# **Full Stack Data Analytics 2.0**

The full stack data analytics course is meant to assist you in becoming a skilled data analyst. Learn how to deal with SQL databases, develop data visualizations, and apply predictive analytics and statistics in a corporate environment using the best analytics tools and methodologies.

Duration: 6 months Language: english Price: 10000

# What you will learn?

- MySQL
- Basic Charts in Power BI
- Working with Maps
- Slicers in Power BI
- Cards and Filters
- Power Query
- M Language
- Tableau
- SQL
- Python
- Statistics
- Excel
- Informatica Cloud (IICS)

### **Features**

- Full stack Data Analytics certification
- Internship Anytime
- Online Instructor-led learning: Live teaching by instructors
- 15+ hands-on industry real-time projects.
- 100 hours live interactive classes.
- Every week doubt clearing session after the live classes.
- Lifetime Dashboard access
- Doubt clearing one to one
- Doubt clearing through mail & support team
- Live project with real-time implementation
- Resume building Anytime
- Career guidance Anytime
- Interview Preparation

- Regular assessment
- Mock Interview

# Requirements

- System with Internet Connection
- Interest to learn
- Dedication

# **Course Curriculum**

### **MySQL**

- MySQL
- SQL
- SQL Query
- SQL Queries Part 2
- SQL Queries
- SQL function and procedure
- SQL primary and foreign key
- Window Function
- Partition
- Joins , Union , Indexing , CTE
- Triggers & Case
- NF & Pivote
- Snowflake
- Snowflake Fundamentals
- SQL Project
- Sql Date Functions
- Staging in SNOWFLAKE (loading data from AWS to snowflake)
- CIA\_Factbook\_Population\_Datasets
- SNOWFALKE CONTINUOS DATA LOAD USING SNOWPIPE
- Snowflake continuous data loading

# Informatica Cloud (IICS) Introduction

- What is Cloud Computing
- The Different Types of cloud computing

### **IICS-Informatica Intelligent Cloud Services**

- What is PasS?
- Power Center on premise vs Informatica cloud
- Power Center on cloud vs Informatica cloud
- Advantages of using Informatica cloud
- Informatica Cloud Architecture
- Informatica Cloud Connectivity and Secure Agent
- Informatica Documentation

### **Getting Started with IICS**

- How to Create a informatica cloud account
- What are the different services available in informatica cloud
- Quick Overview of Data Integration Service
- Quick Overview of Administration Service
- Quick Overview of Monitor Service
- Steps to download and install secure agent

### **Data Integration Service**

- Folder Creation under Explore Option
- Mapping Designer-Layout
- How to Configure a resuable Flat File Connection
- How to Configure a reusable Relational connection for an on-premise database
- Steps to Create the mapping and execute it
- Copy to and move to options
- How are the environments setup work in the cloud
- What are sub organization and how to link sub organizations
- Sub organization option

#### **Connections**

- Setup salesforce connection
- Setup big query connection
- Setup snowflake connection
- Setup Amazon S3 connection

#### **Transformations**

- Creating Customer Table in Oracle Database
- Set up Oracle connection

- Create Mapping
- Connect with Target Table
- Expression Transformation
- Overview in Expression Transformation
- Router Transformation
- Filter Transformation
- Aggregator Transformation

#### **Tasks**

- Mapping Task Properties in IICS
- Mapping Task Demo
- Synchronization Task in IICS
- Replication Task in IICS
- Data Transfer Task in IICS

#### **Taskflows**

- Create a Taskflow in IICS
- Tasks inside a Taskflow in IICS
- Schedule a Taskflow in IICS
- Unschedule a Taskflow in IICS
- File Listener in IICS
- Start Taskflow from File Listener in IICS
- Start Taskflow from Faulted step in IICS
- Blackout Period in IICS
- Copy, Rename, move, Delete Assets in IICS
- Deploy the assets from one environment to another environment

# **Informatica Projects**

- Build an ETL Pipeline for Bank Transactions
- Develop Informatica Mappings, Sessions, Worklets, Workflows for Sales Dataset
- Create data warehouse for multiple subject

### **PowerBI Live Classes**

- Power Bi
- Snowflake Integration with Power Bi + Donut Charts
- Line Chart (All types) + Slicers + Managing Relationship

