# DataBaseSystem report

Lecture 7



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### Quiz

#### - What is ER Diagram?

ER diagram expresses the Entity-Relationship Model. ER diagram is used in the design process of the database from the requirements of the real world. In other words, by modeling a concept, entities, attributes and relationships are expressed. ER diagrams are translatable into relational tables which allows you to build databases quickly. ER diagrams provide a preview of how all your tables should connect, what fields are going to be on each table.

- What are entity types, attribute and relationship?

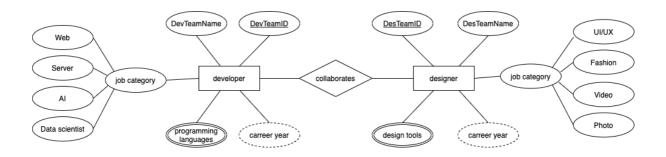
**Entity types**: The common property of entity is the entity types such as game. An entity is an object in the real world that exists independently and is uniquely identified, such as a Starcraft, FIFA, Leage Of Legend.

**Attibute**: An attribute is property possessed by an entity. one entity is described as a set of associated attributes. For example, an developer entity has attibutes such as DevTeamID, DevTeamName, job category, programming languages and career year.

**Relationship**: relationship is one of the biggest purposes of ER Diagram and express the association between entities. relationship is association or connection between entities that can be thought of as a mapping between two or more entity types.

#### Task

- Create your own ER Diagram that contains two entity types and connect them with relationship
- For your entity types, include the following attributes
  - Primary key attribute, simple attribute, composite attribute, multi-valued attribute, derived attribute



Entity types: developer, designer

Relationship: collaborates

## **Developer**'s attributes

Primary key attribute: **DevTeamID** 

Simple attribute: **DevTeamName** 

Composite attribute: job category

Multi-valued attribute: programming languages

Derived attribute: career year

**Designer**'s attributes

Primary key attribute: **DesTeamID** 

Simple attribute: **DesTeamName** 

Composite attribute: job category

Multi-valued attribute: design tools

Derived attribute: career year