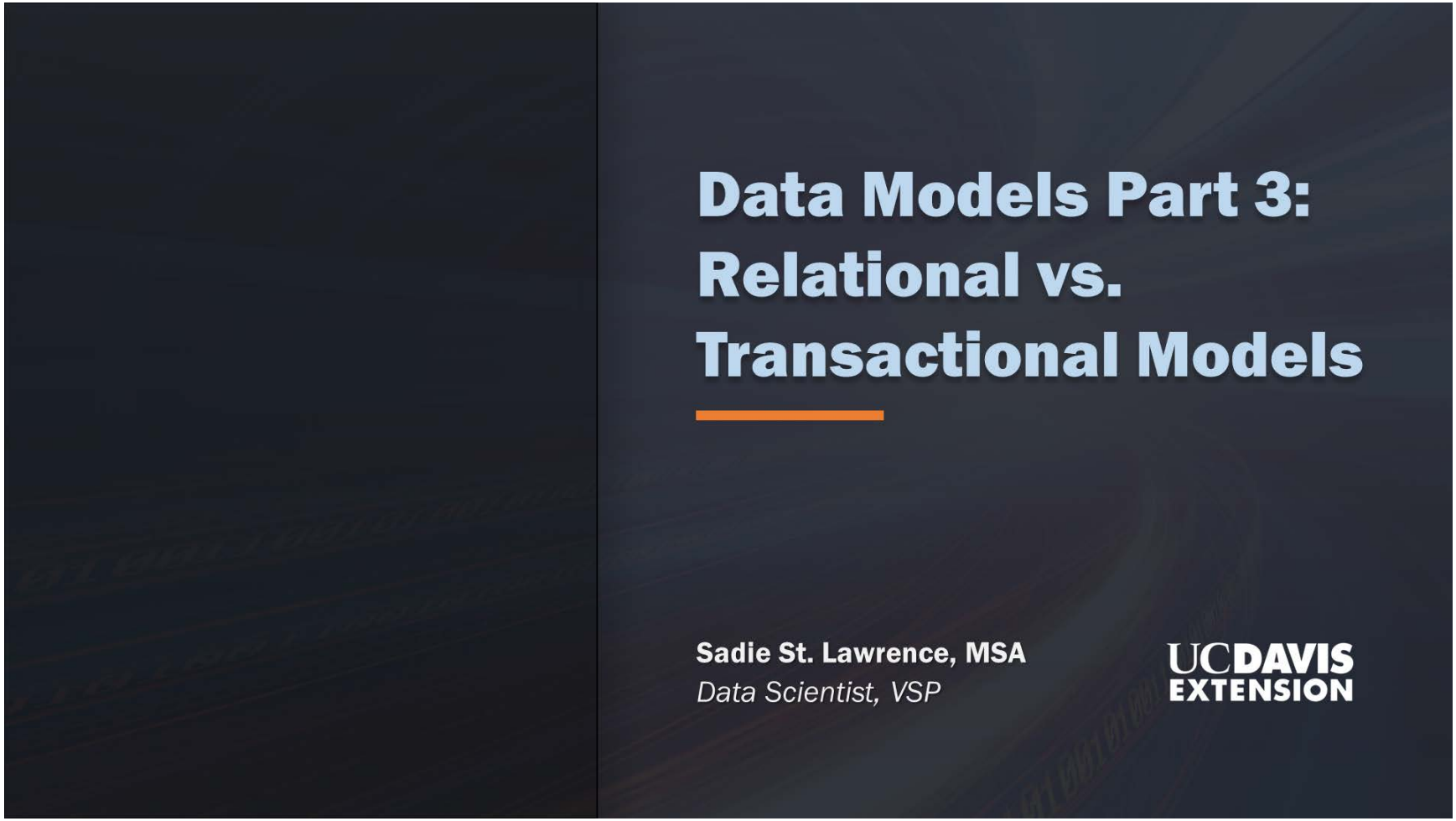
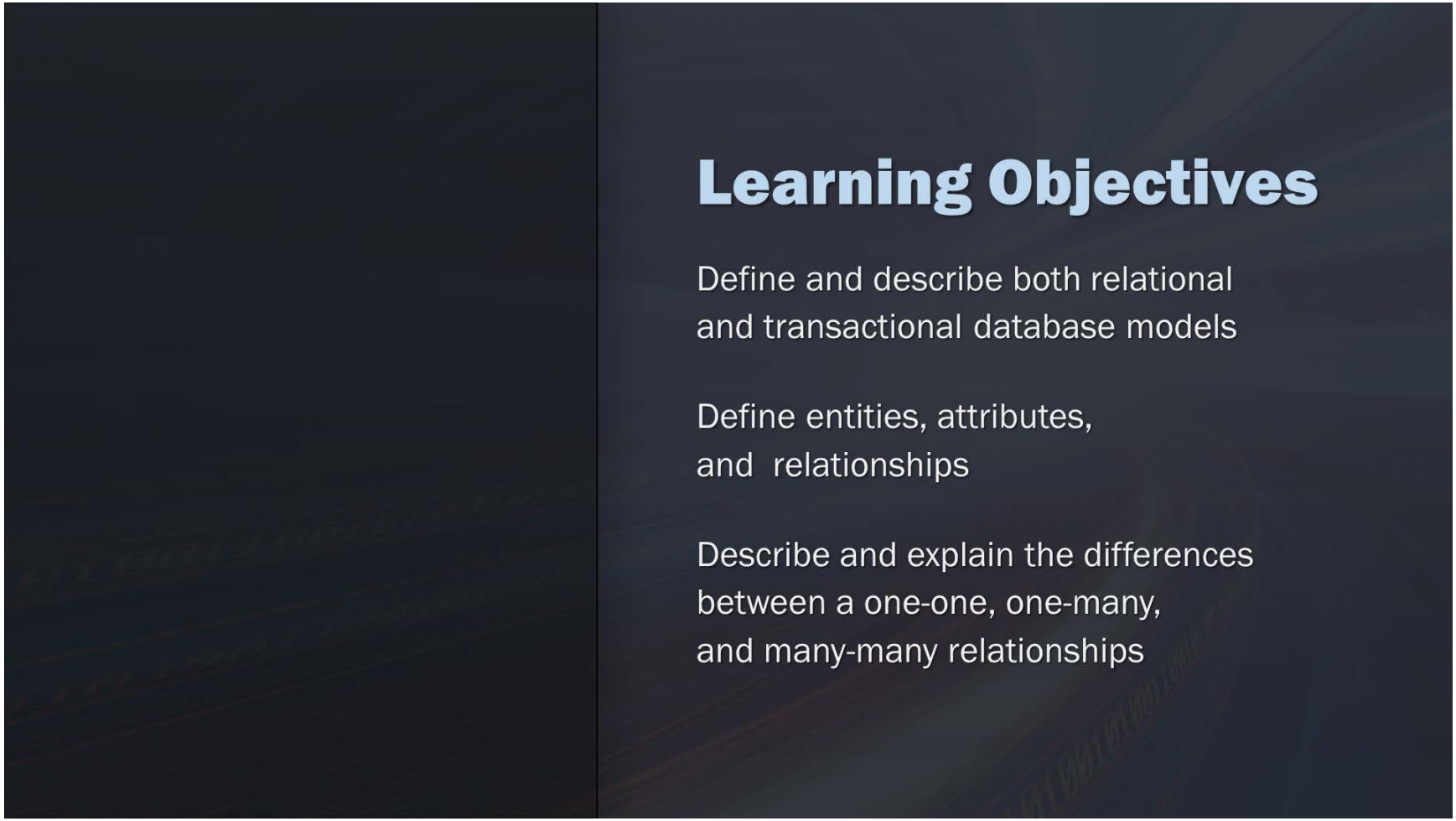
