

# Data Modeling for Business Intelligence

Lesson 00:

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People matter, results count.



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## Document History

Date	Course Version No.	Software Version No.	Developer / SME	Change Record Remarks
June 2011	0.1D	NA	Vandana Mistry	Content Creation
June 2016	0.2D	NA	Swati Rao	Material Revamp as per Integrated ToC for I & D LoT

## Course Goals and Non Goals

- Course Goals

- At the end of this program, participants gain an understanding of basic concepts in Data Modeling.

- Course Non Goals

- Implementation of Data Modeling tools.



## Pre-requisites

- Fair knowledge of DW concepts

## Intended Audience

- Software Engineers and Senior Software Engineers



## Day Wise Schedule

- Day 1
  - Lesson 1: Introduction to Data Modeling
  - Lesson 2: Understanding Business Requirements
  - Lesson 3: Conceptual Model
  - Lesson 4: Logical Model

## Table of Contents

- Lesson 1: Introduction to Data Modeling
  - 1.1: Importance of Data Modeling
  - 1.2: Features of a Good Data Model
  - 1.3: Who should be involved in data modeling?
  - 1.4: Database Design stages and deliverables
  - 1.5: Classification of Information
- Lesson 2: Understanding business requirements
  - 2.1: Need of requirement analysis
  - 2.2: Characteristic of a good requirement
  - 2.3 The data life cycle
  - 2.4. Methods of collecting requirement
  - 2.5. Business requirement specification

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- Lesson 3: Conceptual Model
  - 3.1: Define Conceptual Model
  - 3.2: Objectives of Conceptual Model
  - 3.3: Components of Conceptual Model
  - 3.4: Types of Modeling
  - 3.5: Entity-Relationship model
  - 3.6: Types of Attributes
  - 3.7: Steps of Dimension Modeling
  - 3.8: Star Schema
  - 3.9: Snowflake Schema
  - 3.10. Bill Inmon Vs Ralph Kimball approach



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- Lesson 4: Logical Model
  - 4.1: Define Logical Model
  - 4.2: List features of Logical model
  - 4.3: Transformations required to be done while converting a conceptual model into logical model
  - 4.4: Activities in Table specification
  - 4.5: Activities in Column specification
  - 4.6: Activities in Primary key specification

## References

- Student material:
  - Class Book (presentation slides with notes)
- Book:
  - Data Modeling techniques for data warehousing
- Web-site:
  - <http://www.datawarehouse.org>



## Next Step Courses (if applicable)

- BI related tool training



## Other Parallel Technology Areas

- NA