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Sign up

Modern Data Stack training: your data at its full potential

2 days (14 hours)

Presentation

Our Modern Data Stack training course will give you an in-depth understanding of the modern data stack and its components. You'll learn about data repositories, analysis, orchestration, security and data governance. Our Modern Data Stack training course will teach you the essential basics, such as understanding the concept and benefits of the Modern Data Stack, and configuring and managing a data collection pipeline. You'll also learn how to set up and administer a modern data warehouse and create an ETL/ELT process for data transformation. Our training is punctuated by practical workshops, enabling you to familiarize yourself with the concepts covered in the course, and to apply them in your day-to-day tasks to become fully operational.

Objectives

- Understanding the fundamental concepts of the Modern Data Stack
- Configuring and administering a data pipeline
- Installing and administering a data repository

Target audience

- Data scientists
- Data analysts

Prerequisites

- Basic knowledge of data management

Modern Data Stack training program

Introduction to the Modern Data Stack

- What is **the Modern Data Stack?**
- Modern Data Stack vs. traditional data management
- Components
- Advantages and disadvantages
- Current trends

Collecting data

- Basics of data collection
- Collection tools (Stitch, Fivetran...)
- Extract data from different sources
- Best practices
- Workshop: Configuring a data pipeline

Modern data warehouses

- Understanding the basics
- Data repository tools (Snowflake, Google BigQuery and Amazon Redshift...)
- Choosing the right data warehouse
- Best practices
- Data warehouse configuration and management

Data transformation

- Introduction to data transformation
- ETL/ELT processes
- DBT and other data transformation tools
- Best practices for data transformation
- Creating an ETL/ELT process with dbt

Data analysis

- Basics of data analysis
- Looker, Tableau, Power BI and other data analysis tools
- Create interactive dashboards and reports
- Best practices
- Practical workshop: creating a dashboard with Looker or Tableau

Data orchestration

- What is data orchestration?
- Introducing Apache Airflow and Prefect
- Automate and manage data workflows
- Recommended practices for data orchestration
- Data workflow configuration with Apache Airflow

Data security and governance

- Understand the importance of data security and governance
- Regulatory and legal data requirements.
- Tools and best practices for data security
- Tools and best practices for data governance
- Practical workshop: implementing a data security and governance strategy

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.