

## **DBMS Project**

### **PROBLEM:**

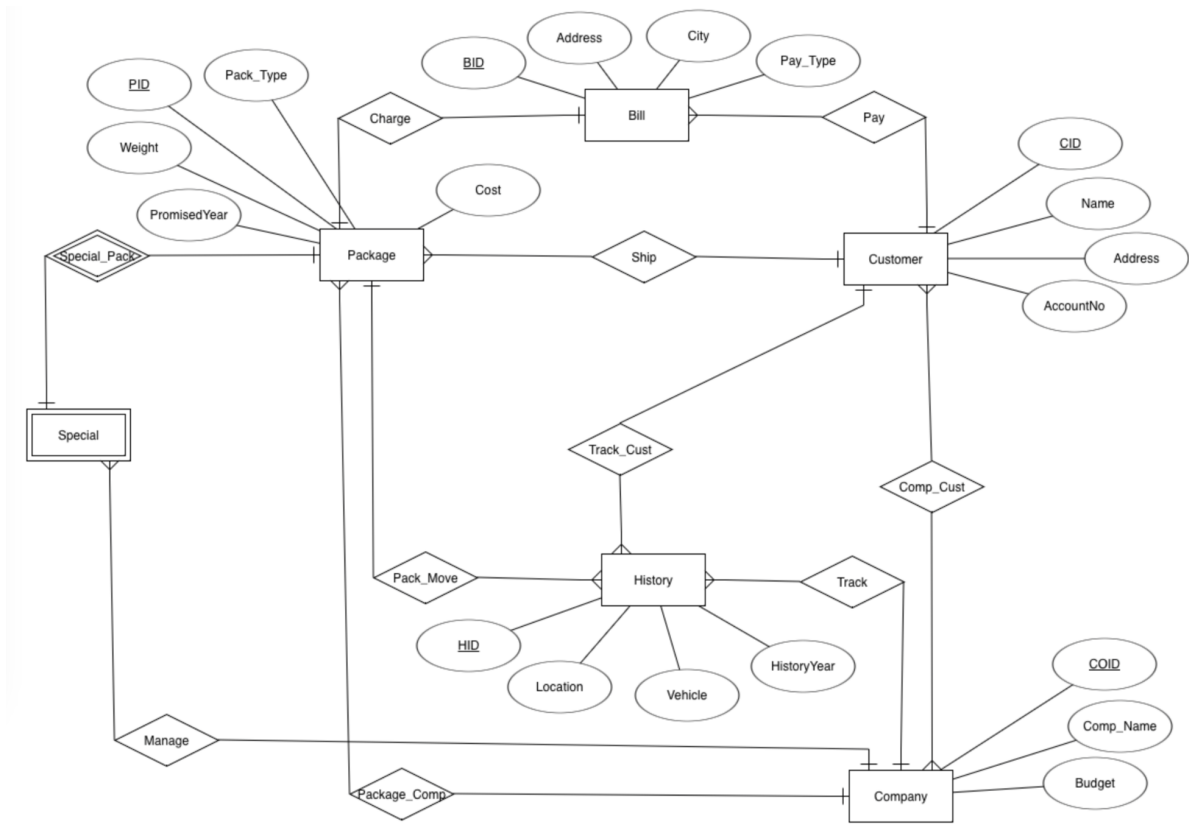
#### **Package Delivery System**

*Our Aim is to create a database system to track packages through their journey and manage customer information, company details, and related costs. The system needs to be efficient, scalable, and user-friendly.*

### **ASSUMPTIONS:**

- *Each package can be shipped by one company and belongs to one customer.*
- *Each customer can have multiple packages shipped to them.*
- *Each company can ship multiple packages to multiple customers.*
- *Each package can be tracked multiple times.*
- *Each tracking event has a location, vehicle, and date.*
- *Each package has a history of costs associated with it.*

ER DIAGRAM:



RELATIONS:

NAME: AKSSHAT GOVIND  
BRANCH: CS 5A

BILL

i	BID	Address	City	Pay_Type
	61222	Martin St.	Francisco	Cash
	121023	Sunset Ave.	Los Angeles	Credit Card
	52824	Green Blvd.	New York	Debit Card
	110425	Ocean View Dr.	Miami	Cash on Delivery
	30126	Park Lane	Chicago	PayPal
	82527	Cherry St.	Seattle	Gift Card
	120728	Main St.	Washington D.C.	Bank Transfer
	91329	Forest Ave.	Boston	Check
	51930	Maple Blvd.	Atlanta	Mobile Wallet
	102331	Beach Rd.	Dallas	Cash

