

# **Assignment 1: Modelling Google Scholar**

**INFO20003 Database Systems**

**Student Number: 697004**

**Date: 01/04/2022**

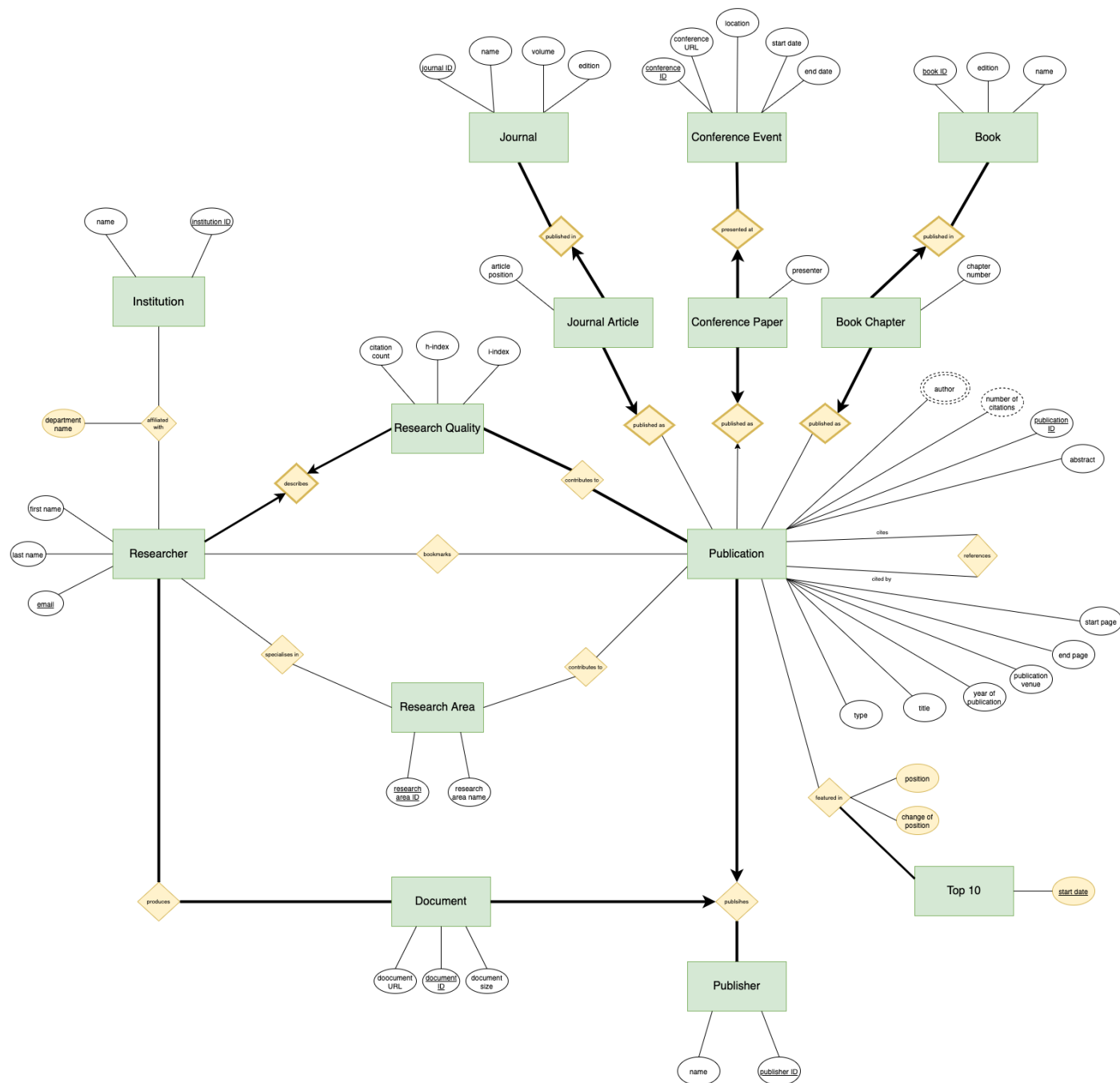
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## Assumptions

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- A publication need not have any references. Ex: a creative short story might be referenced by an article on literature.
- An individual and Publishing Company must produce at least one *published* 'Document Object' ('Publication') to become a 'Researcher' and 'Publisher' respectively within database.
- When a 'Researcher' instance is created, it is paired with a 'Research Quality' instance.
- An institution need not be associated with a researcher. It might be new and without any defined associations.
- A researcher need not be associated with an institution. They might be unemployed.
- A given document object can be at most one publication. Once a document object *has* been published, it has a changed status. Ex: reprints of articles acknowledge prior publishing, often with foreword.
- A publication can be of more than one type. Ex: A conference paper can also be published as a book chapter.
- A book chapter or journal article can only be published *in* one book or journal respectively. However, a publication can be published *as* multiple journal articles/book chapters, and therefore appear in multiple books/journals.
- Journal Article and Book Chapter have parents in Journal and Book entities respectively.

Assignment 1 Part 1: Google Scholar in  
Chen's Notation  
Student Number: 697004



Assignment 1 Part 2: Google Scholar in Physical Model  
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