

SAYNA-MERISE SQL-ECOMMERCE

Ce projet a pour objectif de nous mettre en condition réelle en nous imposant un cahier des charges ainsi qu'un délai imparti (environ 24 heures). Nous devons nous mettre dans la peau d'un développeur freelance qui réalise une prestation pour un client. Vous devrez donc respecter toutes les consignes.

1 - La premiere partie porte sur la conception et la mise en place de la methode merise pour la conception du systeme de base de donne relationnel du site ECOMMERCE

Lien vers google drive : https://drive.google.com/drive/folders/1R6O1pi8-eYDvGrD1gzg9-G0_34ih6xly

2 - Les requetes : liste des requetes effectue sur la base de donnee

- Selection de toutes les donnees dans une table

Figure demonstrative

```
53 ('Amilcar', 'Cabral', 'Bissau', 'Avenida Amilcar Cabral', 'amilcar.cabral@example.com', '245-955-123456', '1004', 'Guinea-Bissau'),
54 ('Amina', 'of Zazzau', 'Zaria', 'Zazzau Royal Palace', 'amina.zazzau@example.com', '234-906-876543', '810211', 'Nigeria'),
55 ('Paul', 'Kagame', 'Kigali', 'Village Urugwiro', 'paul.kagame@example.com', '250-788-987654', '250', 'Rwanda'),
56 ('Hassan', 'II', 'Rabat', 'Royal Palace of Rabat', 'hassan.ii@example.com', '212-661-555555', '10000', 'Morocco');
57
58 > Run
59 SHOW TABLES ;
60 > Run | +Tab | JSON | Ask Copilot
SELECT * FROM customers ; 7ms
```

id	firstname	lastname	city	street	email	phone_number	postal_code	country
1	Kwesi	Amissah-Arthur	Cape Coast	Pedu Rd	kwesi.arthur@example.com	233-244-567890	00233	Ghana
2	Isabel	Dos Santos	Luanda	Miramar	isabel.dos.santos@example	244-926-123456	1000	Angola
3	Idriss	Déby	N'Djamena	Presidential Palace	idriss.deby@example.com	235-662-111222	01 BP 109	Chad
4	Marc	Ravalomanana	Antananarivo	lavoloha	marc.ravalomanana@exam	261-20-1234567	101	Madagascar
5	Ntsay	Christian	Antananarivo	Ambohitsorohitra	christian.ntsay@example.co	261-20-9876543	101	Madagascar
6	Jean	Rajaonarimampianina	Antananarivo	lavoloha	jean.rajaonarimampianina@	261-20-5555555	101	Madagascar
7	Andry	Rajoelina	Antananarivo	Ambohitsorohitra	andry.rajoelina@example.cc	261-20-7777777	101	Madagascar
8	Hery	Rajaonarimampianina	Antananarivo	lavoloha	hery.rajaonarimampianina@	261-20-8888888	101	Madagascar
9	Didier	Ratsiraka	Toamasina	Toamasina I	didier.ratsiraka@example.cc	261-53-1234567	501	Madagascar
10	Kwame	Nkrumah	Accra	1 Independence Ave	kwame.nkrumah@example.	233-244-123456	GA1	Ghana
11	Nelson	Mandela	Johannesburg	46664 Vilakazi St	nelson.mandela@example.c	27-123-456789	2000	South Africa
12	Haile	Selassie	Addis Ababa	Imperial Palace	haile.selassie@example.com	251-911-987654	1000	Ethiopia
13	Wangari	Maathai	Nairobi	Karura Forest	wangari.maathai@example.	254-722-555555	00100	Kenya
14	Léopold	Sédar Senghor	Dakar	Avenue Léopold Sédar S	leopold.senghor@example.	221-777-111222	BP 98	Senegal
188	Chinua	Achebe	Enugu	5 Ogidi Rd	chinua.achebe@example.co	234-802-234567	400001	Nigeria

