



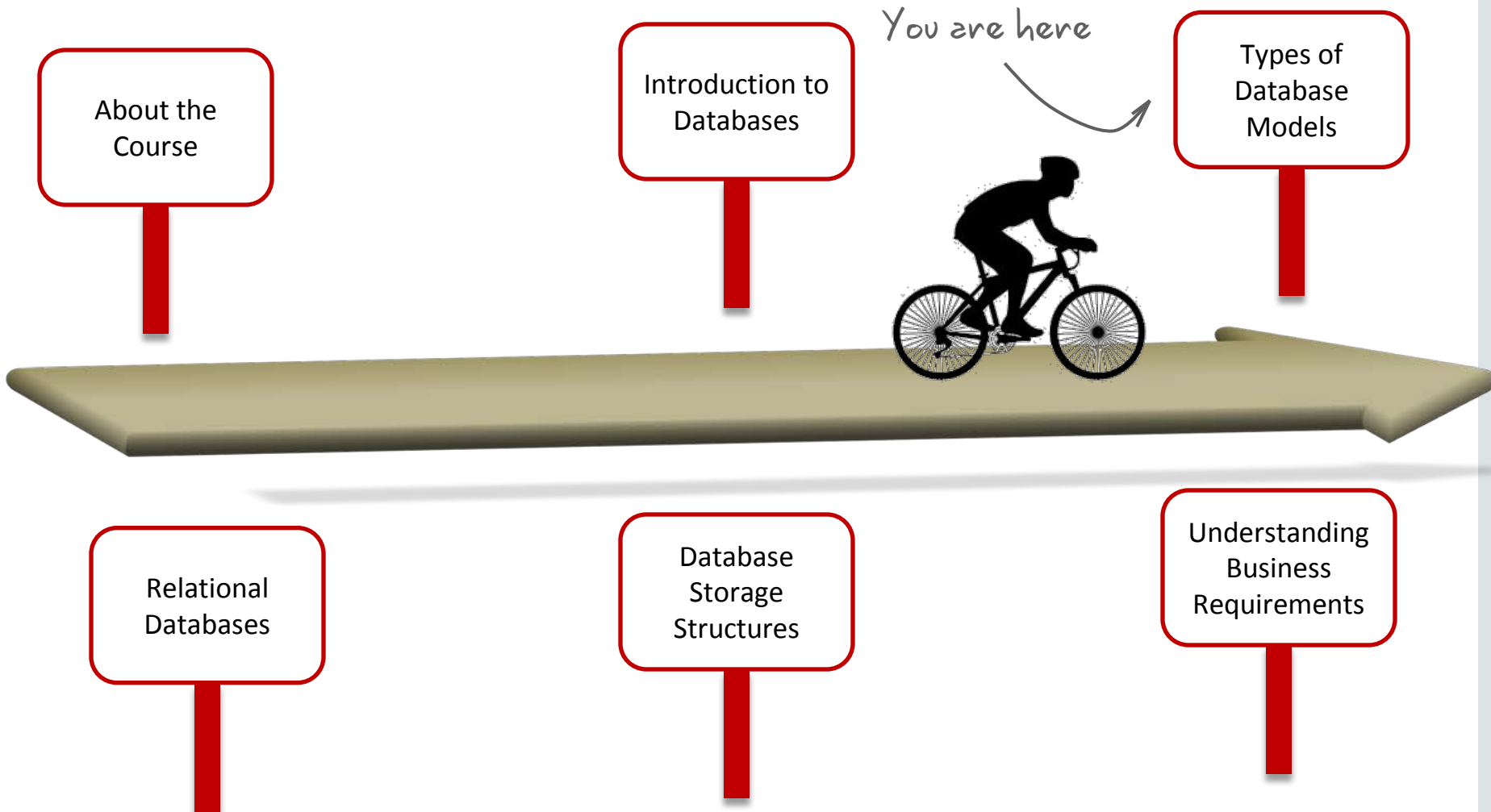
Database Foundations

1-3

Types of Database Models



Roadmap



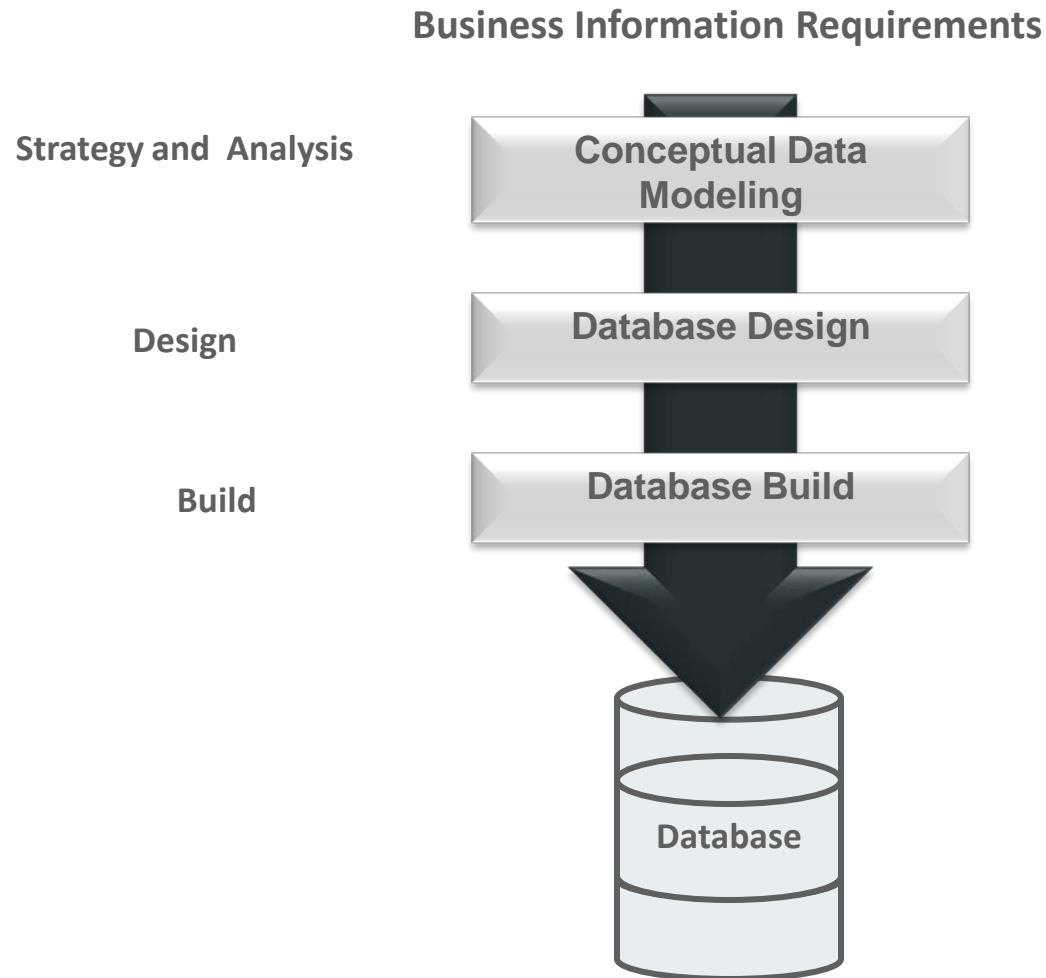
Objectives

This lesson covers the following objectives:

- Describe the database development process
- Explain the common types of database models:
 - Flat file model
 - Relational model
 - Hierarchical model
 - Network model
 - Object-oriented model



