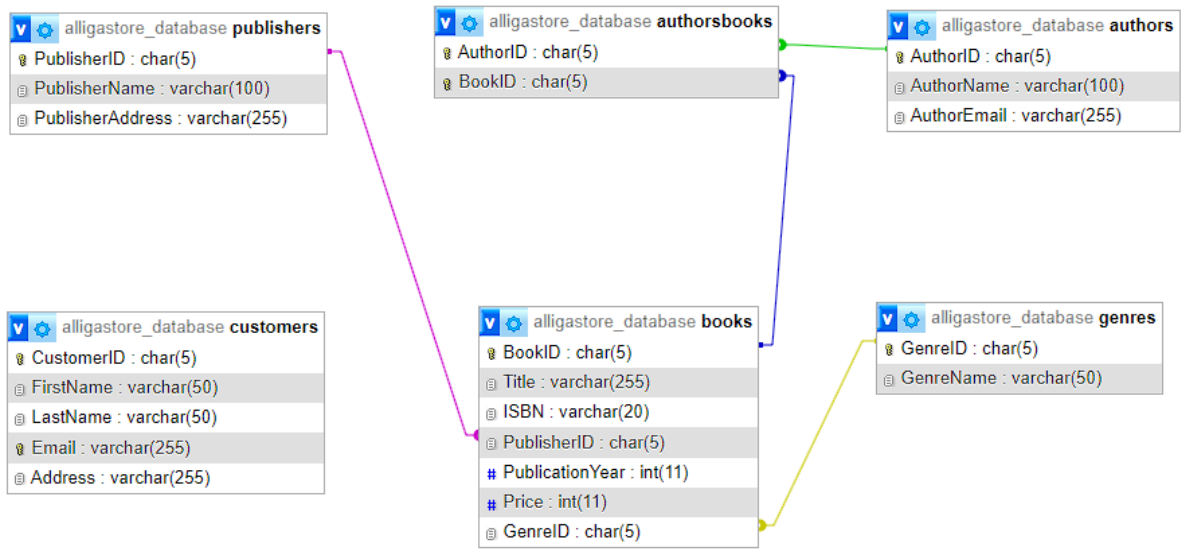
Alligastore

Alligastore, a renowned blend of "Alligators" and "Bookstore," has gained global popularity, leading to a surge in transaction data. To aid Alligastore in managing their database, design an efficient system to handle book sales, customer information, and alligator figurine purchases. Ensure scalability to accommodate the growing demand while maintaining a seamless and delightful shopping experience for all visitors.



1. Create a database named "**alligastore_database**".
   (**CREATE DATABASE**)
2. Create a table named "orders" with the following descriptions.
   (**CREATE TABLE**)

Field Name	Data Type	Length	Description
OrderID	CHAR	5	**Primary Key**. **OrderID** must start with "OD" and followed by three digits number. Example: BK001
CustomerID	CHAR	5	References from **customer**. If the referenced data is changed then the changes will be cascaded.
OrderDate	DATE		Not Null
TotalAmount	INT		NOT NULL. **TotalAmount** must be more than or equal to 0.

3. Create a table named “orderitems” with the following descriptions.

   (**CREATE TABLE**)

Field Name	Data Type	Length	Description
OrderItemID	CHAR	5	**Primary Key**. **OrderItemID** must start with “OI” and followed by three digits number. Example: OI001
OrderID	CHAR	5	References from **orders**. If the referenced data is changed then the changes will be cascaded.
BookID	CHAR	5	References from **books**. If the referenced data is changed then the changes will be cascaded.
Quantity	INT		Not Null. **Quantity** must be more than 0.

