

Database Design

After modeling our database onto an EERD, we yield the following tables.

External_Stakeholders Table

<u>stakeholder_id</u>	email	address	contact_number
1	Johndoe@gmail.com	1 Skip Street, Pretoria, 0081	0831234567
2	Info@ramcouriers.co.za	27 Wrench Rd, Kempton Park, 1600	0104948223
3	Inventory@mdesigns.co.za	355 Bullhorn St, Johannesburg, 2215	0117375841
4	Info@bexpress.co.za	120 Loper Ave, Kempton Park, 1619	0861239397
5	Suzymashaba@gmail.com	45 Harpoon Lane, Midrand, 0157	0723214321

Customer Table

<u>customer_id</u>	stakeholder_id	name	surname	password	card_no	exp_date
1	1	John	Doe	Password123!	4480123456789000	03/29
2	5	Suzy	Mashaba	Secret45###	NULL	NULL

Juristic Table

jurist_id	stakeholder_id	trading_name	freight_rate	account_no	branch_code
1	2	RAM Couriers	R73	62000001452	250655
2	3	Marriage Designs	R90	401475684	632005
3	4	BEX Express	R59	1023657342	198765

Courier Table

<u>courier_id</u>	jurist_id
1	1
2	3

Supplier Table

supplier_id	jurist_id
1	2

Collection Table

<u>coll_id</u>	customer_id	timestamp
1	1	2024-01-24 14:57:15
2	2	2024-02-14 09:34:00

Wishlist Table

<u>customer_id</u>	<u>timestamp</u>	prod_id
1	2024-01-24 14:57:15	43

Cart Table

<u>customer_id</u>	<u>timestamp</u>	prod_id
2	2024-02-14 09:34:00	14

Once a customer clicks the checkout button, all the records in the cart table will be converted to an invoice description and corresponding total. The records of the cart table will be deleted as the cart is emptied. By contrast, a wish list's contents are emptied when the customer chooses to send them to the cart or merely deletes them.

Whenever the customer clicks the add to wish list or add to cart button, a time stamp and product id are recorded in the respective specialized table, as well as the generalization table. Should they have not added anything to either table, there will be no records with their customer id and the site will report as such.

Product Table

prod_id	prod_name	prod_desc	selling_price	sizes	prod_img	supplier_id
14	Whispering Petals Bridal Gown	The "Whispering Petals Bridal Gown" is a timeless romance in fabric form. With luxurious satin, intricate lace, and soft tulle, it exudes grace and elegance. Delicate lace appliqués adorn the back, while fabric flowers and shimmering beadwork add subtle sparkle. Ideal for brides seeking enchanting sophistication on their special day.	R3499.00	25, 25, 26, 27, 27, 28, 29, 30,	Whispering_Petals_Bridal_Gown.png	1
43	Elegant Affair Groom's Ensemble	The "Elegant Affair Groom's Ensemble" is sophistication at its peak. Tailored from premium wool blend, it boasts a classic silhouette with subtle details for added elegance. Perfect for any wedding, it ensures the groom looks impeccable.	R2950.00	34, 44, 44, 46, 46, 46, 47, 48, 48, 50	Elegant_Affair_Groom's_Ensemble.png	1
12	Dainty Charm Ring Bearer Ensemble	The "Dainty Charm Ring Bearer Ensemble" is a sweet blend of elegance and innocence. Featuring a crisp white shirt paired with tailored shorts or trousers, adorned with delicate details like lace accents or satin bows. Finished with coordinating accessories, this ensemble ensures the little one steals hearts down the aisle.	R945.00	6, 6, 7, 8, 8, 9, 10, 11, 12	Dainty_Charm_Ring_Bearer_Ensemble.png	1
11	Cherub Chic Ring Bearer Attire	"Cherub Chic Ring Bearer Attire" steals hearts with its timeless elegance. A crisp white shirt paired with tailored shorts or	R1025.00	6, 6, 7, 8, 8, 9, 10, 11, 12	Cherub_Chic_Ring_Bearer_Attire.png	1

		trousers, adorned with subtle accents, adds whimsy to the wedding. Finished with coordinating accessories, the ensemble ensures the ring bearer looks irresistibly adorable.				
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We can normalize the Product table by ungrouping the sizes attribute as follows

prod_id	prod_name	prod_desc	selling_price	sizes	prod_img	supplier_id
14	Whispering...	The "Whispering Petals Bridal...	R3499.00	25	Whispering_...	1
14	Whispering...	The "Whispering Petals Bridal...	R3499.00	25	Whispering_...	1
14	Whispering...	The "Whispering Petals Bridal...	R3499.00	26	Whispering_...	1

Thereafter, we can move the attributes that were dependent on the gender and age by which a customer would want to shop for products to their own specialization tables, to further normalize the product table.

Product Table

<u>prod_id</u>	selling_price	sizes	supplier_id
14	R3499.00	25	1
14	R3499.00	25	1
14	R3499.00	26	1
...

Womens Table

<u>womens_id</u>	prod_id	quantity	prod_name	prod_desc	prod_img
1	14	8	Whispering...	The "Whispering Petals Bridal...	Whispering_...

Mens Table

<u>mens_id</u>	prod_id	quantity	prod_name	prod_desc	prod_img
1	43	10	Elegant...	The "Elegant Affair Groom's...	Elegant_...

Girl Table

<u>girls_id</u>	prod_id	quantity	prod_name	prod_desc	prod_img
1	12	9	Elegant...	The "Dainty Charm Ring Bear...	Dainty_...

Boys Table

<u>girls_id</u>	prod_id	quantity	prod_name	prod_desc	prod_img
1	12	9	Cherub...	"Cherub Chic Ring Bearer Att...	Cherub_...

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Workitem Table

<u>workitem_id</u>	date
2q4q38294q	2024-03-01

Order Table

<u>order_id</u>	workitem_id	order_id	order_desc	customer_id	order_total
10001	2q4q38294q	2024-03-01	1 Cherub Chic Ring Bearer Attire	1	R1025.00

Return Table

<u>return_id</u>	workitem_id	order_id

Restocking Table

<u>restock_id</u>	workitem_id