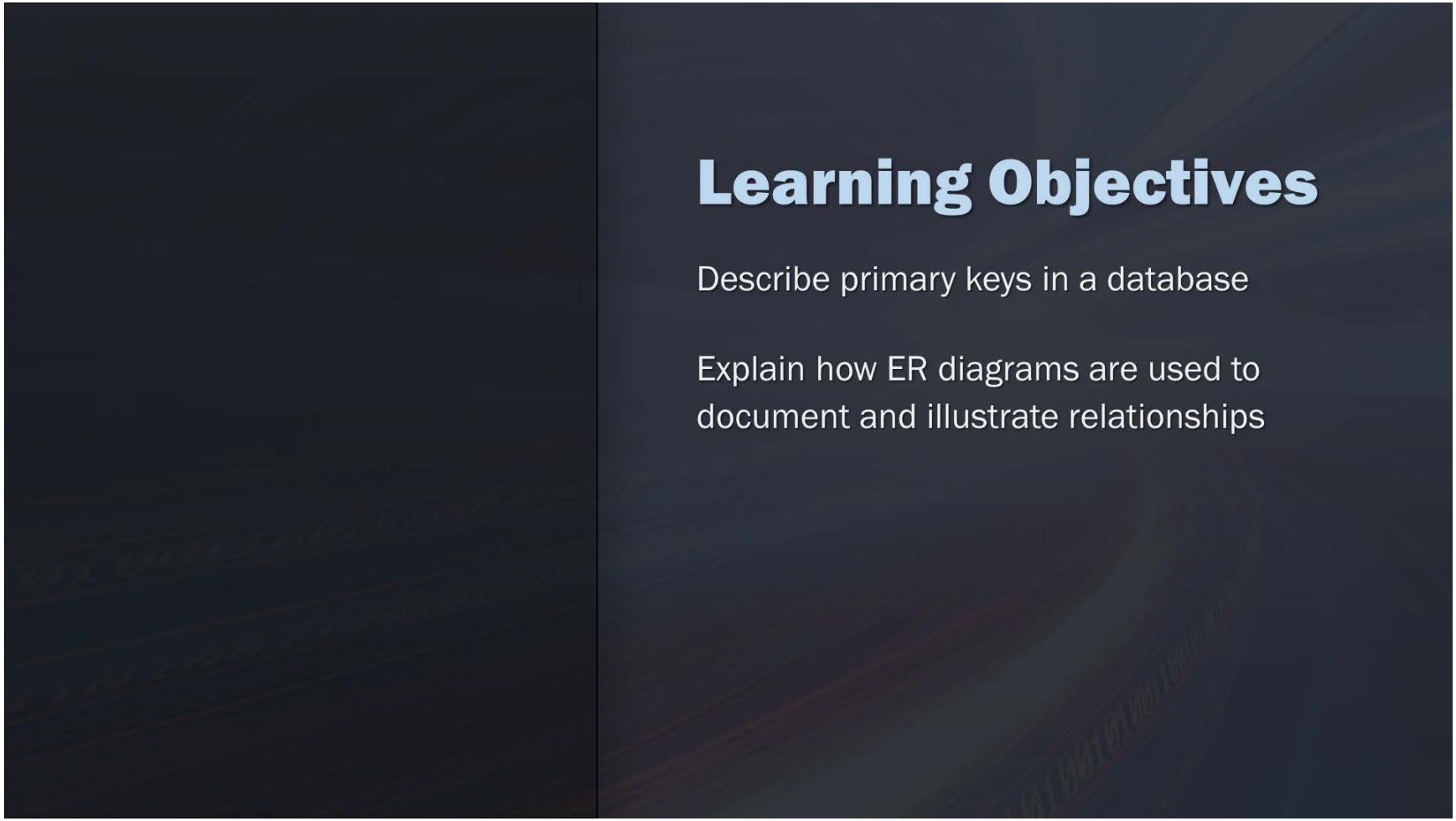
Slide 1: Data Models Part 3: Relational vs. Transactional Models



