**TEAM NAME :**

**TEAM MEMBERS :** Sujith Vishal V

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**TITLE OF PROJECT:** SUPPLY CHAIN MANAGEMENT

**PROBLEM STATEMENT:**

There are often instances in real life where retailers need to open warehouses in multiple locations to meet faster and easier delivery of products. To open a warehouse of their own has its own logistics and expense issue. So, retailers go for 3rd party companies who offer warehouses of their own. This leads to stocking up of retailers’ products in multiple locations at cheaper rates. These companies also provide transportation of ordered products, as some products might not be available at all locations and need to be transported only when needed. If the retailers had their own warehouses and had to transport some products from one location to another, there might arise a situation where the stocks are less and the space that could be accommodated by the transport vehicle is empty at large. This leads to waste of fuel and time. 3rd party companies could combine the stocks of all the contracted retailers, and this leads to efficient use of fuel and time. The 3rd party companies need to have a dedicated supply chain management system to avoid discrepancies among the various retailers and their products and also maximize their transport path efficiency as required.

**ABSTRACT OF SOLUTION:**

We provide a supply chain management system tool in the form of website where the company could manage their warehouses and the stocks in their warehouses. The retailers could place orders when they want their stocks to move from one location to another, at which the status is ‘PENDING’. This is achieved by efficiently grouping all those orders and the admin updates the status as ‘ACCEPTED’ when a transport path is assigned. The status of order is updated whenever it reaches the next hub until the destination at which the status is updated as ‘DELIVERED’.

**TABLES USED:**

1. User (

user\_id primary key,

email unique not null,

password not null,

company\_name not null,

location not null

)

1. Admin (

admin\_id primary key,

name not null,

password not null,

warehouse\_id foreign key references warehouse(warehouse\_id),

)

1. Warehouse (

warehouse\_id primary key,

location not null

)

1. Order (

order\_id primary key,

order\_date not null,

user\_id foreign key references user(user\_id),

source foreign key references warehouse(warehouse\_id),

destination foreign key references warehouse(warehouse\_id),

current\_hub foreign key references warehouse(warehouse\_id),

vehicle\_id foreign key references vehicle(vehicle\_id),

weight not null,

products not null,

amount not null,

status not null,

expected\_date

)

1. Price\_plan (

from\_warehouse foreign key references warehouse(warehouse\_id),

to\_warehouse foreign key references warehouse(warehouse\_id),

price\_per\_kg not null,

price\_plan\_name not null

)

1. Vehicle (

vehicle\_id primary key,

total\_space not null,

allocated\_space not null,

emp\_id foreign key references employee(emp\_id),

curr\_location foreign key references warehouse(warehouse\_id),

from\_location foreign key references warehouse(warehouse\_id),

to\_location foreign key references warehouse(warehouse\_id)

)

1. Employee (

emp\_id primary key,

name not null,

designation not null,

phone\_no not null

)

**ER DIAGRAM:**

