made above

- 5.1. Aggregate
- 5.2. Character Map
- 5.3. Conditional Split without Default
- 5.4. Conditional Split with Default
- 5.5. Derived Column
- 5.6. Sort
- 5.7. Merge Join

6. Tableau or Power BI Reporting

- 6.1. Overview
- 6.2. Architecture
- 6.3. Data source connections
- 6.4. Joining between the tables
- 6.5. Measures and dimensions
- 6.6. Different types of charts
- 6.7. Filters
- 6.8. Groups
- 6.9. Sets
- 6.10. Parameters
- 6.11. Dashboards
- 6.12. Story Points
- 6.13. Super Store Workbook
- 6.14. World Indicator Workbook

7. Interview Preparation



Advanced Excel

Module 1: Introduction

- 1.01 Introduction
- 1.02 Interface
- 1.03 Tabs and Ribbons
- 1.04 Document Windows
- 1.05 Navigation Tips
- 1.06 Office Button and Save

Module 2: Entering, Editing and Formatting Data

- 2.01 Introduction
- 2.02 Entering Data
- 2.03 Fonts, Fills, and Alignment
- 2.04 Cut, Copy, and Paste
- 2.05 Paste Special
- 2.06 Undo and Redo
- 2.07 Moving, Finding, and Replacing a Value
- 2.08 Cell Styles
- 2.09 Comments

Module 3: Formatting Numbers

- 3.01 Introduction
- 3.02 Currency Format
- 3.03 Format Painter
- 3.04 Formatting Dates
- 3.05 Custom and Special Formats

Module 4: Managing Worksheets

- 4.01 Introduction
- 4.02 Naming and Moving Worksheets
- 4.03 Copying Worksheets
- 4.04 Adding, Deleting and Hiding Worksheets
- 4.05 Grouping Worksheets
- 4.06 Moving, Copying, Deleting and Hiding Grouped Worksheets

Module 5: Modifying Rows and Columns

- 5.01 Introduction
- 5.02 Inserting and Deleting Columns and Rows
- 5.03 Inserting & Deleting Cells
- 5.04 Inserting Multiple Columns & Rows
- 5.05 Modifying Cell Width and Height
- 5.06 Hiding and Unhiding Rows and Columns

Module 6: Understanding Formulas

- 6.01 Introduction
- 6.02 Using Operations
- 6.03 Creating Formulas
- 6.04 AutoSum
- 6.05 Common Formulas
- 6.06 Searching for Formulas



- 6.07 Copying Formulas
- 6.08 Using Relative and Absolute References

Module 7: Changing Views

- 7.01 Introduction
- 7.02 Workbook Views
- 7.03 Show/Hide
- 7.04 Zoom Features
- 7.05 Freeze Panes
- 7.06 Split Windows
- 7.07 Viewing Multiple Windows
- 7.08 Minimize The Ribbon
- 7.09 Worksheet Backgrounds
- 7.10 Watermarks

Module 8: AutoFill and Custom Lists

- 8.01 Introduction
- 8.02 AutoFill a Series
- 8.03 AutoFill Non-Adjacent Cells
- 8.04 AutoFill on Multiple Sheets
- 8.05 Creating Custom Lists
- 8.06 Series Formatting

Module 9: Conditional Formatting

- 9.01 Introduction
- 9.02 Highlight Cells Rules
- 9.03 Top/Bottom Rules
- 9.04 Data Bars
- 9.05 Color Scales
- 9.06 Custom Formatting Rule

Module 10: Tables

- 10.01 Introduction
- 10.02 Insert a Table and Style Options
- 10.03 Add Rows and Columns
- 10.04 Perform a Function in a Table
- 10.05 Summarise With Pivot Table

Module 11: Data Tools

- 11.01 Introduction
- 11.02 Data Validation
- 11.03 Drop-Down Lists
- 11.04 Removing Duplicates
- 11.05 Text To Columns
- 11.06 Goal Seek
- 11.07 Scenario Manager

Module 12: Referencing Formulas

- 12.01 Introduction
- 12.02 Multiple Sheet References
- 12.03 Consolidating Data – With or Without Links
- 12.04 Trace the Precedents and Dependents
- 12.05 Using the Watch Window



Module 13: Ranges and Dates

- 13.01 Introduction
- 13.02 Cell Names
- 13.03 Named Ranges
- 13.04 Formulas with Cell Names
- 13.05 Date Formulas

Module 14: Lookups

- 14.01 Introduction
- 14.02 VLOOKUP
- 14.03 VLOOKUP Exact Match
- 14.04 HLOOKUP
- 14.05 HLOOKUP Exact Match

Module 15: Conditional Logic

- 15.01 Introduction
- 15.02 IF Statement
- 15.03 Nested IF
- 15.04 AND
- 15.05 OR
- 15.06 NOT
- 15.07 IFERROR
- 15.08 SUMIF
- 15.09 AVERAGEIF
- 15.10 COUNTIF & COUNTIFS
- 15.11 SUMIFS
- 15.12 AVERAGEIFS

Module 16: Text Formulas

- 16.01 Introduction
- 16.02 Case Formulas
- 16.03 Fix Number Fields
- 16.04 Trim Spaces
- 16.05 Substitute Text

Module 17: Introduction to Charts

- 17.01 Introduction
- 17.02 Chart Types
- 17.03 Instant Chart
- 17.04 Update Chart
- 17.05 Column Chart
- 17.06 Picture Fill
- 17.07 Adjust Chart Size
- 17.08 Line Chart
- 17.09 Scatter Chart

Module 18: Formatting Charts

- 18.01 Introduction
- 18.02 Chart Styles
- 18.03 Chart Layouts
- 18.04 Add Labels
- 18.05 Axis Options
- 18.06 Chart Title



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18.07 Legends
18.08 Data Labels

Module 19: Adding Graphics to Spreadsheets

19.01 Introduction
19.02 Insert Pictures
19.03 Modifying Pictures
19.04 Insert Shapes
19.05 Insert SmartArt
19.06 Apply Themes
19.07 Arrange

Module 20: Outline, Sort, Filter, and Subtotal

20.01 Introduction
20.02 Group and Ungroup
20.03 Sort Data
20.04 Sort Multiple Levels
20.05 Filter Data
20.06 Advanced Filter
20.07 Conditional Sorting and Filtering
20.08 Sorting with Custom Lists
20.09 Subtotal

Module 21: PivotTables

21.01 Introduction
21.02 Creating PivotTables
21.03 Choosing Fields

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