

# Project report

## **Project Description:**

The problem statement chosen for this DBMS project is to manage and overcome various logistical problems that arise in a warehouse and Transportation business, some of the problems this business which we have tried to overcome are, the inefficient storage management of products or items in a warehouse, we have tackled this problem by dividing warehouse into sectors in which each sector can hold some specific type of products and each product that is procured by our business has a unique id, and each supplier can supply multiple products, but each product can be traced back to a unique supplier i.e each supplier has a unique supplier id.

we created a customer section in which we store all the details of our customers such as their identification details and their delivery address this section also contains the orders of customers, and the payment process that is involved with each order we have tackled the problem of procurement of products from the supplier and delivery of these products to the customers by creating a transportation section which contains various tables that contain the type of vehicles and the machinery that are involved in the procurement and delivery process.

This section also contains the cargo details and the Warehouse details that are involved with the cargo that is used for procurement and delivery process. we created an employee section that contains the details of the employees and various roles that are performed by them for efficient human resource management

## Tables:-

### 1.roles\_:

	ROLE_ID	ROLE_NAME	ROLE_DESC
1	1	Admin	Administrator role
2	2	Manager	Manager role
3	3	Supervisor	Supervisor role
4	4	Employee	Employee role
5	5	Accountant	Accountant role
6	6	Salesperson	Salesperson role
7	7	Engineer	Engineer role
8	8	Analyst	Analyst role
9	9	Consultant	Consultant role
10	10	Support	Support role

### 2.supplier:

	SUPPLIER_ID	SUPPLIER_FNAME	SUPPLIER_LNAME	SUPPLIER_LOC	PRODUCT_ID1	PRODUCT_ID2	PRODUCT_ID3	PHONE_NO1	PHONE_NO2	PHONE_NO3	EMAIL
1	1	John	Doe	New York	1	2	(null)	1234567890	9876543210	(null)	john.doe@example.com
2	2	Alice	Smith	Los Angeles	3	(null)	(null)	2345678901	(null)	(null)	alice.smith@example.com
3	3	Michael	Johnson	Chicago	4	5	(null)	3456789012	8765432109	(null)	michael.johnson@example.com
4	4	Emily	Davis	Houston	6	7	(null)	4567890123	7654321098	(null)	emily.davis@example.com
5	5	David	Brown	San Francisco	8	(null)	(null)	5678901234	(null)	(null)	david.brown@example.com
6	6	Sarah	Wilson	Seattle	9	(null)	(null)	6789012345	(null)	(null)	sarah.wilson@example.com
7	7	Matthew	Thompson	Boston	10	(null)	(null)	7890123456	(null)	(null)	matthew.thompson@example.com
8	8	Emma	Robinson	Miami	9	(null)	(null)	8901234567	(null)	(null)	emma.robinson@example.com
9	9	Daniel	Lee	Dallas	5	(null)	(null)	9012345678	(null)	(null)	daniel.lee@example.com
10	10	Olivia	Hall	Phoenix	4	3	(null)	0123456789	9012345678	(null)	olivia.hall@example.com

### 3.products:

	PRODUCT_ID	SUPPLIER_ID	PRODUCT_NAME	PRODUCT_TYPE	PRODUCT_COST	RATING
1	1	1	Product1	Type1	10.99	4
2	2	2	Product2	Type2	15.99	3
3	3	3	Product3	Type1	12.5	5
4	4	4	Product4	Type3	9.99	4
5	5	5	Product5	Type2	18.75	3
6	6	6	Product6	Type1	14.99	5
7	7	7	Product7	Type3	11.25	4
8	8	8	Product8	Type2	17.5	3
9	9	9	Product9	Type1	9.99	5
10	10	3	Product10	Type3	13.75	4

#### 4.warehouse:

	WAREHOUSE_ID	NUMBER_OF_SECTORS	WAREHOUSE_LOC_CITY	WAREHOUSE_LOC_STATE
1	1	5	City1	State1
2	2	8	City2	State2
3	3	3	City3	State3
4	4	6	City4	State4
5	5	4	City5	State5
6	6	7	City6	State6
7	7	2	City7	State7
8	8	9	City8	State8
9	9	5	City9	State9
10	10	3	City10	State10