#### **Basic Charts in Power BI**

- 2.0 Basic Charts in Power BI Desktop
- 2.1 Column Chart in Power BI
- 2.2 Stacked Column Chart in Power BI
- 2.3 Pie Chart in Power BI
- 2.4 Donut Chart in Power BI
- 2.5 Funnel Chart in Power BI
- 2.6 Ribbon Chart
- 2.7 Include and Exclude
- 2.8 Export data from Visual

### **Working with Maps**

- 3.1 Creating a Map in Power BI
- 3.2 Filled Map
- 3.3 Map with Pie Chart
- 3.4 Formatting in Map
- 3.5 Change Background in Map
- 3.6 Map of India in Power BI
- 3.7 Map of Australia in Power BI

#### Tables and Matrix in Power BI

- 4.0 Table and Matrix in Power BI
- 4.1 Creating a Table in Power BI
- 4.2 Formatting a Table
- 4.3 Conditional Formatting in Table
- 4.4 Aggregation in Table
- 4.5 Matrix in Power BI
- 4.6 Conditional Formatting in Matrix
- 4.7 Hirearchies in Matrix
- 4.8 Sub-Total and Total in Matrix
- 4.9 Number Formatting in Table

#### Other Charts in Power BI

- 5.0 Other Charts in Power BI
- 5.1 Line Chart in Power BI
- 5.2 Drill Down in Line Chart

- 5.3 Area Chart in Power BI
- 5.4 Line vs Column Chart in Power BI
- 5.5 Scatter Plot in Power BI
- 5.6 Waterfall Chart in Power BI
- 6.7 TreeMap in Power BI
- 5.8 Guage Chart in Power BI

#### **Cards and Filters**

- 6.0 Cards and Filters in Power BI
- 6.1 Number Card
- 6.2 Text Card
- 6.2.1 Formatting of Text Card
- 6.3 Date Card
- 6.3.1 Date Card (Relative Filtering)
- 6.4 Multi-Row Card
- 6.5 Filter on Visual
- 6.6 Filter on This PAge
- 6.7 Filter on All Pages
- 6.8 Drillthrough in Power BI

#### Slicers in Power BI

- 7.0 Slicers in Power BI
- 7.1 Text Slicers in Power BI
- 7.2 Formatting a Text Slicer
- 7.3 Date Slicers in Power BI
- 7.4 Formatting a Date Slicer
- 7.5 Number Slicers in Power BI

#### **Advanced Charts in Power BI**

- 8.0 Advanced Charts in Power BI
- 8.1 Animated Bar Chart Race
- 8.2 Drill down donut Chart
- 8.3 Drill down Column chart
- 8.4 Word Cloud in Power BI
- 8.5 Sankey Chart in Power BI
- 8.6 Infographic in Power BI

- 8.7 Play Axis in Power BI
- 8.8 Scroller in Power BI
- 8.9 Sunburst Chart in Power BI
- 8.10 Histogram in Power BI

### **Objects in Power BI**

- 9.1 Insert Image in Power BI
- 9.2 Insert Text in Power BI
- 9.3 Insert Shapes in Power BI
- 9.4 Insert Buttons in Power BI
- 9.5 Web URL Action in Power BI
- 9.6 Page Navigation Action in Power BI
- 9.7 Bookmark Action in Power BI
- 9.8 Drillthrough Action in Power BI

#### **Power BI Service Introduction**

- 10.1 Create a Superstore Report in Power BI
- 10.2 Create an Account on Power BI Service
- 10.3 Publish Report to Power BI Service Account
- 10.4 Export Power BI Report to PPT, PDF or PBIX
- 10.5 Comment, Share and Subscribe to Power BI Report
- 10.6 Create a Dashboard in Power BI Service
- 10.7 Problem in Power BI Dashboard and its solution
- 10.8 Automatic Refresh in Power Bl using Gateway

# **Power Query - Text Functions**

- 11.0 Text Functions in Power Query (Power BI)
- 11.1 Merge Columns in Power Query (Power BI)
- 11.2 Split and Trim in Power Query (Power BI)
- 11.3 Upper,Lower and ProperCase in Power Query (Power BI)
- 11.4 Prefix and Suffix in Power Query (Power BI)
- 11.5 Left, Right and Mid Functions in Power Query (Power BI)
- 11.6 Extract Text with Delimiters