Database Development Process



Common Types of Database Models

Flat File Model

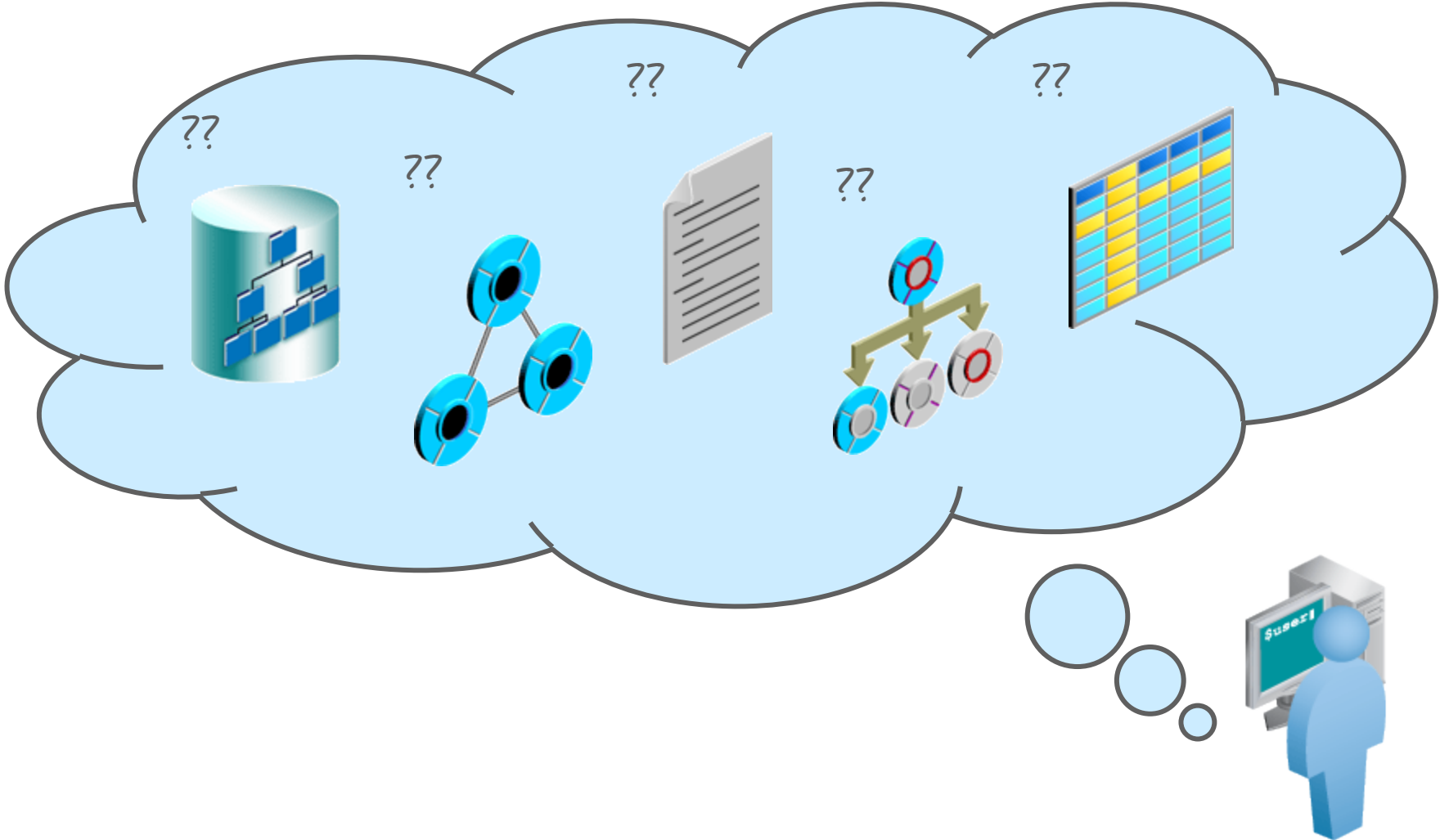
Hierarchical Model

Relational Model

Network Model

Object-Oriented Model

Case Scenario: Types of Database Models



Flat File Model



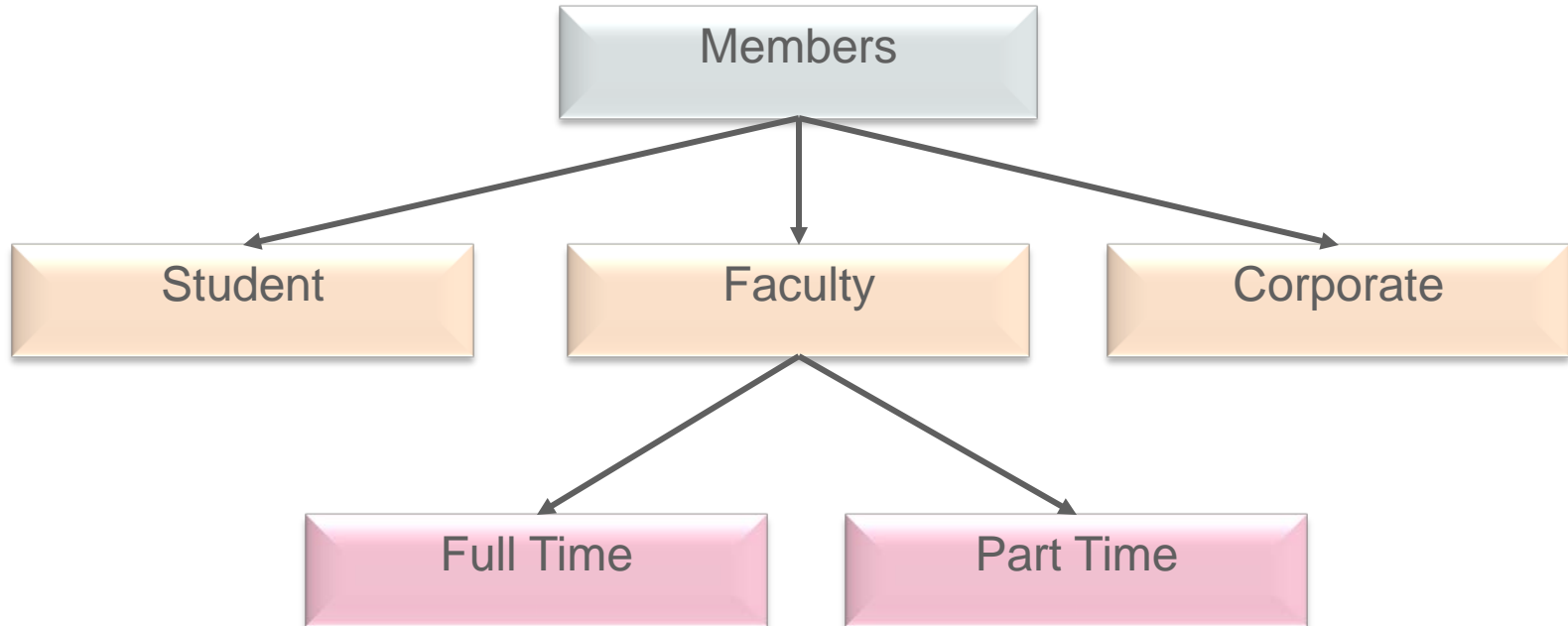
	Member ID	First Name	Last Name	Address	City	Zip
Record 1	CN0001	Velasquez	Carmen	283 King Street	Seattle	5876
Record 2	CN0002	Ngao	LaDoris	5 Modrany	Boston	5862
Record 3	CN0003	Nagayama	Midori	8 Centrale	Lagos	2544
Record 3	CN0003	Nagayama	Midori	9 Fox Town	Stowe	2544

