

ITEC 3335
Database Development
Fall 2019
Homework #3

ER Modeling

(1) Download and install Draw.io desktop version. This is a free general-purpose drawing tool. Please adhere to the drawing guideline stated in [er_in_drawio.pdf](#).

(2) Construct a simple ER model for the following Toy Library System (TLS). You should use the Crow's Foot notation as supported by Draw.io Desktop.

Update: Using ER-Assistant will now also be acceptable.

Toy Library System (TLS)

This assignment models a drastically simplified component of TLS. It allows patrons to borrow books.

There are books in the library. A book has an unique ISBN number and a title. An edition and a publication date may also be stored.

A patron is a registered person with an unique PatronId and a name. An email address and a phone can be stored. For example, our textbook:

- ISBN: 978-0133544619
- Title: Modern Database Management
- Edition: 12th Edition
- Publication Date: July 23, 2015

Author information should be stored. For example, the authors of our textbook:

1. Jeffrey Hoffer
2. Ramesh Venkataraman
3. Heikki Topi

The author position of a book should be stored. For example, it should be possible to find out that Heikki Topi is the third author. An author has an unique id. Note that an author may not have a first name. Contact information and a comment can also be stored for an author. An author can of course author many books.

The library may stored many copies of the same book. For example, there may be three copies of our textbook, each with an unique tag and a possible acquisition date. It may also have a status, e.g. 'lost'

1. Tag: 2090910902, acquired 1/15/2018, status: lost.
2. Tag: 2090910903, acquired 1/15/2018
3. Tag: 2091123423, acquired 3/3/2019

A book may belong to some categories. For example, our textbook may belong to the categories 'Computer Science', 'Database' and 'SQL'. A category has an unique category id.

A patron may also be interested in any number of categories.

A patron can borrow books. For example, the patron with id 10239480 may checkout a copy of the textbook (with Tag 2090910903). The checkout date is 9/1/2019. The due date is 9/15/2019. A return date may current be missing.

Submit the homework through Blackboard with the extensions .drawio, and .pdf (of a PDF printout of the ER diagram). Naming convention should be the same for all homework submission: H<assignment number>_itec3335_<<sid>>_<lastname>.<extension>. For example, H3_itec3335_0111006_Bond_Jane.iodraw and H3_itec3335_0111006_Bond_Jane.pdf.