- Selection de donnees specifiques d'une table

59

▷ Run | +Tab | JSON | Ask Copilot

60 `SELECT * FROM customers ;`

61

▷ Run | +Tab | JSON | Ask Copilot

✓ 62 `SELECT lastname, firstname, email FROM customers ;` 3ms

customers x

Properties DATA Log ER Monitor

`SELECT lastname, firstname, email FROM customers LIMIT 100`

Search Results

Cost: 6ms < 1 > Total 25

	lastname varchar(255)	firstname varchar(255)	* email varchar(255)
<input type="checkbox"/>	> Amissah-Arthur	Kwesi	kwesi.arthur@example.com
<input type="checkbox"/>	> Dos Santos	Isabel	isabel.dos.santos@example
<input type="checkbox"/>	> Déby	Idriss	idriss.deby@example.com
<input type="checkbox"/>	> Ravalomanana	Marc	marc.ravalomanana@exam
<input type="checkbox"/>	> Christian	Ntsay	christian.ntsay@example.co
<input type="checkbox"/>	> Rajaonarimampianina	Jean	jean.rajaonarimampianina@
<input type="checkbox"/>	> Rajoelina	Andry	andry.rajoelina@example.cc
<input type="checkbox"/>	> Rajaonarimampianina	Hery	hery.rajaonarimampianina@
<input type="checkbox"/>	> Ratsiraka	Didier	didier.ratsiraka@example.cc
<input type="checkbox"/>	> Nkrumah	Kwame	kwame.nkrumah@example.
<input type="checkbox"/>	> Mandela	Nelson	nelson.mandela@example.c
<input type="checkbox"/>	> Selassie	Haile	haile.selassie@example.com
<input type="checkbox"/>	> Maathai	Wangari	wangari.maathai@example.
<input type="checkbox"/>	> Sédar Senghor	Léopold	leopold.senghor@example.
<input type="checkbox"/>	> Achebe	Chinua	chinua.achebe@example.co

- Selection avec tri et limitation de resultats

File Edit Selection View Go Run Terminal Help

Request Query test.sql ecommerce.sql

C:\Users\kirin> .dbclient> query> 1741858921766@127.0.0.1@3306@ecommerce> Request Query test.sql> ...

3 -- Selection avec Tri et Limitation

4

▷ Run | +Tab | JSON | Ask Copilot

5 `SELECT * FROM products ORDER BY price DESC LIMIT 5;`

6

7

8 -- Recherche avec condition

9

▷ Run | +Tab | JSON | Ask Copilot

✓ 10 `SELECT * FROM customers WHERE city = 'Antananarivo';` 7ms

11

customers x

Properties DATA Log ER Monitor

`SELECT * FROM customers WHERE city = 'Antananarivo' LIMIT 100`

Search Results

Cost: 22ms < 1 > Total 5

	* id int	firstname varchar(255)	lastname varchar(255)	city varchar(255)	street varchar(255)	* email varchar(255)	phone_number varchar(255)	postal_code varchar(255)	country varchar(255)
<input type="checkbox"/>	> 4	Marc	Ravalomanana	Antananarivo	lavoloha	marc.ravalomanana@exam	261-20-1234567	101	Madagascar
<input type="checkbox"/>	> 5	Ntsay	Christian	Antananarivo	Ambohitsorohitra	christian.ntsay@example.co	261-20-9876543	101	Madagascar
<input type="checkbox"/>	> 6	Jean	Rajaonarimampianina	Antananarivo	lavoloha	jean.rajaonarimampianina@	261-20-5555555	101	Madagascar
<input type="checkbox"/>	> 7	Andry	Rajoelina	Antananarivo	Ambohitsorohitra	andry.rajoelina@example.cc	261-20-7777777	101	Madagascar
<input type="checkbox"/>	> 8	Hery	Rajaonarimampianina	Antananarivo	lavoloha	hery.rajaonarimampianina@	261-20-8888888	101	Madagascar

- Recherche avec une condition

The screenshot shows a database client interface with a dark theme. On the left, a sidebar displays a database schema with tables like 'categories', 'customers', 'orders', and 'products'. The main window shows a SQL query in a text editor:

```
-- Jointure entre deux tables : orders et customers  
SELECT o.id, c.firstname, c.lastname, o.amount  
FROM orders o  
JOIN customers c ON o.customer_id = c.id; 10ms
```

Below the query editor, the results are displayed in a table with columns: id, firstname, lastname, and amount. The results show 20 rows of data.

id	firstname	lastname	amount
61	Kwesi	Amissah-Arthur	1450
62	Isabel	Dos Santos	200
63	Idriss	Déby	50
64	Marc	Ravalomanana	30320
65	Ntsay	Christian	100
66	Jean	Rajaonarimampianina	725
67	Andry	Rajoelina	2240
68	Hery	Rajaonarimampianina	180
69	Didier	Ratsiraka	9054
70	Kwame	Nkrumah	120
71	Jomo	Kenyatta	130
72	Amílcar	Cabral	180
73	Amina	of Zazzau	90
74	Paul	Kagame	300
85	Chinua	Achebe	9540
86	Ellen	Johnson Sirleaf	200

- Utilisation de fonction daggregation : somme , moyenne , comptage

File Edit Selection View Go Run Terminal Help ← → Search

DA... data 8.0.41

Query Request Que...

