Business School
UNIVERSITY OF COLORADO DENVER

Information Systems Program

Module 3
Relational Data Model and
CREATE TABLE Statement

Lesson 1: Basics of relational databases

Lesson Objectives

- Identify components in sample tables
- List alternative terminology

Relational Database Basics

- Collection of tables
- Heading: table name and column names
- Body: rows, occurrences of data

Student

StdNo	StdFirstName	StdLastName	StdCity	StdState	StdZip	StdMajor	StdClass	StdGPA
123-45-6789	HOMER	WELLS	SEATTLE	WA	98121-1111	IS	FR	3.00
124-56-7890	BOB	NORBERT	BOTHELL	WA	98011-2121	FIN	JR	2.70
234-56-7890	CANDY	KENDALL	TACOMA	WA	99042-3321	ACCT	JR	3.50

Sample Tables with Matching Values

Student

StdNo	StdFirstName	StdLastName	StdCity	StdState	StdZip	StdMajor	StdClass	StdGPA
123-45-6789	HOMER	WELLS	SEATTLE	WA	98121-1111	IS	FR	3.00
124-56-7890	BOB	NORBERT	BOTHELL	WA	98011-2121	FIN	JR	2.70
234-56-7890	CANDY	KENDALL	TACOMA	WA	99042-3321	ACCT	JR	3.50

Offering

OfferNo	CourseNo	OffTerm	OffYear	OffLocation	OffTime	FacNo	OffDays
1111	IS320	SUMMER	2020	BLM302	10:30 AM		MW
1234	IS320	FALL	2019	BLM302	10:30 AM	098-76-5432	MW
4321	IS320	FALL	2019	BLM214	3:30 PM	098-76-5432	TTH

Enrollment

OfferNo	StdNo	EnrGrade
1234	123-45-6789	3.3
1234	234-56-7890	3.5
4321	123-45-6789	3.5
4321	124-56-7890	3.2

Graphical Depiction of Matching Values

Student

StdNo	StdLastName
123-45-6789	WELLS
124-56-7890	KENDALL
234-56-7890	NORBERT

Offering

OfferNo	CourseNo
1234	IS320
4321	IS320

Enrollment

StdNo	OfferNo
123-45-6789	1234
234-56-7890	1234
123-45-6789	4321
124-56-7890	4321
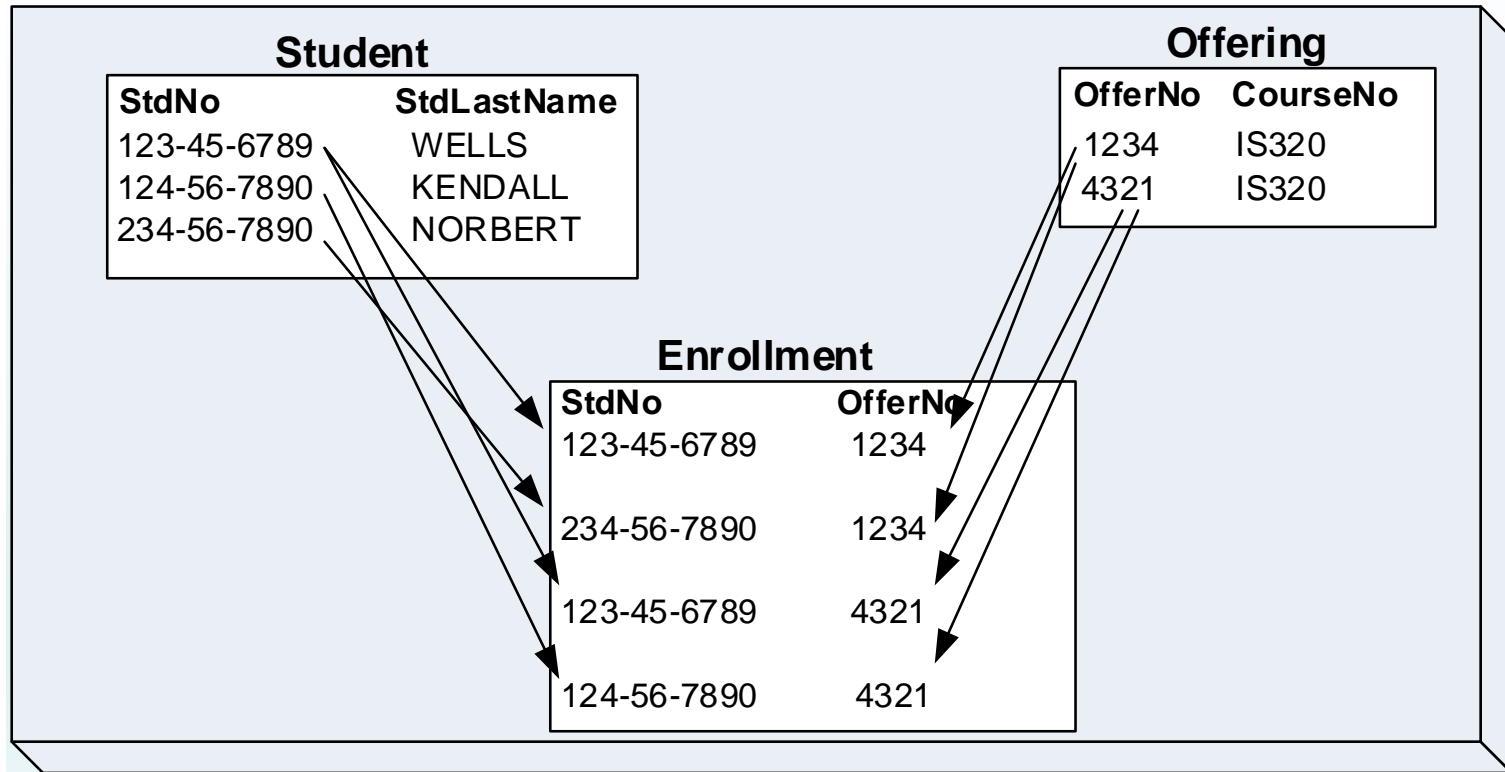
Alternative Terminology

Table-Oriented	Set-Oriented	Record-Oriented
Table	Relation	Record Type, File
Row	Tuple	Record
Column	Attribute	Field

Summary

- Commercial dominance of relational model
- Use sample tables as an aid in query formulation
- Importance of visualizing relationships