PACKAGE

i	PID	Weight	Cost	Pack_Type	Promised_Year
	667001	12	450	Secondary	2026
	801202	15	380	Standard	2024
	135903	8	275	Basic	2025
	724604	20	590	Express	2023
	531805	10	350	Overnight	2023
	908306	18	520	International	2025
	472107	7	220	Gift	2024
	259608	11	395	Large	2023
	37409	9	300	Small	2026
	615810	14	420	Special	2024

CUSTOMER

NAME: AKSSHAT GOVIND  
BRANCH: CS 5A

CID	Name	Address	Account_No	Pack_Type
444801	Aksshat	Beverly Hills	2100290120025	Express
829302	Anya	Manhattan	3200540839045	Basic
567703	David	Chicago	8700120940123	Overnight
314504	Emma	Miami	4500980321094	Large
248005	Liam	San Francisco	7800310456021	Small
91206	Olivia	Los Angeles	5900650748032	Gift
123407	Noah	Seattle	6300820579014	Special
987608	Sophia	Washington D.C.	4100230857064	Secondary
654309	William	Boston	2700460983015	Standard
543210	Charlotte	Atlanta	1500790432086	Express

COMPANY

COID	Comp_Name	Address	City	Budget
2301	Kanters	Park Lane	Boston	800000
5823	Horizon Tech	Main St.	San Francisco	1200000
4091	Green Leaf Solutions	Oakwood Blvd.	Los Angeles	750000
7162	Global Motors	Industrial Ave.	Chicago	2500000
3905	Sun Valley Apparel	Sunset Blvd.	Seattle	400000
1284	Coastal Realty	Ocean View Dr.	Miami	1000000
6532	Tech Solutions Inc.	Silicon Valley Road	Palo Alto	900000
2341	Organic Foods	Greenfield St.	Portland	600000
8710	Travel & Tours	Airport Blvd.	Denver	500000
913	Books & Co.	Library Plaza	New York	300000

SHIP

NAME: AKSSHAT GOVIND  
BRANCH: CS 5A

PID	COID	CID	Date_Shipped
667001	5823	444801	2023-10-26
801202	7162	829302	2023-11-01
135903	3905	567703	2023-11-07
724604	2301	314504	2023-10-20
531805	1284	248005	2023-10-25
908306	8710	91206	2023-11-08
472107	6532	123407	2023-10-15
259608	4091	987608	2023-10-30
37409	2341	654309	2023-11-03
615810	913	543210	2023-10-27

TRACK

PID	CID	Location	Vehicle	Date_Tracked
667001	444801	Los Angeles Hub	Truck	2023-12-01
801202	829302	New York Sorting Center	Plane	2023-12-02
135903	567703	Chicago Delivery Center	Van	2023-12-03
724604	314504	Miami International Airport	Cargo Plane	2023-12-04
531805	248005	San Francisco Post Office	Truck	2023-12-05
908306	91206	International Transit	Ship	2023-12-06
472107	123407	Seattle Delivery Hub	Bike	2023-12-07
259608	987608	Washington D.C. Wareho...	Truck	2023-12-08
37409	654309	Boston Distribution Center	Van	2023-12-09
615810	543210	Atlanta Sorting Facility	Plane	2023-12-10
135903	829302	New York Delivery Center	Truck	2023-12-11
908306	314504	Miami Port	Ship	2023-12-12
724604	123407	Seattle Customer Address	Bike	2023-12-13
37409	91206	Los Angeles Customer Ad...	Van	2023-12-14
615810	567703	Chicago Customer Address	Truck	2023-12-15

HISTORY

NAME: AKSSHAT GOVIND

BRANCH: CS 5A

PID	HID	History_Year	Cost
667001	1	2023	50
801202	2	2023	45
135903	3	2023	35
724604	4	2023	60
531805	5	2023	55
908306	6	2023	100
472107	7	2023	25
259608	8	2023	40
37409	9	2023	30
615810	10	2023	45
135903	11	2023	25
908306	12	2023	75
724604	13	2023	80
37409	14	2023	20
615810	15	2023	35

GITHUB:

[https://github.com/aksshatgovind/Package\\_Delivery\\_Database](https://github.com/aksshatgovind/Package_Delivery_Database)