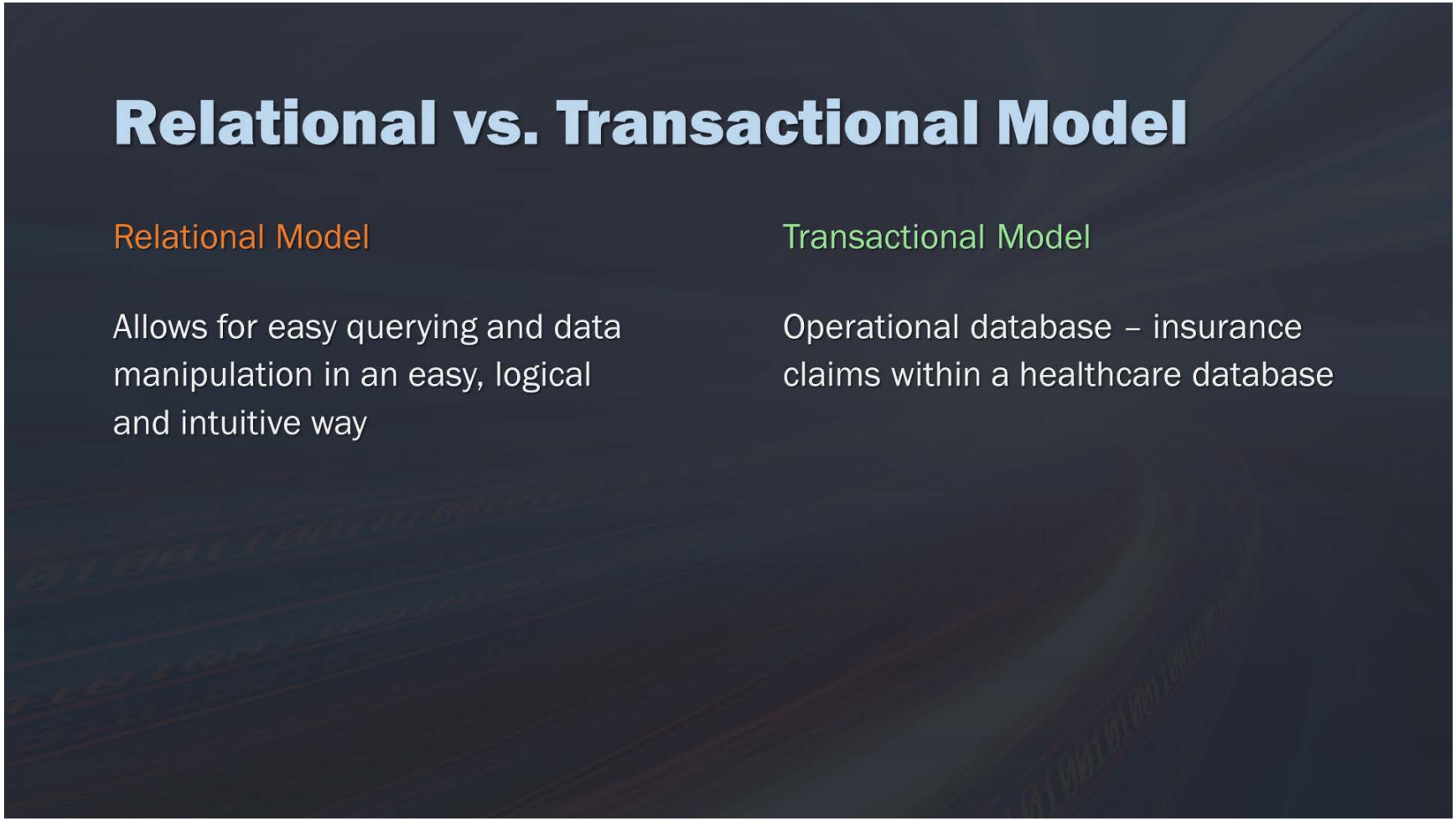
Slide 2: Learning Objectives



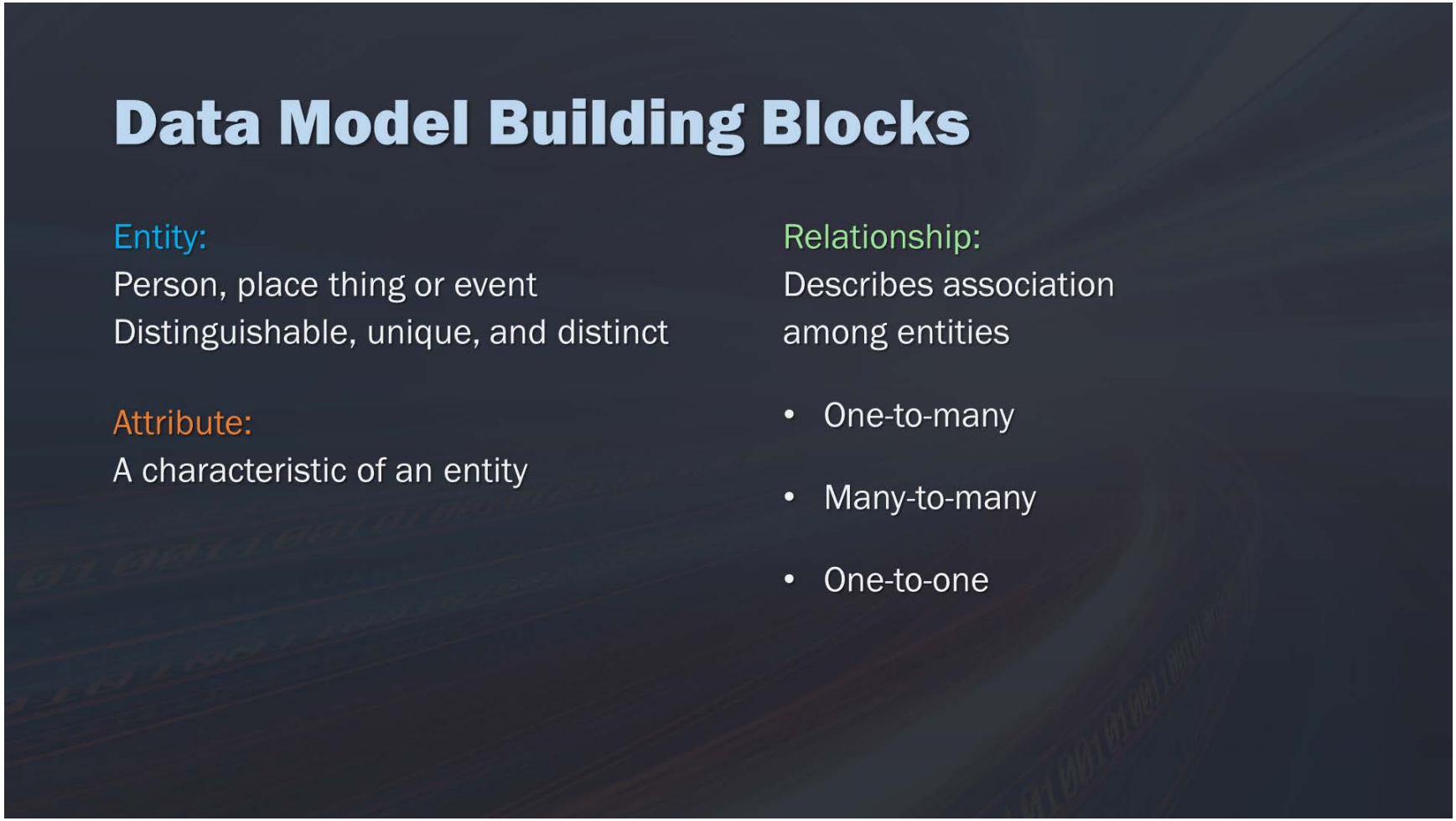