#### 5.machine:

	⚡ MACHINE_ID	⚡ WEIGHT	⚡ MACHINE_NAME	
1	1	100	Machine A	
2	2	150	Machine B	
3	3	200	Machine C	
4	4	120	Machine D	
5	5	180	Machine E	
6	6	90	Machine F	
7	7	160	Machine G	
8	8	140	Machine H	
9	9	110	Machine I	
10	10	170	Machine J	

## 6.sector:

	⚡ SECTOR_ID	⚡ SECTOR_LOC	⚡ PRODUCT_TYPE	⚡ PRODUCT_ID1	⚡ PRODUCT_ID2	⚡ PRODUCT_ID3	⚡ WAREHOUSE_ID	
1	1	Loc1	Type1	1	2	3	1	
2	2	Loc2	Type2	4	5	6	1	
3	3	Loc3	Type3	7	8	9	2	
4	4	Loc4	Type4	10	11	12	2	
5	5	Loc5	Type5	13	14	15	3	
6	6	Loc6	Type6	16	17	18	3	
7	7	Loc7	Type7	19	20	21	4	
8	8	Loc8	Type8	22	23	24	4	
9	9	Loc9	Type9	25	26	27	5	
10	10	Loc10	Type10	28	29	30	5	

## 7.cargo:

	⚡ CARGO_ID	⚡ STATUS	⚡ MACHINE_ID	⚡ CARGO_TYPE	⚡ WEIGHT	⚡ VEHICLE_ID	⚡ WAREHOUSE_ID	
1	1	Pending	1	Electronics	100	1	1	
2	2	Delivered	2	Furniture	500	2	2	
3	3	In Transit	3	Clothing	200	3	1	
4	4	Pending	4	Books	50	4	3	
5	5	Delivered	5	Appliances	300	2	2	
6	6	In Transit	6	Toys	150	1	3	
7	7	Delivered	7	Food	75	3	2	
8	8	Pending	8	Electronics	250	4	1	
9	9	In Transit	9	Furniture	400	2	3	
10	10	Delivered	10	Clothing	120	1	2	

## 8.transport:

	VEHICLE_ID	VEHICLE_NAME	MAINTAINACE_COST	ROUTE_ID	SOURCE_ID	DEST_ID	START_DATE	REACH_DATE
1	1	Vehicle1	1000	1	1	2	01-05-23	02-01-22
2	2	Vehicle2	1500	2	2	3	02-05-02	04-06-06
3	3	Vehicle3	1200	3	3	4	02-05-03	04-06-07
4	4	Vehicle4	1800	4	4	5	02-05-04	04-06-08
5	5	Vehicle5	900	5	5	6	02-05-05	04-06-09
6	6	Vehicle6	2000	6	6	7	02-05-06	04-06-10
7	7	Vehicle7	1700	7	7	8	02-05-07	04-06-11
8	8	Vehicle8	1400	8	8	9	02-05-08	04-06-12
9	9	Vehicle9	1100	9	9	10	02-05-09	04-06-13
10	10	Vehicle10	1600	10	10	1	02-05-10	04-06-14

## 9.payment:

	PAYMENT_ID	TOTAL_AMOUNT	PAYMENT_TYPE	DISCOUNT	PAYMENT_DATE
1	1	100	Credit Card	10	06-01-01
2	2	50	Cash	0	06-01-02
3	3	75	Credit Card	5	06-01-03
4	4	200	Cash	0	06-01-04
5	5	150	Debit Card	0	06-01-05
6	6	80	Credit Card	10	06-01-06
7	7	120	Cash	0	06-01-07
8	8	90	Debit Card	0	06-01-08
9	9	60	Credit Card	5	06-01-09
10	10	180	Cash	0	06-01-10

