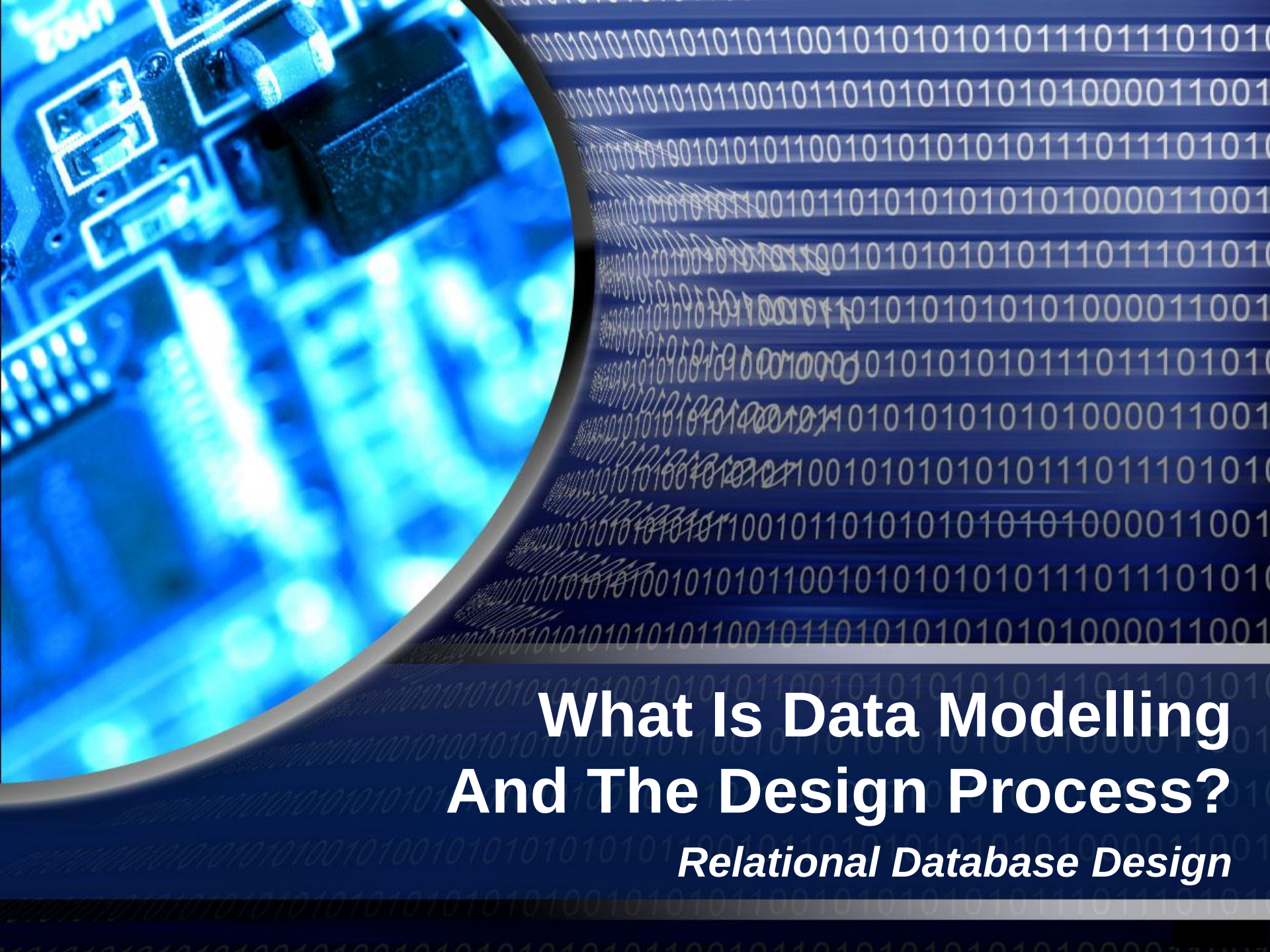


What Is Data Modelling And The Design Process?

Relational Database Design

Session Outline

- What data modelling is
- Why it needs to be done

What Is Data Modelling?

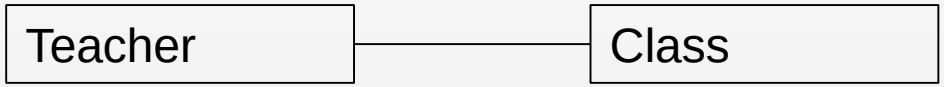
- Process of analysing data requirements and identifying the objects to be used for a database
- A data model is created
- Similar to class modelling if you've done object oriented development

Data Model Types

- There are three main types of data models:
- Conceptual Data Model
- Logical Data Model
- Physical Data Model
- We will be using all three at some level in this course

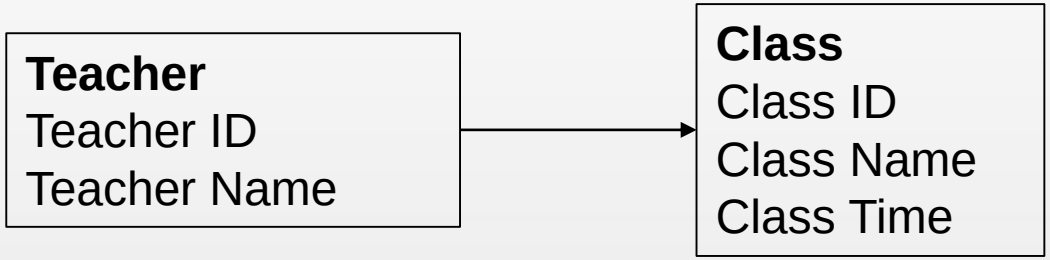
Conceptual Data Model

- A conceptual data model is a high-level model that shows relationships between objects
- Used to help explain concepts to people in the project
- Usually just shows object names or concepts



Logical Data Model

- Shows objects but at a more detailed level
- Includes the information that is stored for each object
- Shows relationships



Physical Data Model

- Used to design the internal schema of the database
- Shows table names, column names, keys, relationships
- Used to create a database

Summary

- Data modelling is the process of gathering data requirements and creating a relationship between objects
- A **conceptual** data model is a high level object relationship
- A **logical** data model has objects and fields
- A **physical** data model has database fields and types

What's Next?

- Determining the goal of the database, which is the first step of database design