Slide 3: Learning Objectives



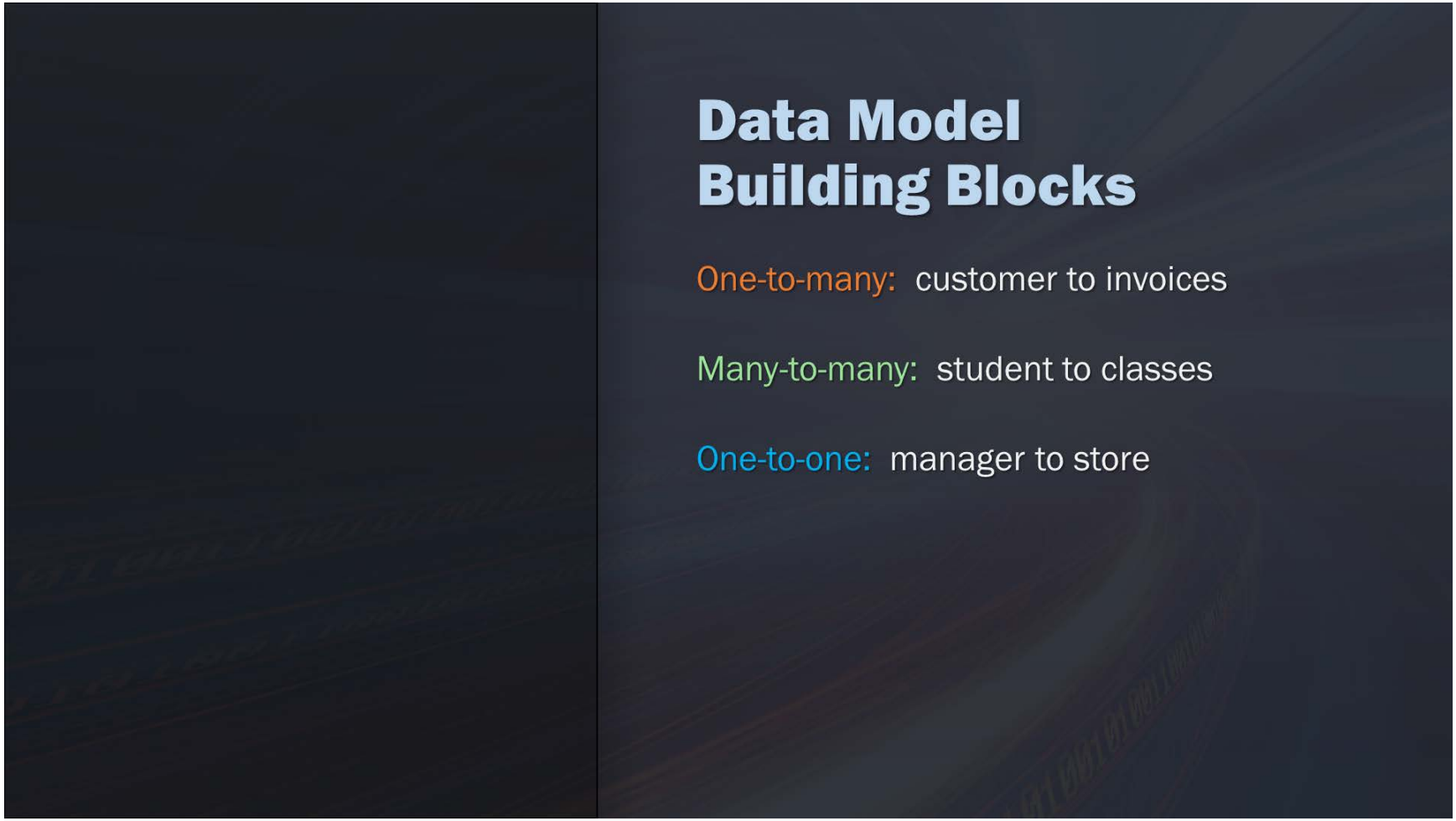
Slide 4: Relational vs. Transactional Model



