

A decorative graphic on the left side of the slide, consisting of a network of white lines and small circles on a blue gradient background, resembling a circuit board or a neural network.

WEEK 2

MAPPING ENTITIES FROM AN ER DIAGRAM INTO A RELATIONAL DATABASE

CS3319

STUDENT OBJECTIVES

- Upon completion of this video, you should be able to:
 - Look at an ER Diagram and turn each of the entities into a table in a relational model.

NOW, LET'S SEE/FIGURE OUT/COMPREHEND THE
BEAUTY OF THE RELATIONAL MODEL!



- Think about going from:
 - The Real World (a mini universe) TO A ...
 - Model (ER Diagram) TO A ...
 - Relational Database

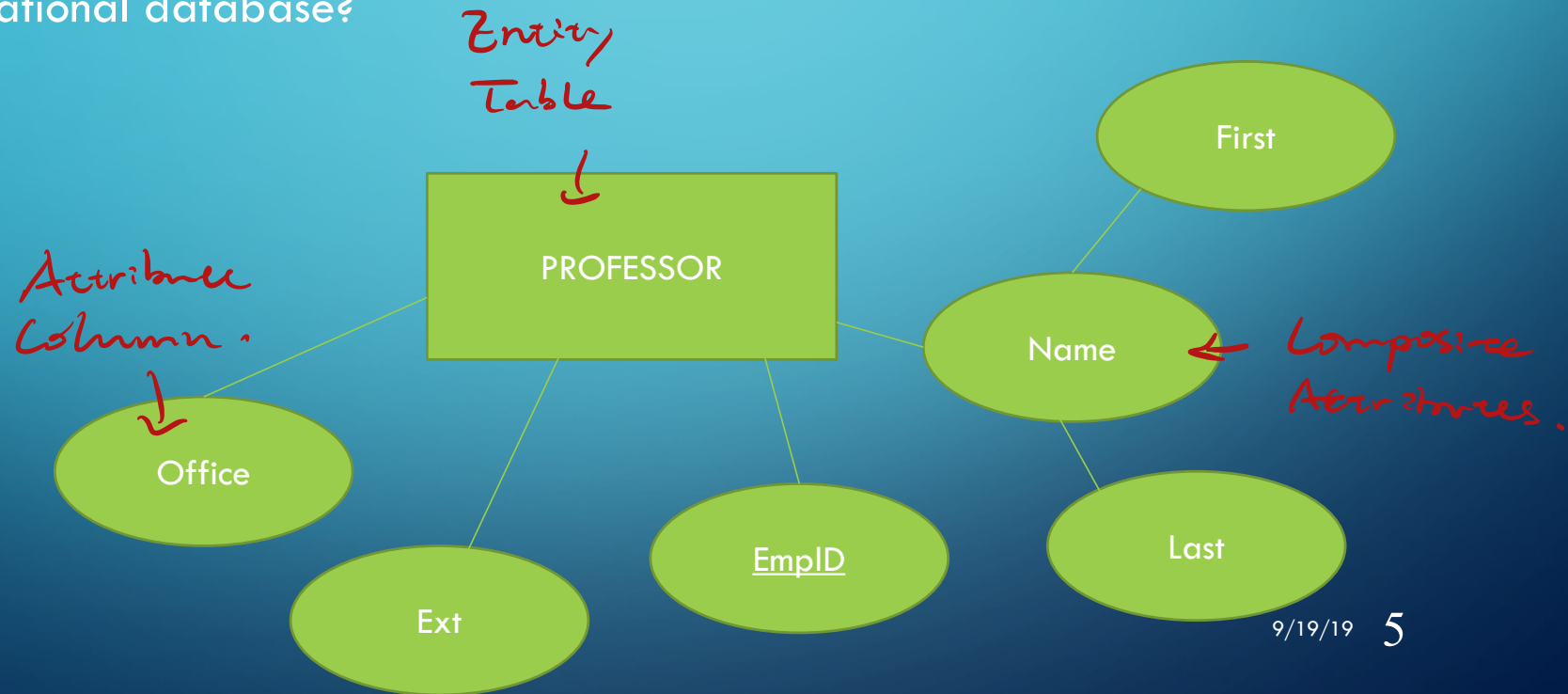
- Our only real rule is that:

Relational Databases can only use these data structures:

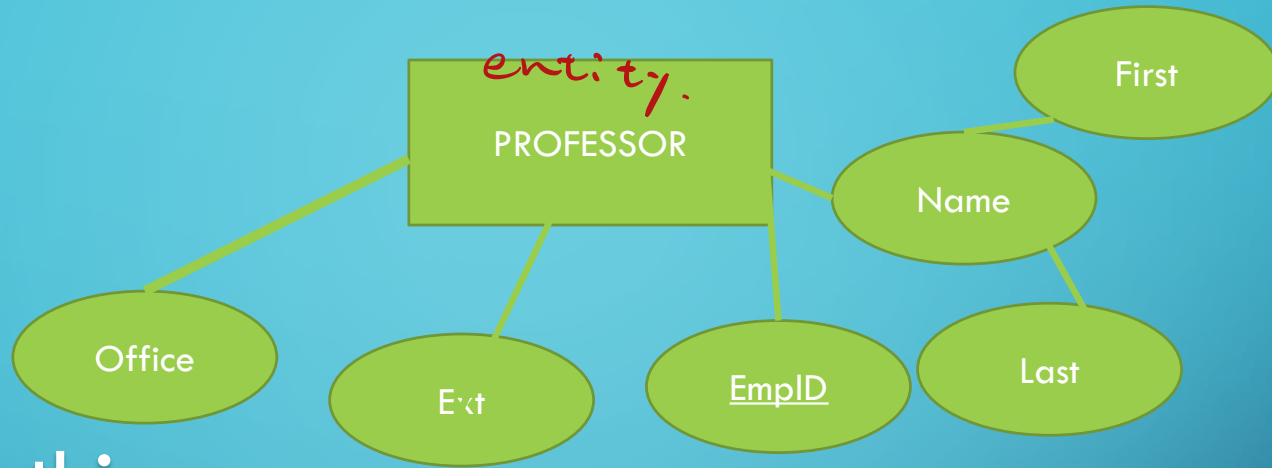
- *Tables (Relations)*
- *Rows*
- *Columns*
- *Cells*

REPRESENTING ER DIAGRAM ENTITIES IN THE RELATIONAL MODEL

- How do we represent entities such as Professor or Department in a relational database?



TA DA....



Becomes this...

Professor

FirstName	LastName	<u>EmpID</u>	Office	Ext
Laura	Reid	11	ST238	86905
Doug	Vancise	22	MC 421	83355
Michael	Atkinson	15	SSC 44	83456
Stuart	Rankin	18	MC 101	87678
Jamie	Andrews	34	MC 343	86789
Irving	Robinson	56	MC 102	86733