# **Power Query - Date Functions**

- 12.0 Date Functions in Power Query(Power BI)

- 12.1 Year, Quarter, Month and Day Functions in Power Query (Power BI)
- 12.2 Find Difference between Dates in Power Query(Power BI)
- 12.3 Month and Day Name in Power Query (Power BI)
- 12.4 Day, Week of Month, Year in Power Query (Power BI)
- 12.5 Extract Date, Time in Power Query (Power BI)
- 12.6 Calculate Age in Power Query (Power BI)
- 12.7 Day of Year, Quarter, Month in Power Query (Power BI)

### **Power Query - Number Functions**

- 13.0 Number Functions in Power Query (Power BI)
- 13.1 Basic Number Functions in Power Query (Power BI)
- 13.2 Percentage, Percent Of, Module in Power Query (Power BI)
- 13.3 Round Functions in Power Query (Power BI)
- 13.4 IsEven, IsODD, Sign in Power Query (Power BI)

### **Power Query - Append Files**

- 14.1 Append multiple CSV files in a folder in Power Query (Power BI)
- 14.2 Append multiple excel sheets, Tables in Power Query (Power BI)
- 14.3 Append Excel sheets or Tables with different columns in Power BI
- 14.4 Append multiple Excel files from a folder in Power BI
- 14.5 Append different data sources in Power BI

### **Power Query - Merge Files**

- 15.0 Merge Files and Tables in Power BI
- 15.1 Merge Sheets or Tables in Power Query (Power BI)
- 15.2 Merge Data from multiple Excel files or Workbooks in Power BI
- 15.3 Merge data from different data sources in Power Query (Power BI)
- 15.4 Merge data having multiple criteria in Power BI

### **Power Query - Conditional Columns**

- 16.0 Conditional Column and Column from example in Power BI
- 16.1 Column from examples in Power BI Split Text
- 16.2 Column from examples in Power BI Merge Columns
- 16.3 Column from Examples in Power BI Date
- 16.4 Column from Examples in Power BI Alphanumeric
- 16.5 Conditional Column in Power BI One Column

- 16.6 Conditional Column in Power BI two columns
- 16.7 Conditional Column in Power BI Compare two columns
- 16.8 Conditional Column in Power BI on Dates

### **Power Query - - Important Topics**

- 17.0 Very Important Topics in Power Query (Power BI)
- 17.1 Fill Down in Power BI
- 17.2 Grouping in Power Query (Power BI)
- 17.3 Transpose in Power Query (Power BI)
- 17.4 Unpivot In Power Query (Power BI)
- 17.5 Data Types in Power Query (Power BI)
- 17.6 Replace Errors and Values in Power Query (Power BI)
- 17.7 Keep and Remove Rows in Power Query (Power BI)
- 17.8 Add, Remove and Goto Columns in Power Query (Power BI)

### **M** Language Introduction

- 18.0 M Language in Power Query
- 18.1 Introduction to M Language
- 18.2 IsIn Date Functions in M Language Power BI
- 18.3 Add and Subtract Date M Functions in Power BI
- 18.4 Basic Date M Functions in Power BI
- 18.5 Basic Text M Functions in Power BI
- 18.6 Simple M Code in Power BI
- 18.7 Trick to get all 900+ M Functions in Power BI

#### Introduction to tableau

- Tableau Introduction
- Download and Install Tableau
- Tableau Vs Excel

#### Charts - 1

- Column Chart
- Horizontal Bar Chart
- Stacked Column Chart
- Stacked Bar Chart
- Keep Only, Exclude

- Keep Only, Exclude 2\_Normal
- Publish to Tableau Public

#### Charts - 2

- Pie Chart
- Multiple Pie Chart
- TreeMap\_Editing
- Packed Bubble Chart
- Word Cloud OR Word Map
- Formatting payal

#### Charts - 3

- Data Types in Tableau
- Filled Map
- Symbol Maps
- India Map
- Histogram

#### Charts - 4

- Text Table
- Text Table with Multiple Measures
- Measure Names and Measure Values
- Line Chart
- Line Chart with Multiple Measures
- Discrete Vs Continous Line Chart
- Discrete Vs Continuous

