BẢN THIẾT KẾ DATABASE SPORTSWEAR WEBSITE

1. **Tổng quan về Database.**

Tables

		Name
1		mern-db.users
2		mern-db.brands
3		mern-db.carts
4		mern-db.categories
5		mern-db.deliveryinfos
6		mern-db.orders
7		mern-db.products
8		mern-db.sizes

2. Chi tiết các table trong Database

users

Columns

	Name	Key	Data type	Null	Attributes	References	Description
1	_id	🔑	Id	✔			
2	name		String	✔			
3	username		String	✔			
4	email		String	✔			
5	password		String	✔			
6	role		String	✔			
7	profilePicture		String	✔			
8	createdAt		DateTime	✔			
9	updatedAt		DateTime	✔			
10	__v		Int32	✔			

Relations

Foreign table		Primary table	Join	Title / Name / Description
carts		users	carts.user = **users**._id	fk_users_carts
deliveryinfos		users	deliveryinfos.user = **users**._id	fk_users_deliveryinfos
orders		users	orders.user = **users**._id	fk_users_orders

Unique keys

	Key name	Columns	Description
🔑	_id	_id	

brands

Schema	mern-db	
Name	brands	
Type	Collection	
Module	Diagram	

Columns

	Name	Key	Data type	Null	Attributes	References	Description
1	_id	🔑	Id	✔			
2	name		String	✔			
3	slug		String	✔			
4	createdAt		DateTime	✔			
5	updatedAt		DateTime	✔			
6	__v		Int32	✔			

Relations

Foreign table		Primary table	Join	Title / Name / Description
products	⚷	brands	products.brand = **brands**._id	fk_brands_products

Unique keys

	Key name	Columns	Description
🔑	_id	_id	

categories

Name	categories
Type	Collection
Module	Diagram

Columns

	Name	Key	Data type	Null	Attributes	References	Description
1	_id	🔑	Id	✔			
2	name		String	✔			
3	slug		String	✔			
4	parentId		String	✔		categories	
5	createdAt		DateTime	✔			
6	updatedAt		DateTime	✔			
7	__v		Int32	✔			

Relations

Foreign table		Primary table	Join	Title / Name / Description
categories	>—i	categories	**categories**.parentId = **categories**._id	fk_categories_categories
products	>—i	categories	products.category = **categories**._id	fk_categories_products

Unique keys

	Key name	Columns	Description
🔑	_id	_id	

products

Columns

		Name	Key	Data type	Null	Attributes	References	Description
	1	_id	🔑	Id	✔			
	2	name		String	✔			
	3	slug		String	✔			
	4	price		Int32	✔			
	5	description		String	✔			
	6	productPictures		Document[]	✔			
1		productPictures._id		Id	✔			
2		productPictures.img		String	✔			
	7	category		Id	✔		categories	
	8	sizes		Document[]	✔			
1		sizes._id		Id	✔			
2		sizes.size		Id	✔			
3		sizes.quantity		Int32	✔			
4		sizes.updatedAt		DateTime	✔			
5		sizes.createdAt		DateTime	✔			
	9	brand		Id	✔		brands	
	10	reviews		Null[]	✔			
	11	createdAt		DateTime	✔			
	12	updatedAt		DateTime	✔			
	13	__v		Int32	✔			

Relations

Foreign table		Primary table	Join	Title / Name / Description
products	⤜₁	brands	**products**.brand = brands._id	fk_brands_products
products	⤜₁	categories	**products**.category = categories._id	fk_categories_products
carts	⤜₁	products	carts.cartItems.product = **products**._id	fk_products_carts
orders	⤜₁	products	orders.items.productId = **products**._id	fk_products_orders

Unique keys

	Key name	Columns	Description
🔑	_id	_id	

carts

Columns

	Name	Key	Data type	Null	Attributes	References	Description
1	_id	🔑	Id	✔			
2	user		Id	✔		users	
▾ 3	cartItems		Document[]	✔			
1	cartItems.quantity		Int32	✔			
2	cartItems._id		Id	✔			
3	cartItems.product		Id	✔		products	
4	cartItems.size		Id	✔		sizes	
4	createdAt		DateTime	✔			
5	updatedAt		DateTime	✔			
6	__v		Int32	✔			

Relations

Foreign table		Primary table	Join	Title / Name / Description
carts	⋈	products	**carts**.cartItems.product = products._id	fk_products_carts
carts	⋈	sizes	**carts**.cartItems.size = sizes._id	fk_sizes_carts
carts	⋈	users	**carts**.user = users._id	fk_users_carts