Example of a Flat File Model

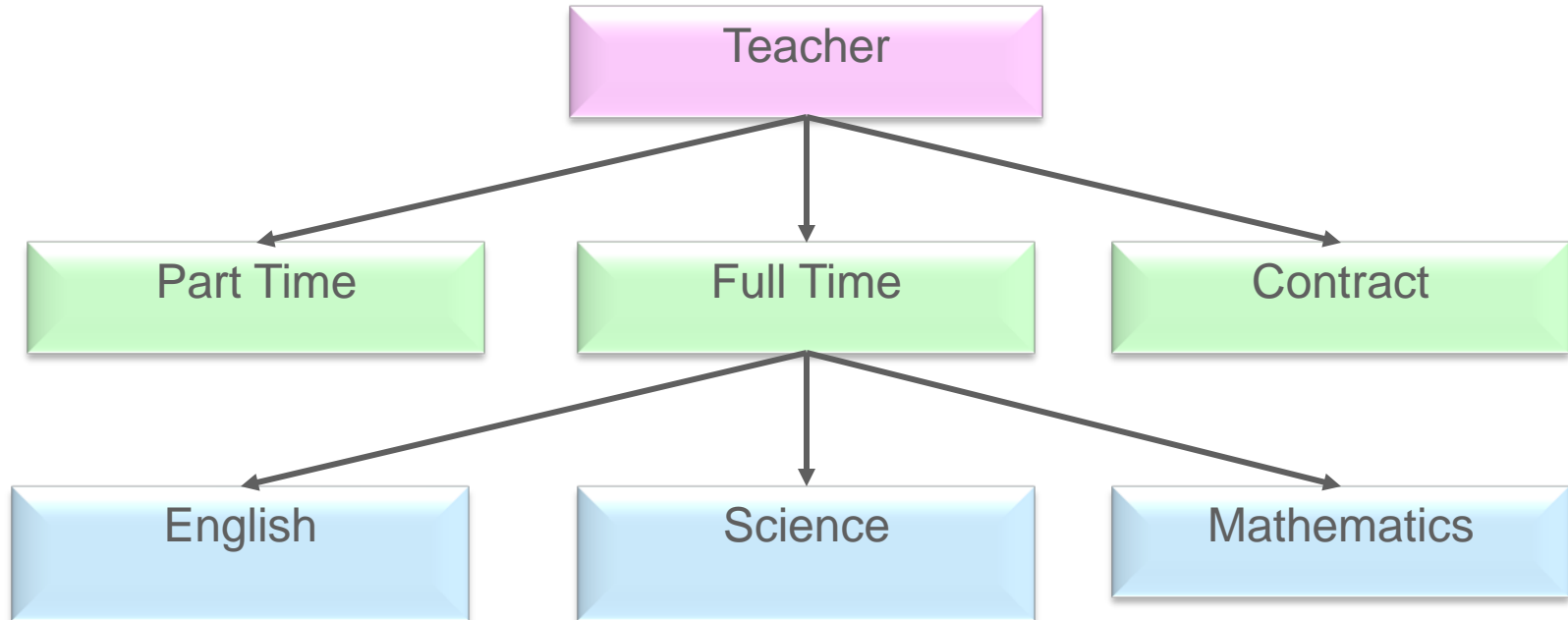


	Author ID	Author Name	Title
Record 1	AD0001	Oscar Wilde	A Vision
Record 2	AD0002	Leo Tolstoy	War and Peace
Record 3	AD0003	Oliver Goldsmith	Citizen of the World
Record 4	AD0003	Oliver Goldsmith	The Deserted Village