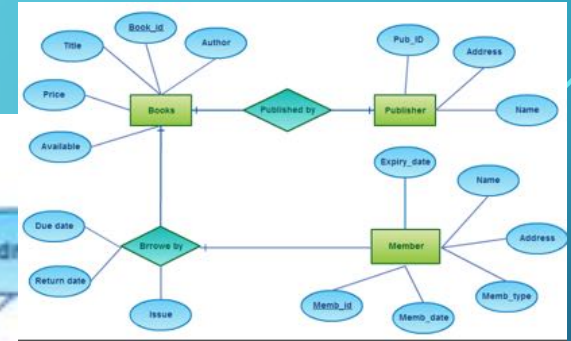
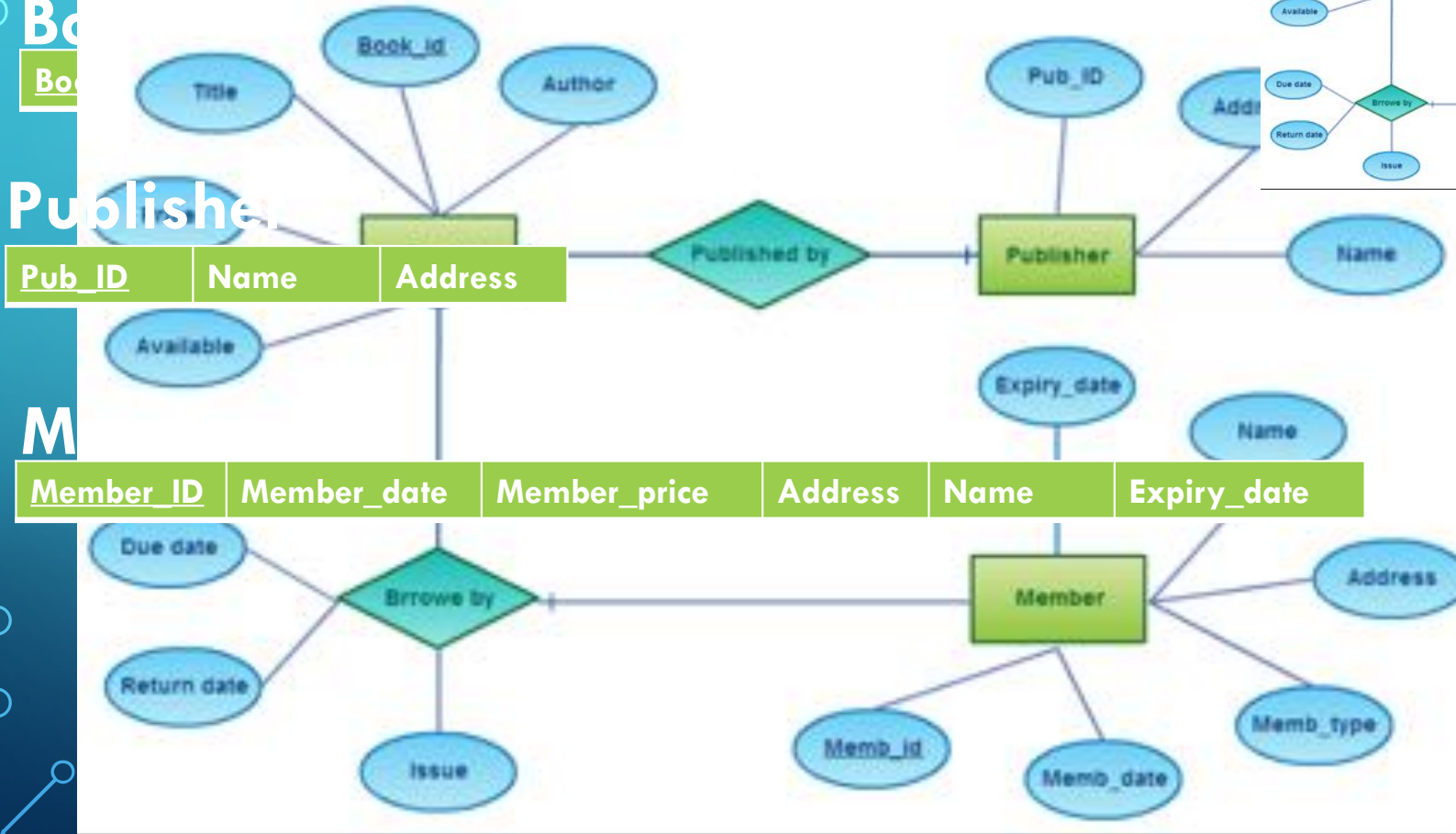
6 rows
5 columns.

ANOTHER EXAMPLE OF HOW TO MAP ER ENTITIES TO A RELATIONAL DATABASE:

Books

Publisher

Member



Book

Book ID Title Price Author Available

Publisher

Pub ID Name Address

Member

Mem-ID Mem-date Mem-type Add Name Exp-date.

Entity - Table

Attribute - Columns.