Tables (11)

- categories 5
- category
- customers 25
- order_produ...
- orders
- payment
- payments
- product
- product_cate...
- products
- shipping
- Views
- Functions
- Procedures

sakila 6.45M

sayna

world 784k

Request Query test.sql × ecommerce.sql

C: > Users > kirin > .dbclient > query > 1741858921766@@127.0.0.1@3306@ecommerce > Request Query test.sql > ...

13

Run | +Tab | JSON | Ask Copilot

✓ 14 SELECT id, COUNT(*) AS nombre_produits FROM products GROUP BY id; 9ms

15

16

products ×

Properties DATA Log ER Monitor

SELECT id, COUNT(*) AS nombre_produits FROM products GROUP BY id LIMIT 100

Search Results

Cost: 17ms < 1 > Total 8

	* id int	nombre_produits
>	1	1
>	2	1
>	3	1
>	4	1
>	5	1
>	6	1

- Jointure de deux tables

The screenshot shows a database client interface with a menu bar (File, Edit, Selection, View, Go, Run, Terminal, Help) and a search bar. The left sidebar displays a tree view of the database structure, including tables like 'categories', 'customers', 'orders', and 'products'. The main editor area contains a SQL query: `-- Jointure entre deux tables : orders et customers`, `SELECT o.id, c.firstname, c.lastname, o.amount`, `FROM orders o`, and `JOIN customers c ON o.customer_id = c.id;`. The query is executed, and the results are displayed in a table below. The table has columns: id (int), firstname (varchar), lastname (varchar), and amount (int). The results show 20 rows of data.

id	firstname	lastname	amount
61	Kwesi	Amissah-Arthur	1450
62	Isabel	Dos Santos	200
63	Idriss	Déby	50
64	Marc	Ravalomanana	30320
65	Ntsay	Christian	100
66	Jean	Rajaonarimampianina	725
67	Andry	Rajoelina	2240
68	Hery	Rajaonarimampianina	180
69	Didier	Ratsiraka	9054
70	Kwame	Nkrumah	120
71	Jomo	Kenyatta	130
72	Amílcar	Cabral	180
73	Amina	of Zazzau	90
74	Paul	Kagame	300
85	Chinua	Achebe	9540
86	Ellen	Johnson Sirleaf	200

- Groupement de données avec aggregation

File Edit Selection View Go Run Terminal Help Search

DA... 8.0.41

Query

Request Que...

Tables (11)

- categories 5
- category
- customers 25
- order_produ...
- orders
- payment
- payments
- product
- product_cate...
- products
- shipping
- Views
- Functions
- Procedures
- sakila 6.45M
- sayna
- world 784k

Request Query test.sql

```

22 -- Groupement de donnees avec agregation
23
24 -- SELECT c.id , c.firstname, c.lastname, COUNT(o.id) AS total_orders FROM customers c
25 -- JOIN `orders` o ON c.id = o.id
26 -- GROUP BY c.id, c.firstname, c.lastname;
27
28 SELECT c.id, c.firstname, c.lastname, COUNT(o.id) AS total_orders
29 FROM customers c
30 JOIN orders o ON c.id = o.customer_id
31 GROUP BY c.id, c.firstname, c.lastname; 8ms
32

```

Result(RO) x

Search Results

Cost: 8ms < 1 > Total 20

id	firstname	lastname	total_orders
1	Kwesi	Amissah-Arthur	1
2	Isabel	Dos Santos	1
3	Idriss	Déby	1
4	Marc	Ravalomanana	1
5	Ntsay	Christian	1
6	Jean	Rajaonarimampianina	1
7	Andry	Rajoelina	1
8	Hery	Rajaonarimampianina	1
9	Didier	Ratsiraka	1
10	Kwame	Nkrumah	1
188	Chinua	Achebe	1
189	Ellen	Johnson Sirleaf	1
190	Kofi	Annan	1

- Mise a jour de donnees dans une table

File Edit Selection View Go Run Terminal Help Search

DA... 8.0.41

Query

Request Que...