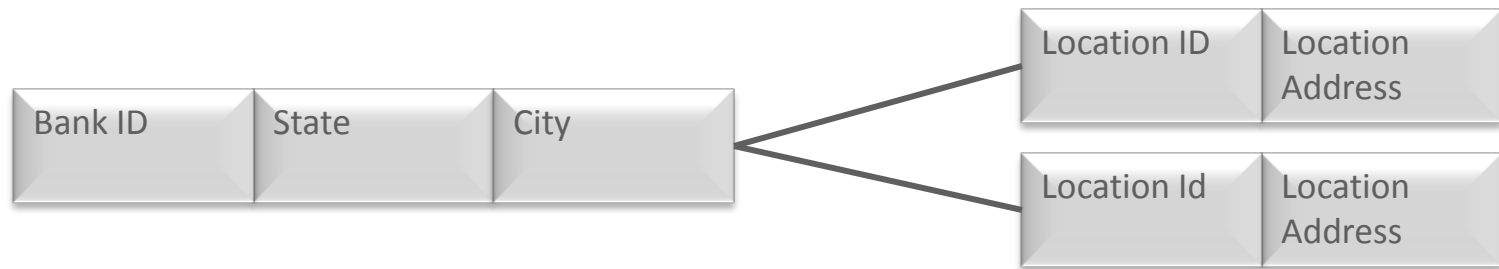
Hierarchical Model



Example of a Hierarchical Model

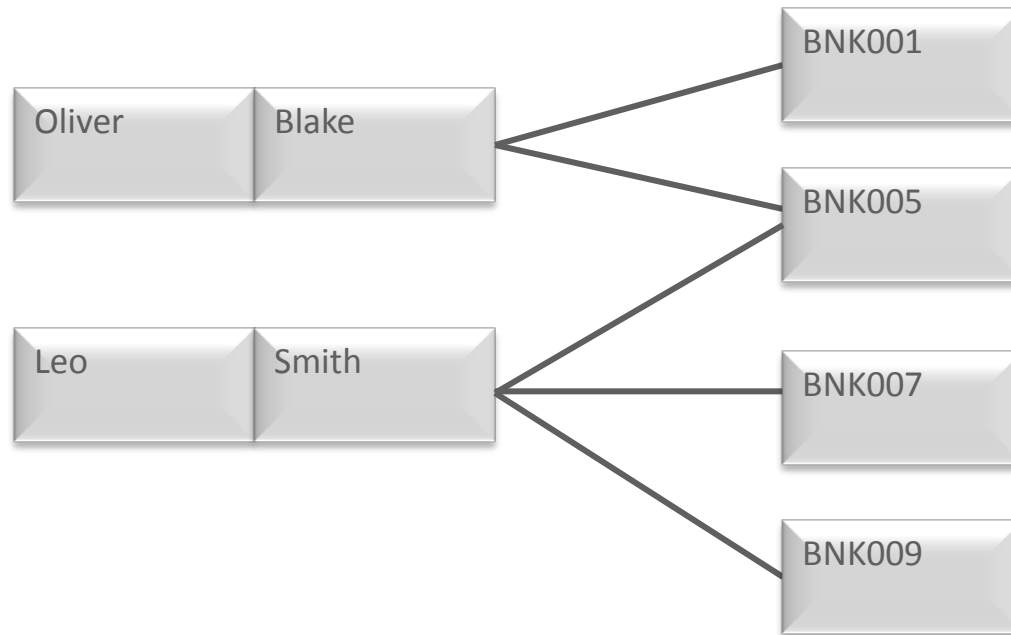


Network Model



↑
Details of different banks located in a city

Example of a Network Model



