

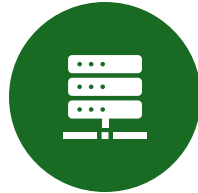
NerdBlock

**By: Ahmed Naveed, Alexzander Saddler,
Graeme Jeffreys, Muhammad Yasir Patel,
Valentine Sah**

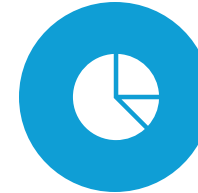
Our Solution to Your Needs...



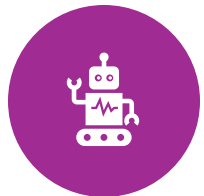
Scalable & Future-Proof –
Designed to grow with NerdBlock, with options to migrate to the cloud.



Effortless Subscription & Inventory Management –
Easily track customers, orders, and stock movement.



Optimized Reporting & Insights – *Generate clear reports on customers, sales, and inventory trends.*



User-Friendly Interface –
Simple, easy-to-use front-end for staff to manage operations efficiently.



Reliable Support & Maintenance – *Ongoing assistance to keep the system running smoothly.*

Our Database

Robust database to manage subscriptions, customer info, inventory management, order logistics, business insights, accessibility.

Data dictionary/3nf table structure

Snippet of our data dictionary
and 3NF table structure:

Data Dictionary		192	Database Development 2				
Table	Attribute Name	Contents	Type	Format	Required	PK or FK	FK Referenced Table
tblEmployees	EmployeeID	Employee's unique identifier	INT	99999	Y	PK	
	StoreID	Store's unique identifier	INT	99999	Y	FK	tbl.Stores
	First Name	Employee's first name	VARCHAR (50)	Xxxxxxx	Y		
	Last Name	Employee's last name	VARCHAR (50)	Xxxxxxx	Y		
	Phone Number	Employee's contact number	VARCHAR (50)	Xxxxxxx	Y		
	Email Address	Employee's email	VARCHAR (100)	Xxxxxxx	Y		
	Date Joined	Employee's joining date	DATE	MM/DD/YYYY	Y		
	IsAdmin	Indicates if the employee is an admin	BOOLEAN	TRUE/FALSE	Y		
	IsStoreOwner	Indicates if the employee owns the store	BOOLEAN	TRUE/FALSE	Y		
	tbl.Reports	ReportID	Report's unique identifier	INT	99999	Y	PK
Report Name		Title of the report	VARCHAR (100)	Xxxxxxx	Y		
Report Description		Brief description of the report	VARCHAR (250)	Xxxxxxx	Y		
Created Date		Date when the report was created	DATE	MM/DD/YYYY	Y		
Created By		Identifier of report creator	VARCHAR (50)	Xxxxxxx	Y	FK	tbl.Employees
Report Scope		Scope of the report	VARCHAR (50)	Xxxxxxx	Y		
Report Format		Format of the report	VARCHAR (50)	Xxxxxxx	Y		
tbl.Inventory	InventoryID	Inventory's unique identifier	INT	99999	Y	PK	
	ProductID	Product identifier	INT	99999	Y	FK	tbl.Products
	Product Name	Name of the product	VARCHAR (100)	Xxxxxxx	Y		
	Quantity	Available quantity of product	INT	99999	Y		
tbl.Stores	StoreID	Store's unique identifier	INT	99999	Y	PK	
	City	City where store is located	VARCHAR (50)	Xxxxxxx	Y		
	Street Address	Street address of store	VARCHAR (100)	Xxxxxxx	Y		
	Postal Code	Store's postal code	VARCHAR (10)	Xxxxxxx	Y		
	Phone Number	Store's contact number	VARCHAR (50)	Xxxxxxx	Y		
tbl.Suppliers	SupplierID	Supplier's unique identifier	INT	99999	Y	PK	
	Name	Supplier's name	VARCHAR (100)	Xxxxxxx	Y		
	Street Address	Supplier's street address	VARCHAR (100)	Xxxxxxx	Y		
	Postal Code	Supplier's postal code	VARCHAR (10)	Xxxxxxx	Y		
	Phone Number	Supplier's phone number	VARCHAR (50)	Xxxxxxx	Y		
tbl.Transfer	Email Address	Supplier's email	VARCHAR (100)	Xxxxxxx	Y		
	TransferID	Transfer's unique identifier	INT	99999	Y	PK	
	Sorting Key	Sorting key for transfer	INT	99999	Y		
	ProductID	Product being transferred	INT	99999	Y	FK	tbl.Products
	StoreID	Store receiving the product	INT	99999	Y	FK	tbl.Stores
	Quantity	Quantity transferred	INT	99999	Y		

Employees								
EmployeeID	StoreID	First Name	Last Name	Phone Number	Email Address	Date Joined	IsAdmin	IsStoreOwner
105664234	101224234	Gerard	Lincoln	12334567890	name@gmail.com	2/12/2025 14:35	FALSE	FALSE
Inventory								
InventoryID	ProductID	Product Name	Quantity					
124414234	123314232	Olives	1/5/1900 0:00					
Stores								
StoreID	City	Street Address	Postal code	Phone Number				
107714234	Ottawa	123 name st	U8TK0E	12334567890				
Suppliers								
SupplierID	Name	Street Address	Postal Code	Phone Number	Email Address			
105664234	Fredreic Landers	123 name st	U8TU6A	12334567890	name@gmail.com			
Transfer								
TransferID	Sorting Key	ProductID	StoreID	Quantity				
100014234	155556078	123314232	107714234	2				
Transfer Report								
TransferReportID	Date	Transfer Sorting Key						
122014234	2/12/2025 19:35	155556078						
Boxes								
BoxID	Sorting Key	ProductID	GenreID	Price				
109014234	119556078	123314232	1554567882.00	\$ 24.00				
Transactions								
TransactionID	Box Sorting Key	SubscriberID	Total Price	Date				
109823234	177556078	123314232	\$ 24.00	2/12/2025 19:35				

