

#### **TASK**

# Capstone Project - Databases

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#### Introduction

#### **WELCOME TO THE CAPSTONE PROJECT - DATABASES TASK!**

This Capstone is a milestone in your learning so far. In this task, you will be consolidating the knowledge which you have gained and applying it to a real-world situation! This Capstone project will give you the opportunity to demonstrate your competence in using Python and SQL.

Be creative – you'll be tasked with a set of criteria to meet, but the rest is up to you. It is worth spending time and effort to make this a project that you can be proud of. It could well be the first project you add to your developer portfolio!

#### **Instructions**

This project is a way for you to test your programming skills while creating an application that you can add to your portfolio. Understanding a programming language or development technology is a key skill. However, being able to apply your knowledge in order to create software to meet the unique specifications that a client may want is one of the most desirable skills in the industry. This project allows you to highlight your development skills to a prospective employer!

For this project, you are required to create a program for a bookstore. The program should allow the clerk to enter data about new books into the database, update book information, delete books from the database, and search to find the availability of books in the database.

Remember, any great design must be functional and meet the specifications provided by the user. A software solution that looks good and works but doesn't do what the user wants it to, is like creating a bike with square wheels. It may be an interesting exercise but not a very useful one.

## **Compulsory Task**

#### Follow these steps:

- Create a program that can be used by a bookstore clerk. The program should allow the clerk to:
  - o add new books to the database
  - o update book information
  - o delete books from the database
  - o search the database to find a specific book
- Create a database called **ebookstore** and a table called **book**. The table should have the following structure:

id	title	author	qty
3001	A Tale of Two Cities	Charles Dickens	30
3002	Harry Potter and the Philosopher's Stone	J.K. Rowling	40
3003	The Lion, the Witch and the Wardrobe	C. S. Lewis	25
3004	The Lord of the Rings	J.R.R Tolkien	37
3005	Alice in Wonderland	Lewis Carroll	12

- Populate the table with the above values. You can also add your own values if you wish.
- The program should present the user with the following menu:
  - 1. Enter book
  - 2. Update book
  - 3. Delete book
  - 4. Search books
  - 0. Exit

The program should perform the function that the user selects. The implementation of these functions is left up to you, but a demonstration of the topics we have covered in the last module should be shown.

### Completed the task(s)?

Ask an expert to review your work!

**Review work** 



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