Relational Model

Table: STUDENT

Columns

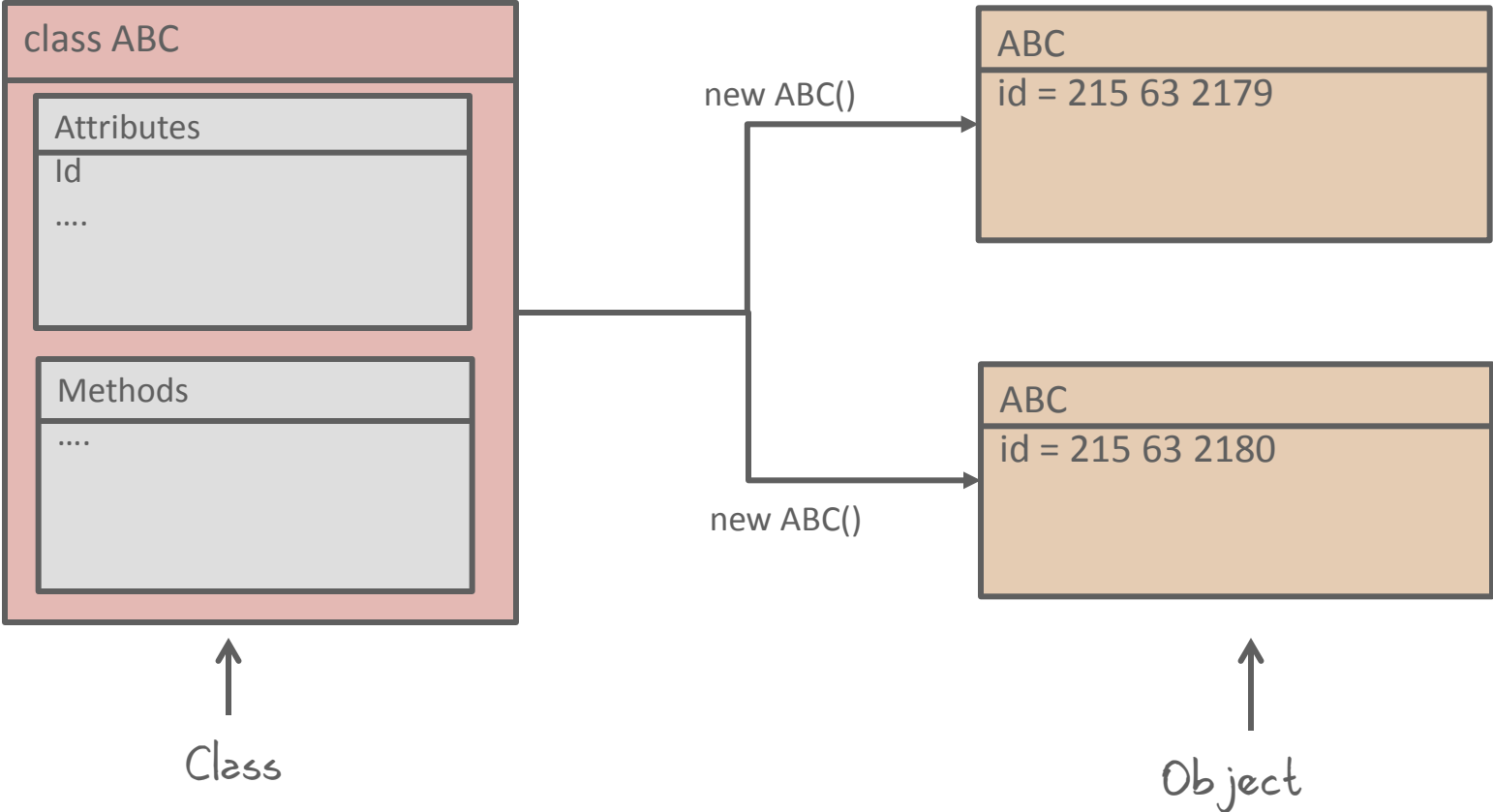
Student ID	Name	Address	Birth_date
110	Jones	12 Oxford Street	03-03-66
301	Smith	53 Hayes Drive	08-12-53
134	Gonzales	5609 Maple Court	10-02-87