Slide 5: Data Model Building Blocks



Slide 6: Data Model Building Blocks

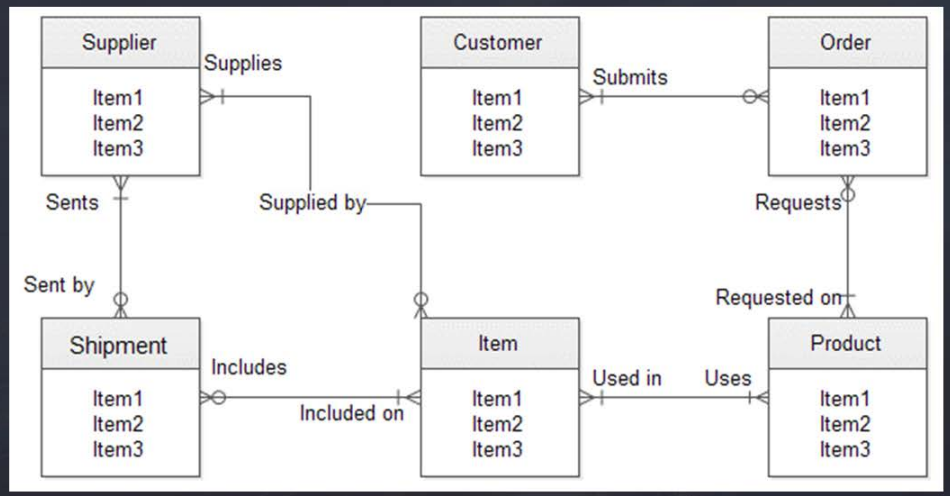


Slide 7: ER Diagrams

ER Diagrams

ER model

Is composed of entity types and specifies relationships that can exist between instances of those entity types



Slide 8: ER Diagrams

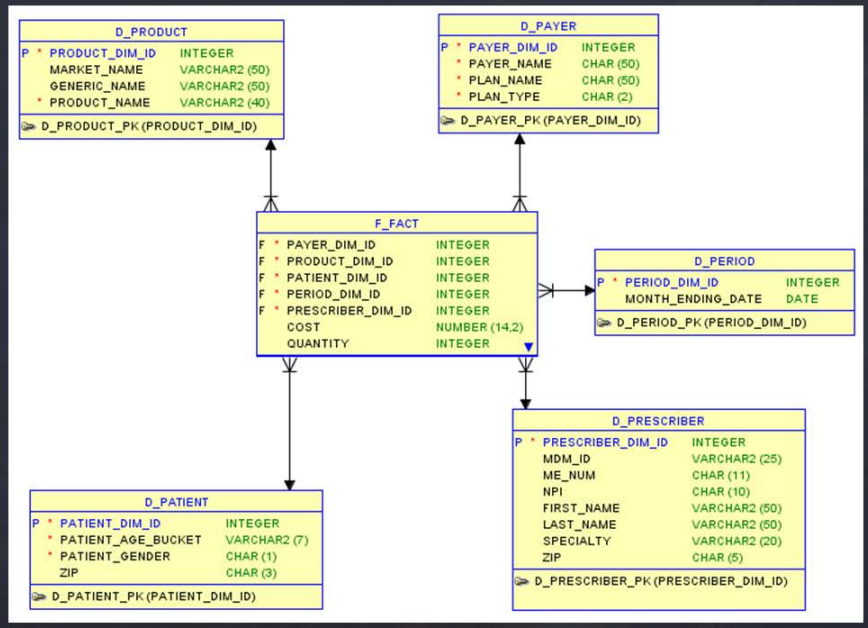
ER Diagrams

Show relationships

Business process

Represented visually

Show links (primary keys)