#### Charts - 5

- Lollipop Chart
- Line Vs Column Chart
- Dual Axis Chart
- Column vs Shapes
- Bar in Bar Chart

#### Charts - 6

- Calculated fields
- Conditional Column Chart

- Column chart with Shapes based on condition
- Conditional Maps

#### Charts - 7

- Map with Pie Chart
- Map with WMS

#### Charts - 8

- Funnel Chart
- Advanced Funnel Chart
- Calendar
- Dumbell Chart
- Donut Chart
- Multiple Donut Chart

#### Charts - 9

- Bullet Chart 1
- Bullet Chart 2
- Table Calculations Part 1
- Table Calculations Compute Using Part 2
- Table Calculations Relative Part 3
- Bump Chart
- Bump Chart with Circle
- 100 Percent Stacked Column Chart

#### Charts - 10

- Scatter Plot
- Scatter Plot with Images OR Shapes
- Bubble Chart
- Animation Column Chart
- Animation Line Chart
- Animation Column vs Line Chart

#### Charts - 11

- Heat Maps
- Heat Map with Shapes
- Heat Map with Conditional Formatting

- Pareto Chart
- Rounded Bar Chart

# Introduction and installation of MySQL

- Introduction to section 1
- MySQL introduction 5 points to know
- MYsql Installation MAC

# **Basics of MySQL**

- Introduction to section 2
- Creating and dropping database Startup
- Resolving the issue for future
- Creating your first table
- Adding values to canon table
- Answering customer question

### Playing with data

- Introduction to section 3
- Primary key, default and NULL
- Table with primary key and default values
- Testing the new table
- Adding new values and answering questions
- Update in customers table
- Delete from the customers table

#### More on functions

- Introduction to section 4
- Understand the new Ico user DB
- Task for CONCAT
- Task for REPLACE
- task for SUBSTRING
- Task for reverse and CHAR\_LENGTH
- Task for case conversion and DOCS

# **Answering some DB questions**

- Introduction to section 5
- A task on DISTINCT

- A task for ORDER BY
- A task on LIMIT
- Match the pattern
- A task on COUNT
- SQL MODES and GROUP BY
- MIN MAX and SUBQUERIES
- GROUP BY with MAX and MIN
- SUM and AVERAGE with GROUP BY
- A task on AND OR
- A task in RANGE based selection
- CASE THEN multiple range selection

### A pinch of theory

- Introduction to section 6
- Data type for INTEGER and STRING
- Data type for DATE, DATETIME and JSON
- DATE TIME code Example
- Get the date and time
- Lets join tom and jerry tables
- Types of JOIN

#### **FOREIGN KEY and JOINS**

- Introduction to section 7
- Code talk over FOREIGN keys
- Understand a new database
- A task on INNER join
- ONE to MANY and MANY TO MANY
- Join more 3 or more tables
- A task on LEFT JOIN
- A task on RIGHT JOIN
- FULL OUTER join and UNION tasks

# A pinch of more theory

- Introduction to section 8
- Database engines INNODB and more
- ACID in database

### A 30 Task assignment for movie DB

- Introduction to section 9
- How practice database works FILM

# Final exam - single attempt

- MYSQL Outro and some free resources

### **Python Basics**

- Python Introduction, Installation and Setup
- Python Basics & Conditionals
- Conditionals & Loops
- Working with Loops
- Working with Strings & Lists
- List manipulation
- Tuple, Set & Dictionary
- Working with Functions

#### **Statistics**

- Introduction
- Different types of Statistics
- Population vs Sample
- Mean, Median and Mode
- Variance, Standard Deviation
- Sample Variance why n-1
- Standard Deviation
- Variables
- Random Variables
- Percentiles & quartiles
- 5 number summary
- Histograms
- Gaussian Normal distribution
- Standard Normal distribution
- Application Of Zscore
- Basics Of Probability
- Addition Rule In Probability
- Multiplication rule in probability

