

SQL SERVER 2016 Project

Book Catalog Database

Project Scenario

You have to design a database normalized to 3NF based on the description below.

A book library wants to maintain a separate book catalog alongside the main database for convenience. The library only deals with IT related books. The book catalog will store a subset of data from the main database.

Each book is associated with one or more tags. A book under multiple tags. For example, "Programming with C#" might be associated with "programming", ".Net" and "C#" tags.

A book is often written by more than one author.

The catalog should be able to provide book title, publish date, price, categories and author information of a book availability status. Also, it must store author details and publisher information.

Some books are yet to be published but the publishing date is fixed and its availability status is automatically set to not available.

A sample data is available for better understanding

Title	Publish date	Cover Price	Author	Tags	Publisher	Available
C# step by step	2017-04-03	67.99	McDonnells, Jo Finn	Programming, C#	Northwick publishing	Yes
SQL SERVER 2016 for developers	2016-08-12	88.99	M Antonio, S Maria	Database, SQL Server, SQL	Southwick publishing	Yes
Blazeor guide	2021-01-07	99.99	K Watson	Blazer, Web Assembly, SPA	Northwick publishing	No

Some key implementation requirements:

- Author information is maintained separately and pre-existing or saved before book entry
- There must be a way to insert a book with multiple tags and author id in a single statement (a single with call to a procedure/function. Tags might not pre-existing. If a new tag is found with book, it must be stored.
- There must be a way to extract book information including tags, author names in a comma separated string as shown in sample data.
- There must be a way to prevent deletion of a tag or author if there is any related book.
- There must be a way to fetch pagged book data.

You must use views, stored procedures, all types of UDF, triggers.

Note: For author and tags use a minimum set of attributes.