

Data Modeling Workshop: Prerequisites and Curriculum



Prerequisites and Software Requirements

Basic SQL familiarity

Heavy emphasis on exposure of JOINS

Introductory Power BI experience

Heavy emphasis on importing data and creating basic visualizations in Power BI

Software Requirements

SQL: Free trial of Snowflake

Power BI: Free Power BI Desktop application

Training Syllabus

Understanding Table Structures

Understanding primary keys, foreign keys, and uniqueness

Recognizing fact tables vs. dimension tables using real-world examples

Relationships & Cardinality

Understanding table relationships (one-to-one, one-to-many, many-to-many)

Applying correct cardinality concepts

Understanding filter direction and its impact on analysis

Common relationship mistakes that lead to incorrect results

Reviewing SQL Data for Analytics

Reviewing existing SQL tables to assess data readiness

Understanding how joins and relationships affect reporting outcomes

Identifying modeling issues that cause mismatched totals or filtering problems

Modeling Data in Power BI

Importing existing SQL tables into Power BI

Building and managing relationships in the Power BI data model

Applying correct cardinality and cross-filter direction

Testing and validating the model using visuals and filters



DATA TELLS A STORY. BE THE STORYTELLER