Unique keys

	Key name	Columns	Description
🔑	_id	_id	

⧉ sizes

Documentation	mern-db@cluster0.dpsol.mongodb.net
Schema	mern-db
Name	sizes
Type	Collection
Module	Diagram

⌄ Columns

	Name	Key	Data type	Null	Attributes	References	Description
1	🔑 _id	🔑	Id	✔			
2	▭ size		String	✔			
3	▭ description		String	✔			
4	▭ __v		Int32	✔			

⌄ Relations

Foreign table		Primary table	Join	Title / Name / Description
carts	⪥	sizes	carts.cartItems.size = **sizes**._id	fk_sizes_carts
orders	⪥	sizes	orders.items.sizeId = **sizes**._id	fk_sizes_orders

⌄ Unique keys

	Key name	Columns	Description
🔑	_id	_id	

Exported: **2021-09-10 10:19**   Last imported: **2021-09-10 03:12**

deliveryinfos

Name	deliveryinfos
Type	Collection
Module	Diagram

Columns

	Name	Key	Data type	Null	Attributes	References	Description
1	_id	🔑	Id	✔			
2	user		Id	✔		users	
3	__v		Int32	✔			
4	address		Document[]	✔			
1	address._id		Id	✔			
2	address.name		String	✔			
3	address.address		String	✔			
5	createdAt		DateTime	✔			
6	updatedAt		DateTime	✔			

Relations

Foreign table		Primary table	Join	Title / Name / Description
deliveryinfos		users	**deliveryinfos**.user = users._id	fk_users_deliveryinfos
orders		deliveryinfos	orders.addressId = **deliveryinfos**._id	fk_deliveryinfos_orders

Unique keys

	Key name	Columns	Description
🔑	_id	_id	

orders

Columns

	Name	Key	Data type	Null	Attributes	References	Description
1	_id	🔑	Id	✔			
2	paymentType		String	✔			
3	user		Id	✔		users	
4	addressId		Id	✔		deliveryinfos	
5	totalAmount		Int32	✔			
6	items		Document[]	✔			
1	items._id		Id	✔			
2	items.productId		Id	✔		products	
3	items.sizeId		Id	✔		sizes	
4	items.payablePrice		Int32	✔			
5	items.purchaseQty		Int32	✔			
7	paymentStatus		String	✔			
8	orderStatus		Document[]	✔			
1	orderStatus.type		String	✔			
2	orderStatus.isCompleted		Boolean	✔			
3	orderStatus._id		Id	✔			
4	orderStatus.date		DateTime	✔			
9	createdAt		DateTime	✔			
10	updatedAt		DateTime	✔			
11	__v		Int32	✔			

Relations

Foreign table		Primary table	Join	Title / Name / Description
orders		deliveryinfos	**orders**.addressId = deliveryinfos._id	fk_deliveryinfos_orders
orders		products	**orders**.items.productId = products._id	fk_products_orders
orders		sizes	**orders**.items.sizeId = sizes._id	fk_sizes_orders
orders		users	**orders**.user = users._id	fk_users_orders

Unique keys

	Key name	Columns	Description
	_id	_id	

3. Diagram tổng quát.

brands
- 🔑 _id
- name
- slug
- createdAt
- updatedAt
- __v

categories
- 🔑 _id
- name
- slug
- parentId
- createdAt
- updatedAt
- __v

carts
- 🔑 _id
- user
- cartItems
- createdAt
- updatedAt
- __v

products
- 🔑 _id
- name
- slug
- price
- description
- productPictures
- productPictures. _id
- productPictures. img
- category
- sizes
- sizes. _id
- sizes. size
- sizes. quantity
- sizes. updatedAt
- sizes. createdAt
- brand
- reviews
- createdAt
- updatedAt
- __v

orders
- 🔑 _id
- paymentType
- user
- addressId
- totalAmount
- items
- items. _id
- items. productId
- items. sizeId
- items. payablePrice
- items. purchaseQty
- paymentStatus
- orderStatus
- orderStatus. type
- orderStatus. isCompleted
- orderStatus. _id
- orderStatus. date
- createdAt
- updatedAt
- __v

sizes
- 🔑 _id
- size
- description
- __v

deliveryinfos
- 🔑 _id
- user
- __v
- address
- address. _id
- address. name
- address. address
- createdAt
- updatedAt

users
- 🔑 _id
- name
- username
- email
- password
- role
- profilePicture
- createdAt
- updatedAt
- __v