Slide 9: Primary Keys and Foreign Keys

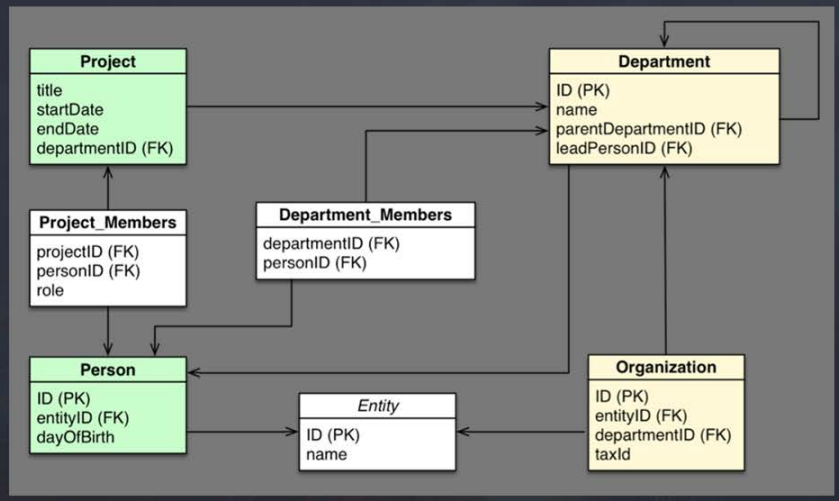
Primary Keys and Foreign Keys

Primary Key

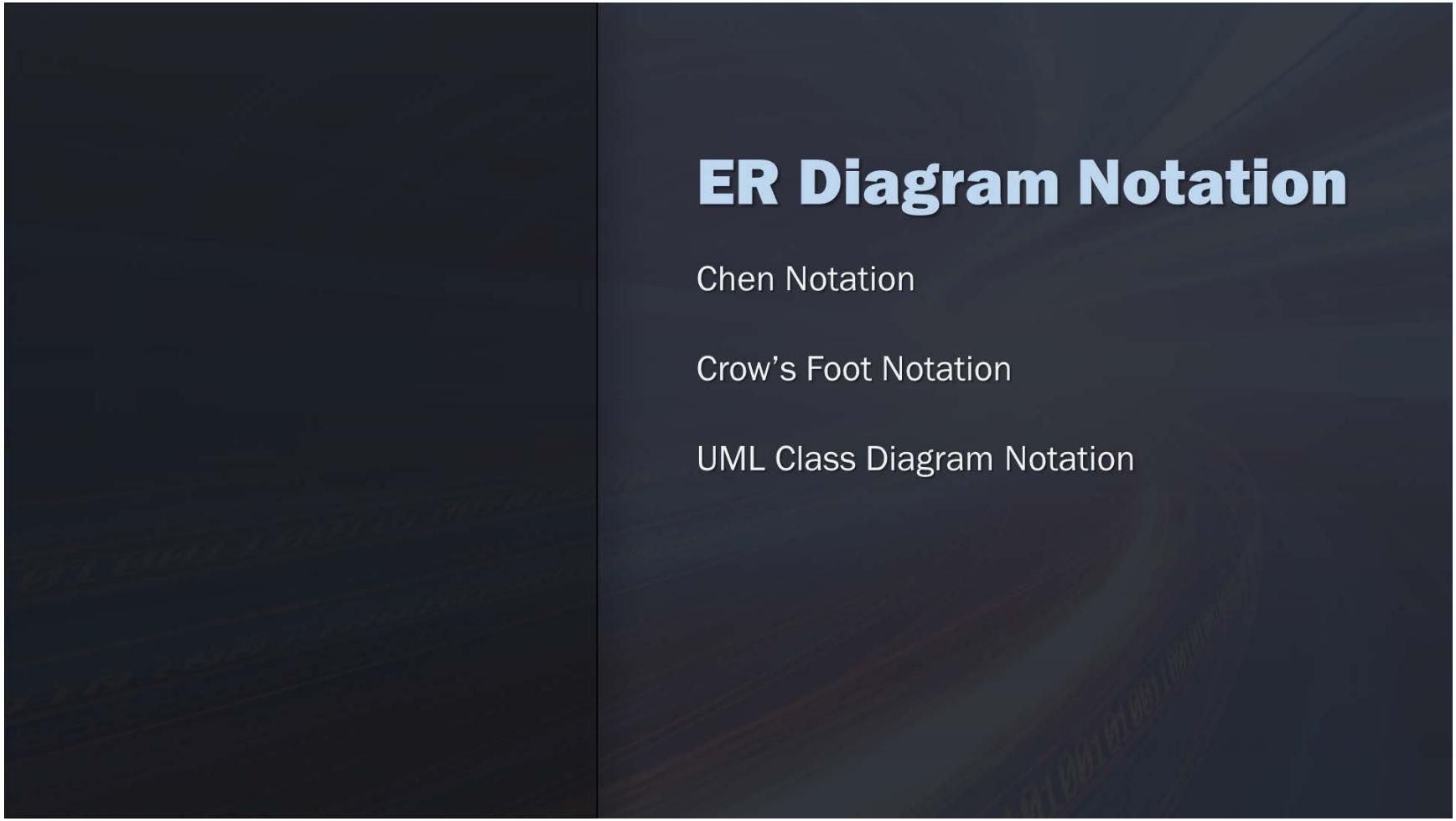
A column (or set of columns) whose values uniquely identify every row in a table