- Permutation
- Combination
- Log Normal Distribution
- Central Limit theorem
- Statistics Left Skewed And Right Skewed Distribution And Relation With Mean, Median And Mode
- Covariance
- Pearson And Spearman Rank Correlation
- What is P Value
- What is Confidence Intervals
- How To Perform Hypothesis Testing Confidence IntervalZ Test Statistics Derive Conclusion
- Hypothesis testing part 2
- Hypothesis testing part 3
- Finalizing statistics

#### **Microsoft Excel Fundamentals**

- Launching Excel
- Microsoft Excel Startup Screen
- Introduction to the Excel Interface
- Customizing the Excel Quick Access Toolbar
- More on the Excel Interface
- Understanding the Structure of an Excel Workbook
- Saving an Excel Document
- Opening an Existing Excel Document
- Common Excel Shortcut Keys

# **Entering and editing text and formulas**

- Entering Text to Create Spreadsheet Titles
- Working with Numeric Data in Excel
- Entering Date Values in Excel
- Working with Cell References
- Creating Basic Formulas in Excel
- Relative Versus Absolute Cell References in Formulas
- Understanding the Order of Operation

# Working with basic excel functions

- The structure of an Excel Function

- Working with the SUM() Function
- Working with the MIN() and MAX() Functions
- Working with the AVERAGE() Function
- Working with the COUNT() Function
- Adjacent Cells Error in Excel Calculations
- Using the AutoSum Command
- Excel's AutoSum Shortcut Key
- Using the AutoFill Command to Copy Formulas

### Modifying an excel worksheet

- Moving and Copying Data in an Excel Worksheet
- Inserting and Deleting Rows and Columns
- Changing the Width and Height of Cells
- Hiding and Unhiding Excel Rows and Columns
- Renaming an Excel Worksheet
- Deleting an Excel Worksheet
- Moving and Copying an Excel Worksheet

### Formatting data in an excel worksheet

- Working with Font Formatting Commands
- Changing the Background Color of a Cell
- Adding Borders to Cells
- Excel Cell Borders Continued
- Formatting Data as Currency Values
- Formatting Percentages
- Using Excel's Format Painter
- Creating Styles to Format Data
- Merging and Centering Cells
- Using Conditional Formatting
- Editing Excel Conditional Formatting

# Alteryx Introduction

- Introduction to Alteryx
- Download and Install Alteryx
- User Interface of Alteryx

#### **IN/Out Tab**

- Get Data from Excel
- Get Data from CSV
- Append All CSV files
- Browse Tool
- Output Tool Update Existing Data
- Directory Tool
- Directory Tool Specific Files
- Text Input Tool
- Date and Time Tool

## **Preparation Tab**

- Auto Field Tool
- Data Cleansing Tool
- Filter Tool (Text Example)
- Filter Tool (Number Example)
- Filter Tool (Date Example)
- FORMULA TOOL (Basic Example)
- FORMULA TOOL (Multiple Examples)
- GENERATE ROWS TOOL
- IMPUTATION TOOL
- MULTI-FIELD BINNING TOOL
- MULTI-FIELD FORMULA
- MULTI ROW FORMULA
- RANDOM % SAMPLE TOOL
- SAMPLE TOOL
- RECORD ID TOOL
- SELECT TOOL
- SORT
- CREATE SAMPLE TOOL
- TILE TOOL
- UNIQUE TOOL

#### Join Tab

- APPEND FIELDS TOOL
- FIND AND REPLACE TOOL

- FUZZY MATCH TOOL
- JOIN TOOL
- JOIN MULTIPLE TOOL
- UNION TOOL
- REGEX TOOL
- Text To Columns

#### **Transform Tab**

- CROSS TAB Tool
- TRANSPOSE Tool
- RUNNING TOTAL Tool
- SUMMARIZE TOOL

# **Reporting Tab**

- TABLE TOOL
- INTERACTIVE CHART Tool
- JOIN TABLE AND CHART
- ADD ANNOTATION
- REPORT TEXT TOOL
- REPORT HEADER TOOL
- REPORT FOOTER TOOL
- REPORT LAYOUT TOOL

#### **Documentation Tab**

- COMMENT TOOL
- EXPLORER TOOL
- CONTAINER TOOL

#### **Case Studies**

- Case Study 1
- Case Study 2
- Case Study 3
- Case Study 4
- Case Study 5