GALILEU

DA-100: Analyzing Data with Microsoft Power BI

Microsoft - Base de Dados

- **Nível:** Intermédio
- **Duração:** 28h

Sobre o curso

This course will discuss the various methods and best practices that are in line with business and technical requirements for modeling, visualizing, and analyzing data with Power BI. It will also show how to access and process data from a range of data sources including both relational and non-relational data. It will explore how to implement proper security standards and policies across the Power BI spectrum including datasets and groups.

The course will also discuss how to manage and deploy reports and dashboards for sharing and content distribution. Finally, this course will show how to build paginated reports within the Power BI service and publish them to a workspace for inclusion within Power BI.

At the end of this course, students will be able to:

- Ingest, clean, and transform data
- Model data for performance and scalability
- Design and create reports for data analysis
- Apply and perform advanced report analytics
- Manage and share report assets
- Create paginated reports in Power BI

Destinatários

- The audience for this course are data professionals and business intelligence professionals who want to learn how to accurately perform data analysis using Power BI.
- This course is also targeted toward those individuals who develop reports that visualize data from the

data platform technologies that exist on both in the cloud and on-premises.

Pré-requisitos

- In addition to their professional experience, students who take this training should have technical knowledge equivalent to the information found in the Azure Fundamentals course.

Programa

- Introduction
- Getting and Profiling Data
- Cleaning and Transforming Data
- Designing a Data Model
- Developing a Data Model
- Creating Model Calculations with DAX
- Optimizing Model Performance
- Creating Reports
- Enhancing Reports for Usability and Performance
- Creating Dashboards
- Enhancing Reports and Applying Advanced Analytics
- Managing and Sharing Power BI Assets
- Working with Paginated Reports in Power BI

Introduction

- The Power BI Portfolio
- Identifying Tasks of the Data Analyst
- **Lab : Getting Started**

Getting and Profiling Data

- Data Sources
- Storage Modes
- Query Performance
- Data Profiling
- **Lab : Preparing Data in Power BI Desktop**

Cleaning and Transforming Data

- User-Friendliness
- Combining Queries
- Data cleaning and transformation
- Advanced capabilities
- Configuring data loading and resolving errors
- **Lab : Loading Data in Power BI Desktop**

Designing a Data Model

- Data modeling basics
- Measures and Dimensions
- Model Performance
- **Lab : Data Modeling in Power BI Desktop**

Developing a Data Model

- Common data modeling techniques
- Adding columns to support the data model
- Row-level security
- Q&A considerations
- **Lab : Advanced Data Modeling**

Creating Model Calculations with DAX

- Introduction to DAX
- Creating tables and columns
- Measures
- The CALCULATE expression
- Time-Intelligence functions
- **Lab : Using DAX in Power BI – Part 1**
- **Lab : Using DAX in Power BI – Part 2**

Optimizing Model Performance

- Fine-tune the data model
- Cardinality
- Identifying performance issues

Creating Reports

- Selecting a visualization
- Configuring visualizations
- Formatting pages

- Enhancing the report
- **Lab : Designing a report in Power BI Desktop – Part 1**

Enhancing Reports for Usability and Performance

- Bookmarks and navigation
- Designing cohesive pages and interactions
- Improving reports
- **Lab : Designing a report in Power BI Desktop – Part 2**

Creating Dashboards

- Dashboard design
- Real-time dashboards
- Dashboard enhancements
- **Lab : Creating a Power BI Dashboard**

Enhancing Reports and Applying Advanced Analytics

- Navigation
- Basic analysis
- Grouping, binning, and clustering
- Analysis over time
- Advanced analysis
- **Lab : Data Analysis in Power BI Desktop**

Managing and Sharing Power BI Assets

- Dataset management
- Enhancing datasets
- Configure row-level security
- Create and Manage workspaces
- Enhancing datasets and reports in the workspace
- Sharing and distributing content
- **Lab : Publishing and Sharing Power BI Content**

Working with Paginated Reports in Power BI

- Introduction to Paginated Reports
- Data sources and datasets
- Adding visual elements
- Enhancing and publishing reports
- **Lab: Creating a Paginated report**