Foreign Key

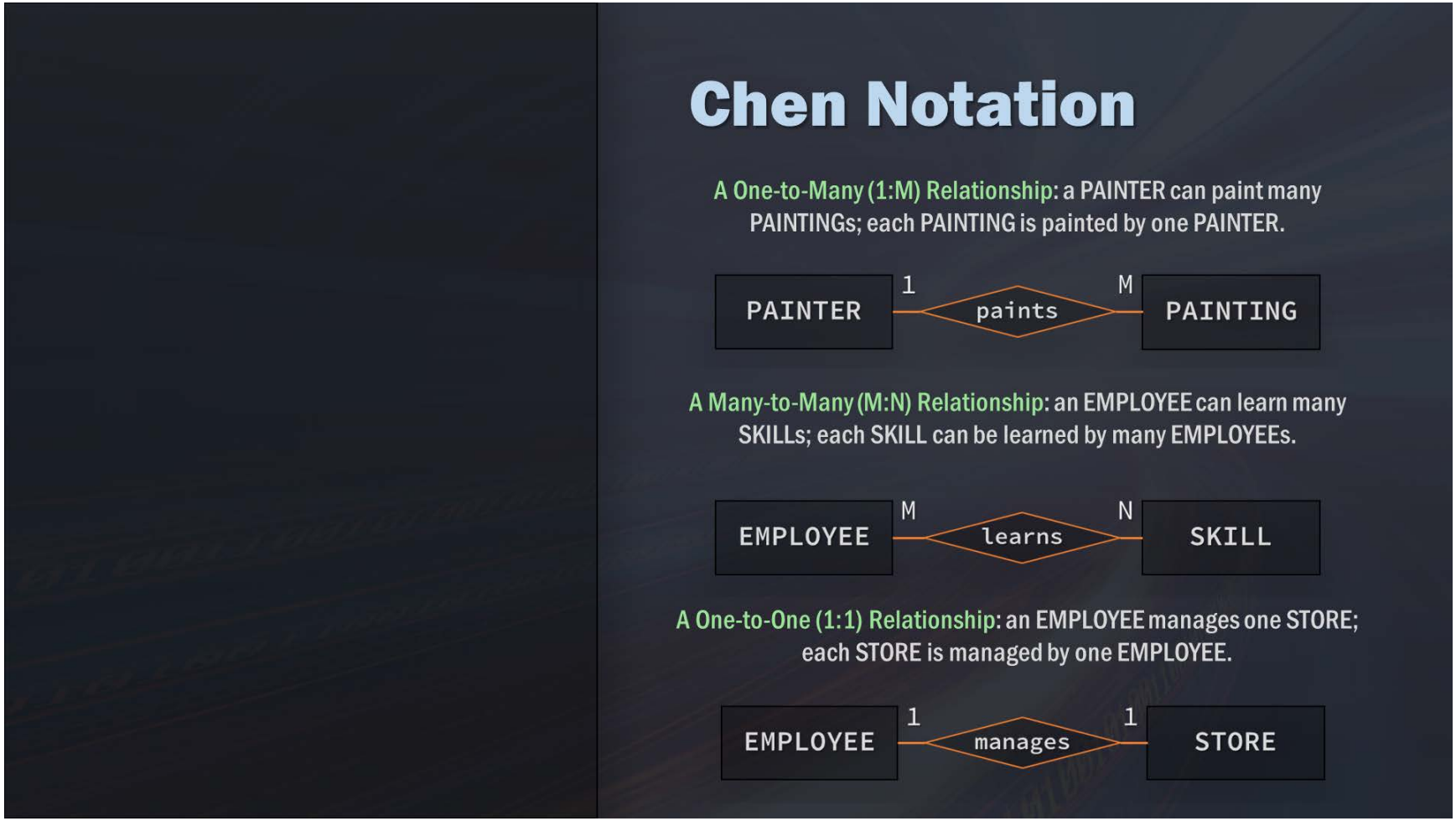
One or more columns that can be used together to identify a single row in another table



