



Fundamentals of Data Management

Pass Tasks 3.1: Entity Relationship Modelling

Overview

In this tutorial, you will practice reading and analyzing user requirements / business rules and design an Entity Relationship Model and present it in an Entity Relationship Diagram.

Purpose

Learn to read and analyse user requirements and design ER model

Task

Read, analyse and design the ER Model for the business scenarios presented in the tasks below. You can choose ER Diagrams (Chen or Crow's feet) or UML diagrams to show your solutions.

Time

This task should be completed in your third lab class and submitted for feedback in the third lab or at the beginning of lab 4.

Resources

- Online module (from Canvas)
- Connolly & Begg, Database Systems, Chapters 12 and 16
- Stephens, Beginning Database Design Solutions, <http://goo.gl/bRCaxF>

Online resources

- Chen notation tutorial

<http://creately.com/blog/diagrams/er-diagrams-tutorial/>

- Crow's feet notation tutorial

<http://www.w3computing.com/systemsanalysis/systems-entity-relationship-model/>

Feedback

Discuss your solutions with the tutorial instructor.

Next

Get started on module 4.

Pass Tasks 3.1 — Submission Details and Assessment Criteria

Document your solutions to the tasks using a word processor or other suitable editor. Upload the document to Doubtfire as pdf. The tutors will discuss them with you in the lab.

Subtask 3.1.4

Consider the following table:

Movie_Rental

Item_No	M_Type	Borrowed_Date	M_Title	Client_NO	Client_Name	Return_Date
44-01	DVD	10-June	Fantastic Four	123	Terry Smith	11-June
44-01	DVD	12-May	Fantastic Four	567	Lucy Lee	
48-01	DVD	10-May	Minions	123	Terry Smith	12 May
44-01	DVD	12-May	Fantastic Four	123	Terry Smith	

- Which string data type is best to be used in the declaration of the column "Title"?
Explain why?
- Choose a primary key for this table.

Document and upload the solution.