

Developing Data Models with LookML

This course empowers you to develop scalable, performant Looker Modeling Language (LookML) models that provide your business users with the standardized, ready-to-use data that they need to answer their questions. Upon completing this course, you will be able to start building and maintaining LookML models to curate and manage data in your organization's Looker instance.

**DURATION**

1 day

**LEVEL**

200 - Intermediate

**FORMAT**

Instructor-led, On-demand

What you'll learn

- Use dashboards to combine key queries and visualizations into a one-page executive view.
- Model files of LookML projects to design and build custom Explores for business users.
- Use derived tables to create new custom tables that do not exist in the underlying database.
- Explain how caching works and how developers can use datagroups to manage caching policies.
- Navigate the Looker user interface and identify key components of the IDE.
- Explain Looker integration with Git for version control and collaborative development.
- Describe the stages of the LookML development lifecycle from writing to deployment.
- Explain the relationship between LookML and SQL and how Looker translates queries.
- Convert between user-defined and LookML dashboards to standardize visualizations.
- Explain symmetric aggregation and its role in accurate data analysis in Looker.

Overview	4 modules · 26 videos · 2 labs · 6 demos · 4 quizzes
Who this course is for	• Data developers who are responsible for data curation and management within their organizations. Data analysts interested in learning how data developers use LookML to curate and manage data in their organization's Looker instance.
Products	• Looker
Prerequisites	• To get the most out of this course, participants should have a basic understanding of SQL, Git, and the Looker business user experience. For learners with no previous experience as data explorers in Looker, it is recommended to first complete Analyzing and Visualizing Data in Looker.
Not covered	• Analyzing data in Explores. • Creating and sharing visualizations and dashboards. • Using Looker administrative features and functions.

Module 01

Introducing Looker and LookML

Topics

- Looker and LookML
- The Looker user interface
- Example 1: The Looker IDE
- LookML project version control
- Example 2: Git workflow in Looker
- How Looker writes SQL

Objectives

- Articulate the benefits of using LookML for data modeling and analysis.
- Identify the primary components of the Looker user interface.
- Identify the target users and functions of key Looker UI elements.
- Define core Looker platform and LookML terminology.
- Understand the basic integration between Looker and Git for version control.
- Describe the LookML development lifecycle, including writing, validation, merging, and deployment processes.
- Recognize how Looker reads, parses, and writes SQL.
- Explain the relationship between SQL and the LookML modeling language.

Activities

- 2 demos
 - 1 quiz
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Module 02

Data Modeling Using LookML

Topics

- Anatomy of a LookML project
- Modeling dimensions
- Example 3: Creating dimensions using LookML
- Modeling measures
- Example 4: Modeling measures using LookML
- Dimension and measure modeling logic
- LookML dashboards
- Lab 1: Creating dimensions and measures with LookML

Objectives

- Detail the hierarchical layers contained within a LookML project.
- Convert between user-defined and LookML dashboards.
- Construct dimensions and measures within a Looker Explore, defining appropriate data types, formats, and calculations.
- Locate dimensions, measures, and dashboards in the Looker IDE.
- Understand how dimensions and measures connect IDE development to Explore usage.
- Model complex dimensions for enhanced user experience in Looker.
- List the features and basic functionality of a LookML dashboard.
- Convert between user-defined and LookML dashboards.

Activities

- 1 quiz
 - 2 demos
 - 1 lab
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Module 03

Modeling Explores for Your Users

Topics

- Modeling new Explores
- Using LookML to filter Explores
- Understanding symmetric aggregation

Objectives

- Create new Explores and filters in the Looker IDE.
- Connect Explores and filters to end-user data exploration.
- Understand symmetric aggregation for data analysis in Looker.

Activities

- 1 quiz
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Module 04

Working with Derived Tables

Topics	• Introducing derived tables • Types of derived tables • Example 5: Using SQL derived tables • Example 6: Using native derived tables • Native derived table parameters • Using persistent derived tables • Caching and datagroups • Implementing datagroups in Looker • Lab 2: Creating Derived Tables with LookML
Objectives	• Understand derived tables, including SQL, native, and persistent types, and their respective purposes. • Identify appropriate use cases for derived tables and select the optimal type based on specific requirements. • Explain how derived tables enhance data analysis efficiency and effectiveness in Looker. • Locate the creation points for SQL, native, and persistent derived tables within the Looker UI. • Describe the process of creating SQL, native, and persistent derived tables in Looker. • Identify the two key parameters used in native derived tables. • Identify optional parameters for optimizing native derived table performance and functionality. • Define caching and datagroups in the context of Looker. • Determine when to implement caching and datagroups for query optimization. • Evaluate the impact of caching and datagroups on overall Looker performance and user experience.
Activities	• 2 demos • 1 quiz • 1 lab