## 10.order\_:

	ORDER_ID	CUSTOMER_ID	CARGO_ID	PAYMENT_ID	PRODUCT_ID1	PRODUCT_ID2	PRODUCT_ID3
1	1	1	1	1	1	(null)	(null)
2	2	2	2	2	2	3	(null)
3	3	3	3	3	4	5	(null)
4	4	4	4	4	6	7	8
5	5	5	5	5	9	(null)	(null)
6	6	1	6	6	10	(null)	(null)
7	7	2	7	7	1	2	3
8	8	3	8	8	4	(null)	(null)
9	9	4	9	9	5	6	(null)
10	10	5	10	10	7	8	9

## 11.department:

	DEPT_ID	DEPT_NAME
1	1	Department1
2	2	Department2
3	3	Department3
4	4	Department4
5	5	Department5
6	6	Department6
7	7	Department7
8	8	Department8
9	9	Department9
10	10	Department10

## 12.employee:

EMP_ID	EXPERIENCE	SECTOR_ID	DEPT_ID	EMP_NAME	EMP_STATE	EMP_CITY	EMP_STREET	SEX	WAREHOUSE_ID	ROLE_ID
1	1	5	1	1 John Doe	California	Los Angeles	123 Main St	Male	1	1
2	2	3	2	2 Jane Smith	New York	New York City	456 Elm St	Female	3	2
3	3	8	3	1 Michael Johnson	Texas	Houston	789 Oak St	Male	4	3
4	4	6	2	3 Emily Davis	Florida	Miami	321 Maple St	Female	2	2
5	5	4	1	2 Robert Wilson	California	San Francisco	567 Pine St	Male	7	7
6	6	2	3	1 Jessica Brown	Texas	Austin	890 Walnut St	Female	6	3
7	7	7	2	3 David Lee	Florida	Orlando	432 Cedar St	Male	7	2
8	8	4	1	2 Sarah Thompson	California	San Diego	876 Birch St	Female	6	7
9	9	3	3	1 Christopher Clark	Texas	Dallas	1098 Oak St	Male	8	3
10	10	5	2	3 Jennifer Hall	Florida	Tampa	543 Maple St	Female	10	2

## 13.login:

	LOGIN_ID	USERNAME	PASSWORD_	CUSTOMER_ID	EMP_ID
1	login1	user1	pass1	1	(null)
2	login2	user2	pass2	2	(null)
3	login3	user3	pass3	3	(null)
4	login4	user4	pass4	4	(null)
5	login5	user5	pass5	5	(null)
6	login6	user6	pass6	(null)	1
7	login7	user7	pass7	(null)	2
8	login8	user8	pass8	(null)	3
9	login9	user9	pass9	(null)	4
10	login10	user10	pass10	(null)	5

## 14.customer:

	CUSTOMER_ID	CUSTOMER_NAME	CUSTOMER_EMAIL	CUSTOMER_PHONE	CUSTOMER_STATE	CUSTOMER_CITY	CUSTOMER_STREET
1	1	John Doe	john@example.com	1234567890	California	Los Angeles	Main Street
2	2	Jane Smith	jane@example.com	9876543210	New York	New York City	Broadway
3	3	Mike Johnson	mike@example.com	4567891230	Texas	Houston	Oak Street
4	4	Emily Davis	emily@example.com	7891234560	Florida	Miami	Palm Avenue
5	5	Robert Wilson	robert@example.com	3216549870	Illinois	Chicago	Park Road
6	6	Sarah Thompson	sarah@example.com	6543217890	Washington	Seattle	Pine Street
7	7	David Anderson	david@example.com	9876541230	Colorado	Denver	Mountain View
8	8	Amy Brown	amy@example.com	4567893210	Arizona	Phoenix	Sunset Boulevard
9	9	Michael Lee	michael@example.com	7891236540	Massachusetts	Boston	Maple Avenue
10	10	Olivia Taylor	olivia@example.com	3216547890	Nevada	Las Vegas	Sapphire Street