Tables (11)

- categories 5
- category
- customers 25
- order_produ...
- orders
- payment
- payments
- product
- product_cate...
- products
- shipping
- Views
- Functions
- Procedures
- sakila 6.45M
- sayna
- world 784k

Request Query test.sql

```

33
34 -- Mise a jou de donnee dans une table
35
36 UPDATE products SET price = 49.99 WHERE id = 8;
37
38 --verification de la mise a jour
39
40 SELECT * FROM products WHERE id = 8; 2ms
41

```

products x

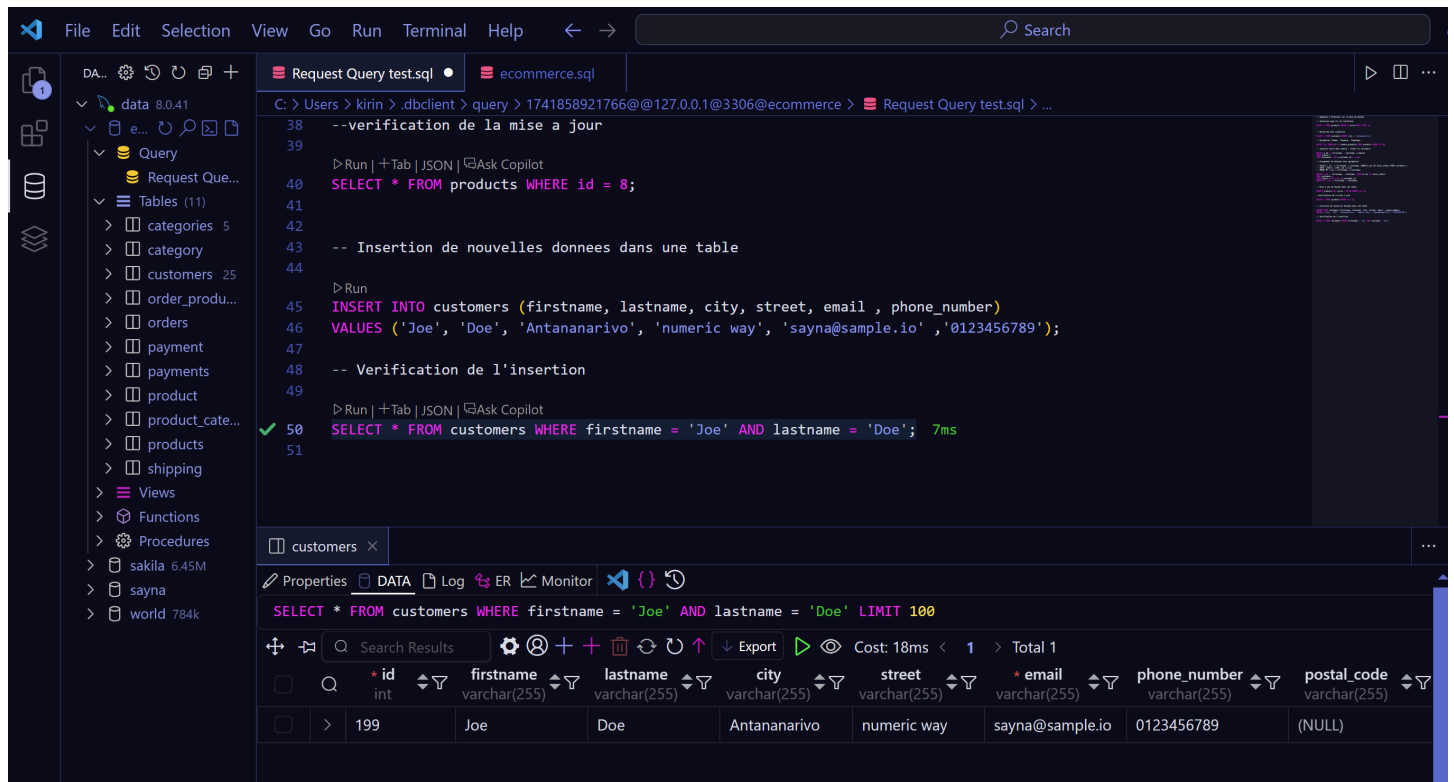
Properties DATA Log ER Monitor

SELECT * FROM products WHERE id = 8 LIMIT 100

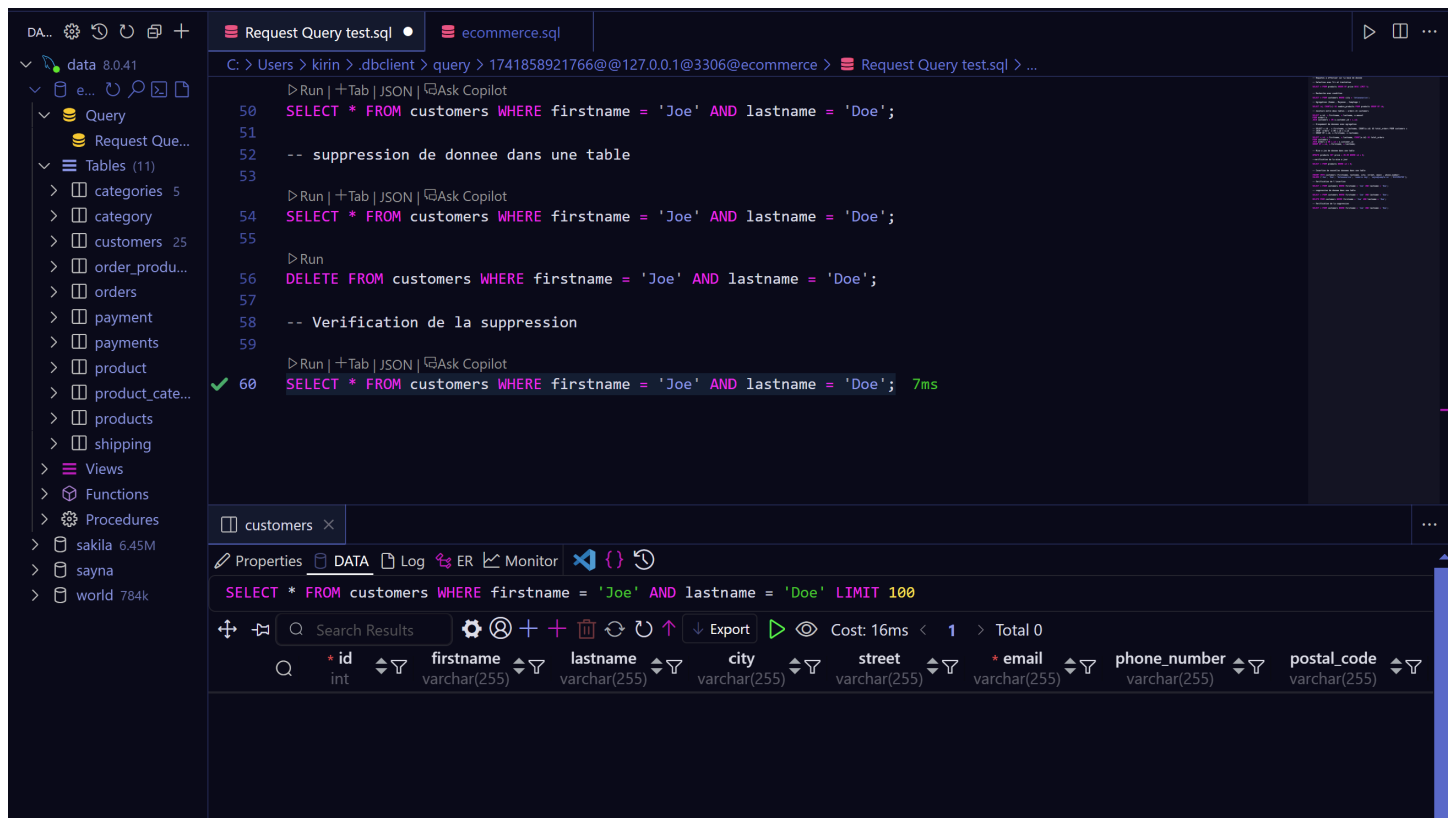
Cost: 5ms < 1 > Total 1

id	product_name	product_description	price	stock
8	Table basse en bois	(NULL)	49.99	25

- Insertion de nouvelles donnees dans une table



- Suppression de donnees dans une table



DA... data 8.0.41

e... e...

Query

Request Que...

Tables (11)

categories 5

category

customers 25

order_produ...

orders

payment

payments

product

product_cate...

products

shipping

Views

Functions

Procedures

sakila 6.45M

sayna

world 784k

Request Query test.sql

ecommerce.sql

C: > Users > kirin > .dbclient > query > 1741858921766@@127.0.0.1@3306@ecommerce > Request Query test.sql > ...

46 VALUES ('Joe', 'Doe', 'Antananarivo', 'numeric way', 'sayna@sample.io', '0123456789');

47

48 -- Verification de l'insertion

49

50 SELECT * FROM customers WHERE firstname = 'Joe' AND lastname = 'Doe';

51

52 -- suppression de donnee dans une table

53

54 SELECT * FROM customers WHERE firstname = 'Joe' AND lastname = 'Doe'; 5ms

55

customers

Properties

DATA

Log

ER

Monitor

SELECT * FROM customers WHERE firstname = 'Joe' AND lastname = 'Doe' LIMIT 100

Search Results

Cost: 9ms

1

Total 1

	* id int	firstname varchar(255)	lastname varchar(255)	city varchar(255)	street varchar(255)	* email varchar(255)	phone_number varchar(255)	postal_code varchar(255)
	199	Joe	Doe	Antananarivo	numeric way	sayna@sample.io	0123456789	(NULL)