4. Make sure the **PublicationYear** is between 1800 and 2023.

   (**ALTER**, **CONSTRAINT**)

5. Insert this data into the orders (**left**) and orderitems (**right**) table.

   (**INSERT**)

OrderID	CustomerID	OrderDate	TotalAmount
OD001	CU001	2023-07-26	4599
OD002	CU002	2023-07-25	3250
OD003	CU003	2023-07-24	1575
OD004	CU004	2023-07-23	2730
OD005	CU005	2023-07-22	5120

OrderItemID	OrderID	BookID	Quantity
OI001	OD001	BO001	2
OI002	OD001	BO003	1
OI003	OD002	BO002	1
OI004	OD003	BO001	1
OI005	OD003	BO003	3
OI006	OD004	BO003	2
OI007	OD005	BO001	3
OI008	OD005	BO002	2

6. Display **Title, AuthorName, ISBN, GenreName,** and **PublicationYear**. (**SELECT**)

Title	AuthorName	ISBN	GenreName	PublicationYear
Harry Potter and the Philosopher's Stone	J.K. Rowling	9780747532743	Fantasy	1997
It	Stephen King	9781501175466	Horror	1986
Murder on the Orient Express	Agatha Christie	9780062073495	Mystery	1934

7. Increase the price for all books published **BEFORE** the year 2000 by 10%. (**UPDATE**)

BookID	Title	ISBN	PublisherID	PublicationYear	Price	GenreID
BO001	Harry Potter and the Philosopher's Stone	9780747532743	*NULL*	1997	1999	GE001
BO002	It	9781501175466	*NULL*	1986	1799	GE002
BO003	Murder on the Orient Express	9780062073495	*NULL*	1934	1495	GE003

BookID	Title	ISBN	PublisherID	PublicationYear	Price	GenreID
BO001	Harry Potter and the Philosopher's Stone	9780747532743	*NULL*	1997	2199	GE001
BO002	It	9781501175466	*NULL*	1986	1979	GE002
BO003	Murder on the Orient Express	9780062073495	*NULL*	1934	1645	GE003

8. Display **CustomerID**, **FullName**, and **TotalSpent** from all customers. (**SELECT**, **CONCAT**)

CustomerID	FullName	TotalSpent
CU001	Stephen William	4599
CU002	Ruth Timorah	3250
CU003	Jacky Setiawan	1575
CU004	Ferren Andrea	2730
CU005	Ichsan Ilyasa	5120

9. Display **BookID**, **BookTitle**, **AuthorName**, **GenreName**, and **TotalOrders** for "Mystery" genre only. (**SELECT**, **COUNT**)

BookID	BookTitle	AuthorName	GenreName	TotalOrders
BO003	Murder on the Orient Express	Agatha Christie	Mystery	3

10. Show all orders made in the last 5 days. (**SELECT**, **DATE_ADD**)

OrderID	CustomerID	OrderDate	TotalAmount
OD001	CU001	2023-07-26	4599
OD002	CU002	2023-07-25	3250
OD003	CU003	2023-07-24	1575
OD004	CU004	2023-07-23	2730

11. Show all books' title along with **GeneratedCode** obtained from combining the **first** three digits of ISBN, **first** char of author's lastname, and the **last** three digits of ISBN.
(**SELECT**, **CONCAT**, **SUBSTRING**, **POSITION**, **LEFT**, **RIGHT**)

Title	GeneratedCode
Harry Potter and the Philosopher's Stone	978R743
It	978K466
Murder on the Orient Express	978C495

12. Show total sales revenue for orders in 2023 grouped by the month as follows.
(**SELECT**, **CONCAT**, **MONTHNAME**, **YEAR**)

Date	TotalSales
July 2023	17274

13. Add 7 days to each order date and display them (**SELECT**, **DATE_FORMAT**, **DATE_ADD**)

OrderID	UpdatedOrderDate
OD001	Wednesday, August 2nd 2023
OD002	Tuesday, August 1st 2023
OD003	Monday, July 31st 2023
OD004	Sunday, July 30th 2023
OD005	Saturday, July 29th 2023

14. Remove all orders where the last digit of its **TotalAmount** is '0'. (**DELETE**, **RIGHT**)

OrderID	CustomerID	OrderDate	TotalAmount
OD001	CU001	2023-07-26	4599
OD003	CU003	2023-07-24	1575

15. Remove all orders if the TotalAmount is less than 2000. (**DELETE**)

OrderID	CustomerID	OrderDate	TotalAmount
OD001	CU001	2023-07-26	4599

16. Delete the "**alligastore_database**". (**DROP DATABASE**)