€TRAINING

Data Management , Security and Warehousing

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Introduction

Big Data presents the challenge of data management because simply having the data is not enough. Data management is defined as an administrative process that includes gathering, validating, storing, safeguarding, and processing the necessary data in order to ensure the data's users' accessibility, dependability, and timeliness. In the big data era, there are many different data warehousing and security solutions available, making it difficult for businesses to choose the best course of action. This training course focuses on the necessity to correctly warehouse the data.

Course Objectives

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

- Learn how to organize your data warehousing project's steps.
- Become knowledgeable about the factors that contribute to the growing demand for strategic information.
- Learn about the core issue with data management and data warehousing.
- Learn data security techniques.
- be able to decide which techniques and strategies to employ in the Big Data era.

Targeted Audience

- Systems Analysts
- Programmers
- Data Analysts
- Database Administrators
- Project Leaders
- Software Engineers
- Managers
- Any Professional involved in Data Analytics

Course Outline

Unit 1: Data Security Techniques

- How can you tell if your data is reliable?
- ISO Standard ISO/IEC 17728
- EU General Data Protection Regulation GDPR
- Protecting the Data Warehouse
- The Lifecycle of a Dataset

Unit 2: Data Warehouse: Architecture and Infrastructure Requirements for Data Warehousing

- Hardware and Operating Systems
- Database Software
- Automation of Warehousing Tasks
- Data Warehouse Architecture

- Business Conceptual Model
- Logical Data Model
- Physical Data Model

Unit 3: Data Management, Security and Warehousing Implementation

- Data Extraction, Transformation, and Loading
- Data Design and Data Preparation-data Dimensional Modeling
- Key Elements of Data Quality
- Matching Information with the User
- On-Line Analytical Processing OLAP
- Big Data Processing in Cloud Environments

Unit 4: Agile Enterprise Data Warehousing

- Agile Manifesto
- The Scrum Method
- Extreme Programming Approach
- Lean Software Development
- Sources for Data Warehousing Standards

Unit 5: Data Warehouse: The Building Blocks

- Data Defining Features
- Data Warehouses and Data Marts
- Data Warehouse Components Overview
- Dimensional Analysis of Data
- Requirements as the Driving Force for Data Warehousing