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IST 659 Data Admin Concepts & Db Mgmt

Date: 7/22/18

Lab Assignment: Lab 2, Conceptual Modeling

Description / Learning Objective

Examine narrative descriptions of organizational data needs and parse them for business rules and facts which we will model.

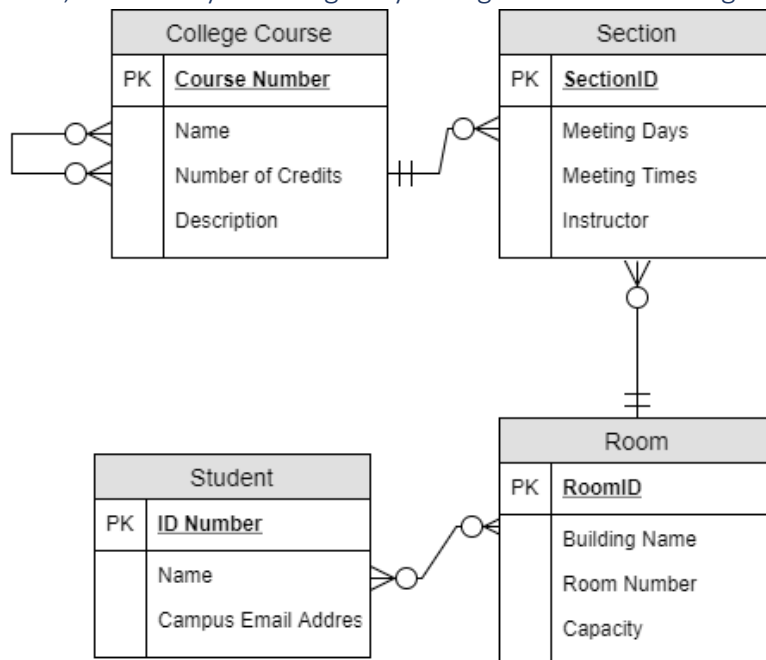
- Demonstrate understanding of the conceptual model
- Demonstrate ability to parse technical requirements from non-technical narratives
- Identify the appropriate cardinality and degree of relationships
- Identify entities from a given data problem
- Identify attributes and their properties for entities in a given data problem

To-do:

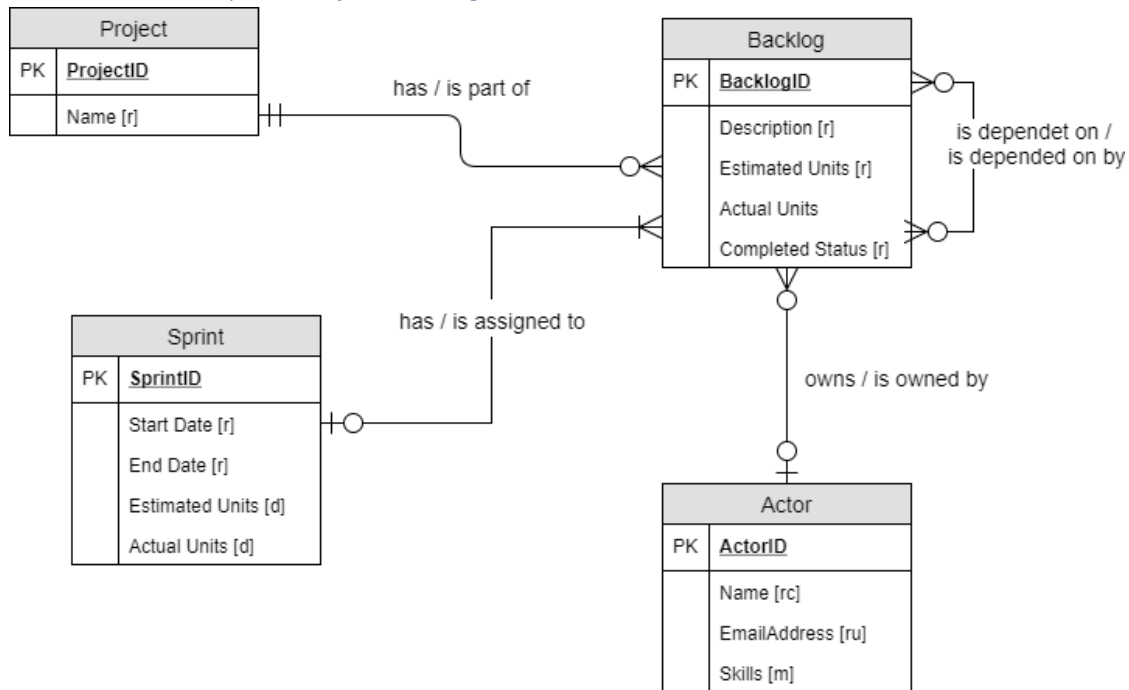
- **Part 1** – Draw ERD diagrams for the Conceptual Modeling Case Studies
- **Part 2** – Draw an ERD diagram for the VidCast Conceptual Model

Responses:

