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CSC 451 Assignment 1

ENTITIES:

DEPARTMENT: A DEPARTMENT is a specified area of our library. For each DEPARTMENT we record the Name of the DEPARTMENT and Capacity. The Capacity is the total amount of books that can fit within a DEPARTMENT. The Name of the DEPARTMENT is the key attribute.

BOOK: A BOOK is a book (literal definition) that is stored in our library. For each BOOK we note its unique ISBN number. Each BOOK will only have one ISBN number and this serves as the key attribute of a BOOK. In addition to the ISBN number, for each BOOK we keep track of the Publisher and the Year it was published in.

AUTHOR: An AUTHOR is the writer of a BOOK. For each AUTHOR we assign a single unique AuthorID number. This AuthorID number is the key attribute of an AUTHOR. We also keep track of an AUTHOR’s Name.

RELATIONSHIPS:

contains: A DEPARTMENT can contain zero to many BOOKS. A BOOK can only be contained in one DEPARTMENT.

writes: An AUTHOR must write one or more BOOKS that are stored in our library. Each BOOK is written by at least one or more AUTHORS.

Additonal Assumptions:

Our database only includes BOOKS that are stored at our library.

Our database only includes AUTHORS whom wrote BOOKS stored in our library.

Our database can create DEPARTMENTS before any BOOKS are associated with them.