Quick Breakdown of the Database



Subscriptions & Customer Profile

Subscriptions

- Customer profiles
- Logged reporting systems
- Subscription information

Customer profile

- Customer info
- Contact info
- Billing payment info
- Other relevant information

Inventory Management, Tracking & Order Logistics

Inventory management and tracking

- Product info
- Batch tracking
- Product and stock movement info

Order logistics

- Order processing info
- Shipping info
- Inventory allocation for orders

Reporting & Business Insights

Reporting & business insights

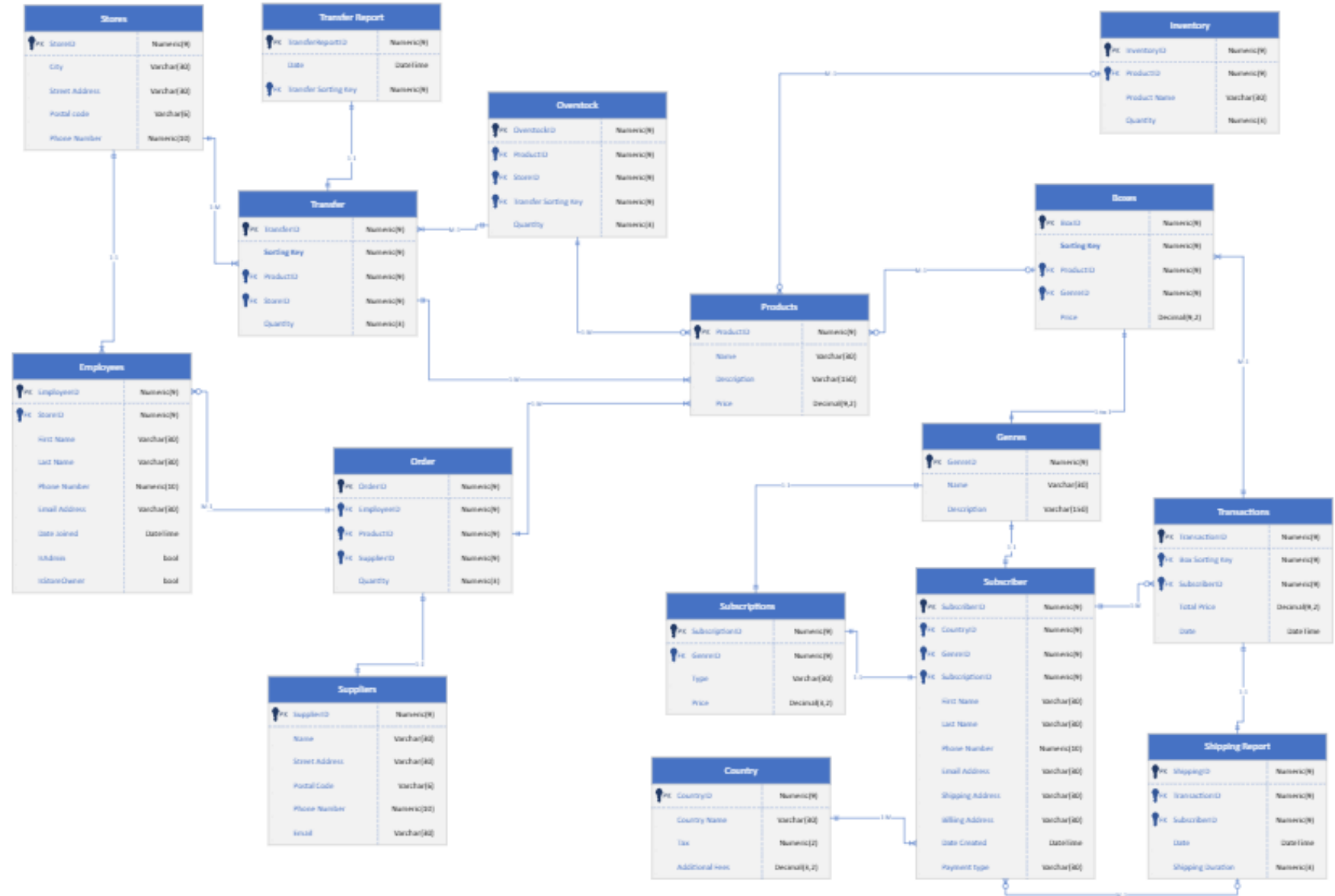
- Customer reports
- Financial reports
- Inventory reports



Database Visual...

Here is a quick visualization of our Database in an Entity Relationship Diagram in 3NF format

3NF ERD



Other Benefits of our Product/Service

- Option to generate metadata
- Scalability options
- Option to transition and migrate to cloud database, or distributed database
- Log system that records past reports (utilizing optimized queries)
- Continued support

Front End & Ease of Use

Front end & report Visual for UI

- Post screenshot of front end reports here. Then go to designer tab>designer> and select a then that works with the rest of the presentation



Thank you for your time.