Part 1, Case Study 1 – Obligatory College Classes Modeling



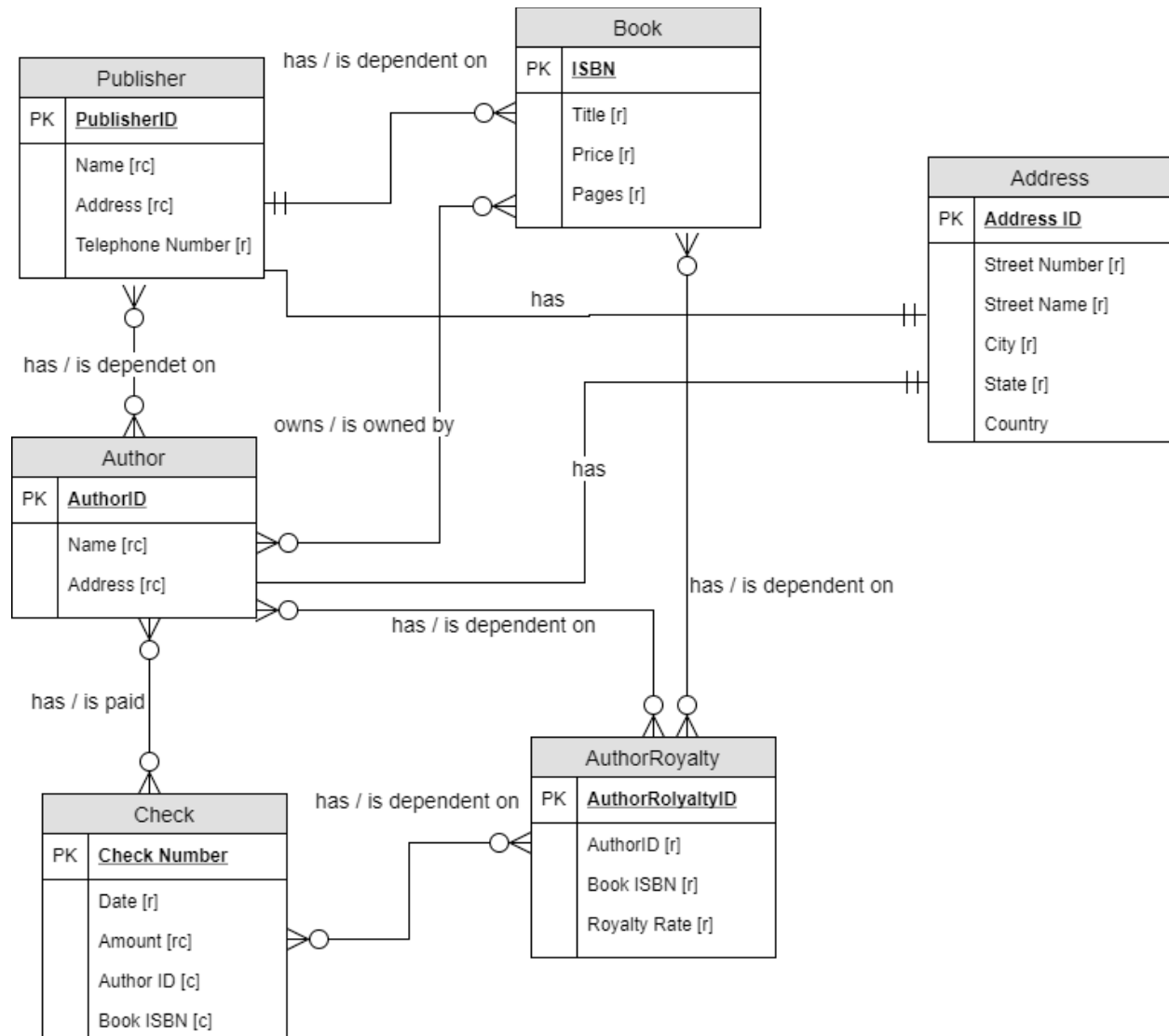
Part 1, Case Study 2 – Project Management



Part 1, Case Study 3 – Book Publishing Database

Entity	Attribute
Publisher	Name [ru] Address [r] Telephone Number [r]
Book	ISBN [ru] Title [r] Price [r] Pages [r]
Author	Author ID [ru] Name [r] Address [r]
AuthorRoyalty	AuthorRoyalty ID [ru] Author Name [r] Book ISBN [r] Royalty Rate [r]
Check	Check Number [ru] Date [r] Amount [r] Author ID [r] Book ISBN [r]
Address	Address ID [ru] Street Number [r] Street Name [r] City [r] State [r]

	Zipcode [r]
Relationships	
Each Publisher <u>has 1 or more Books</u> , Each Book <u>is part of 1 and only 1 Publisher</u> , Each Publisher <u>has 1 and only 1 Address</u>	
Each Author <u>has 1 or more Book</u> , Each Author <u>has 1 or more Publisher</u> , Each Author <u>has 1 and only 1 Address</u> , Each Author <u>has 1 or more AuthorRoyalty</u> , Each Author <u>has 1 or more Check</u>	



Part 2, Part 1 – VidCast Conceptual Model

Entity	Attribute
User	UserID [ru] User Name [ru] Email Address [ru] Description URL Followers
UserTag	UserTagID Tag Description
Vidcast	VidCastID [ru] Title [r] StartDateTime Duration RecordCast RecordingURL ScheduleStatus [r]
VidcastRecording	VidcastRecording [ru] RecordingURL [r]
ScheduleStatus_ref	ScheduleStatusID [ru] Status [r]
Relationships	
<p>Each Vidcast has <u>1 and only 1</u> User, Each User has <u>zero to many</u> Vidcast</p> <p>Each Vidcast has <u>zero to many</u> UserTag, Each UserTag has <u>zero to many</u> Vidcast</p> <p>Each User has <u>zero to many</u> User (Followers), Each User has <u>zero to many</u> UserTag, Each UserTag can have <u>zero to many</u> User</p> <p>Each Vidcast has <u>zero to 1</u> VidcastRecording, Each VidcastRecording has <u>zero to 1</u> Vidcast</p> <p>Each Vidcast has <u>1 and only 1</u> ScheduleStatus_ref, Each ScheduleStatus_ref has <u>1 to many</u> Vidcast</p>	