Rows

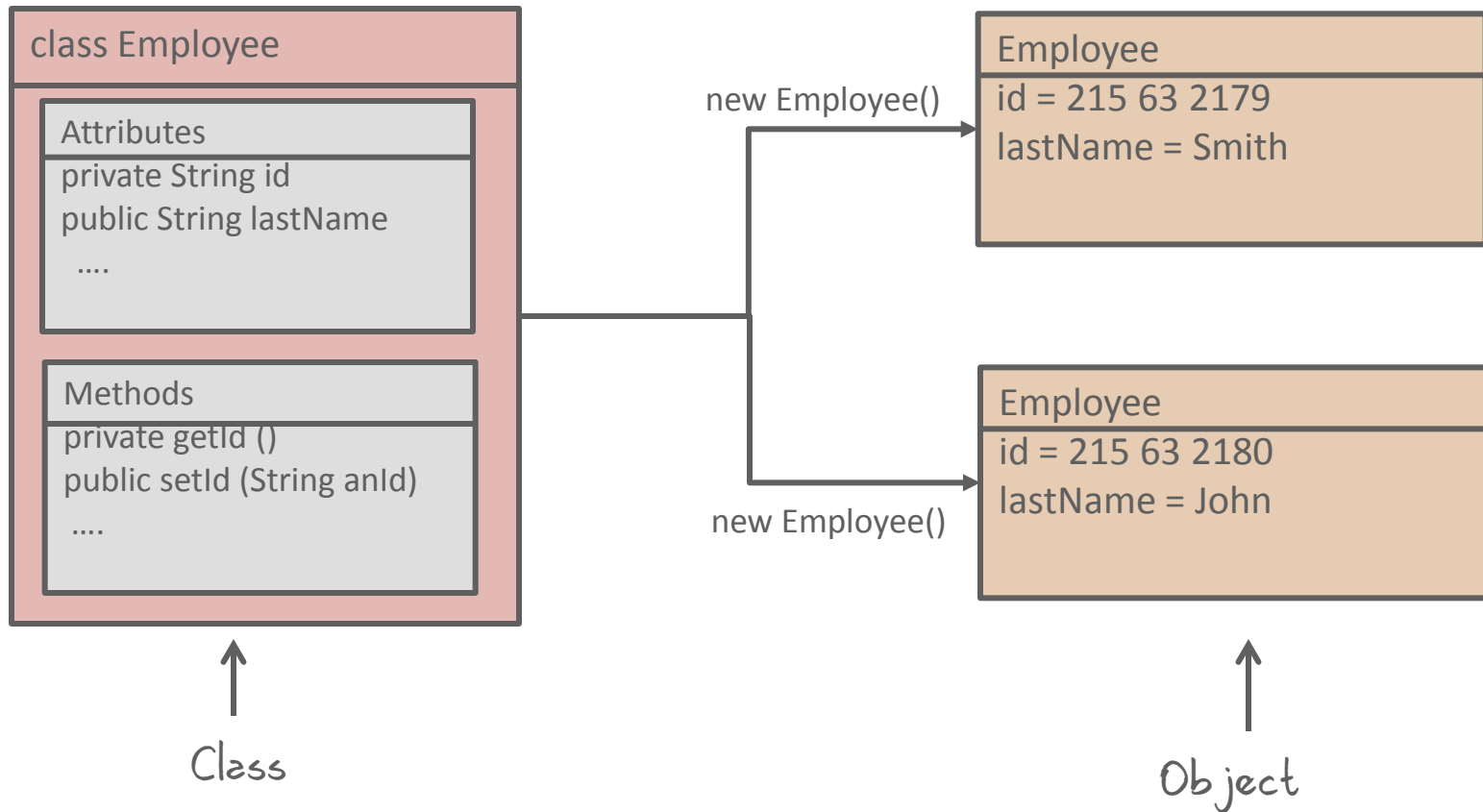
Example of a Relational Model

Employee ID	Employee Name	Hire Date	Department ID
E0001	Jeff Covey	10-Jan-2003	10
E0002	William Jake	23-Nov-2006	20
E0003	Mary Schmidt	14-Jun-2007	30

Object-Oriented Model



Example of an Object-Oriented Model



Summary

In this lesson, you should have learned how to:

- Describe the database development process
- Explain the common types of database models:
 - Flat file model
 - Relational model
 - Hierarchical model
 - Network model
 - Object-oriented model