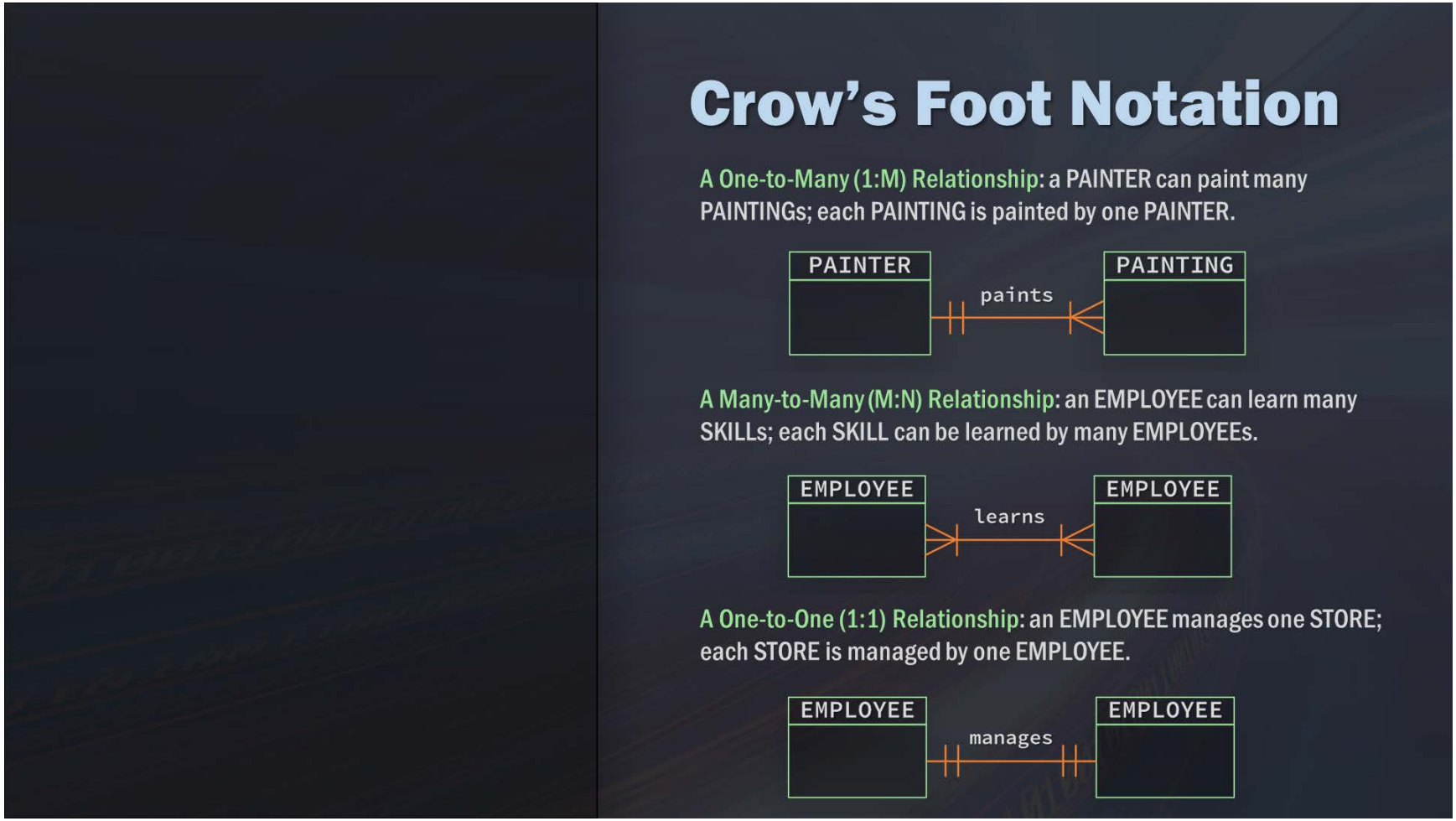
Slide 10: ER Diagram Notation



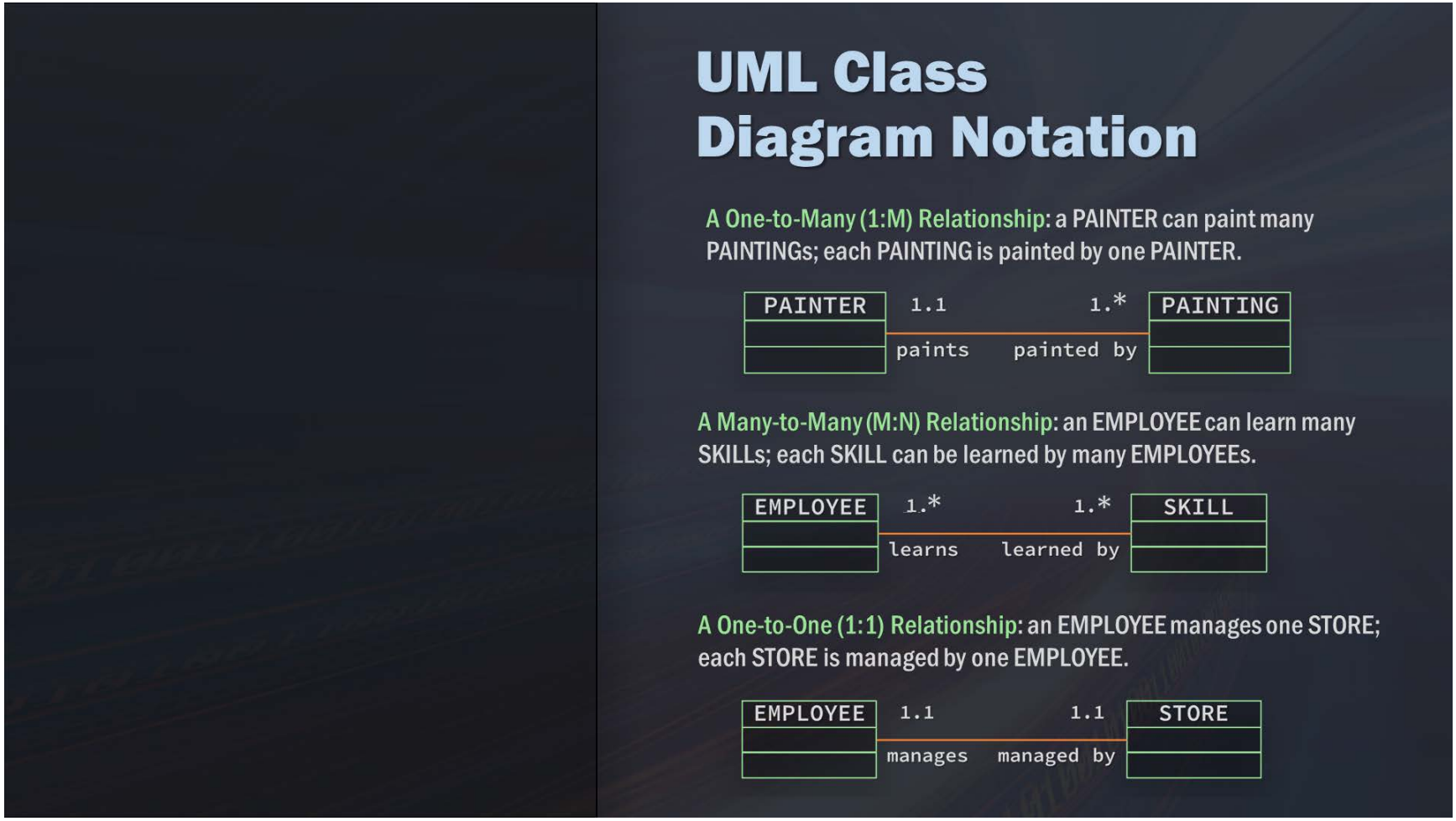
Slide 11: Chen Notation



Slide 12: Crow's Good Notation



Slide 13: UML Class Diagram Notation



Slide 14: ER Diagram Notation