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Robot Group 3

ERD & Reports

Final Project

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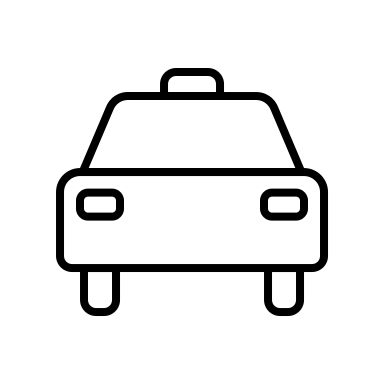
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# Entity Relationship Diagram

## HAB Taxi Services

A diagram of a workflow

Description automatically generated

## Explanation for proposed entities

To enhance the operational efficiency and overall management of HAB Taxi Services, several new features have been integrated into the original ER model. These additions are designed to provide comprehensive tracking and oversight of key business components, ensuring that every aspect of the taxi service is carefully monitored. The enhancements include detailed records of company vehicles, maintenance activities performed on them, and a thorough breakdown of expenses. By incorporating these elements, the extended model offers a robust framework for managing the taxi business, supporting effective financial oversight, and maintaining high standards of operational readiness. Below is a detailed description of each of the newly added features.

**Car Table**

|  |  |
| --- | --- |
| A diagram of a workflow  Description automatically generated | Records detailed information about each vehicle owned by HAB Taxi ServicesConnected to the Rentals table, allowing the system to track which car has been rented by a driver |

**Maintenance Table**

|  |  |
| --- | --- |
| A diagram of a workflow  Description automatically generated | * Maintains comprehensive record of each vehicle’s maintenance history * Essential for both operational efficiency and safety compliance |

**Expense Line Item Table**

|  |  |
| --- | --- |
| A diagram of a workflow  Description automatically generated | * Linked to the Expenses table, enabling precise tracking fund allocation across different business activities * Associated with a specific supply item or maintenance work through the item\_ID or maint\_ID (as foreign key) |

**Integration with Existing Tables**

* The **Car** and **Maintenance** tables work together to manage the upkeep and operational status of the company vehicles. The Maintenance table directly links maintenance activities to the relevant vehicles through the Car\_ID.
* Similarly, the **Expense Line Item** and **Expenses** tables work together to provide a detailed account of costs related to business-related expenses, offering a detailed view of the company's financial outflows.

# Reports

12345678901234567890123456789012345

HAB Taxi Services

## Receipt for Payment

Receipt No: xxxxxx

Receipt Date: yyyy-mm-dd

Reason for Receipt: xxxxxxxxxxxxxx

Employee Details:

Driver Number: xxxxxxx

Name and Address:

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

xxxxxxxxxxxxxxxxx, xx, xxxxxxx

(xxx)xxx-xxxx (phone)

xxxxxxxxxxxxx (email)

Payment Details:

Payment Date: yyyy-mm-dd

Payment Amount: $###.##

Balance Due: $###.##

Payment Method: xxxxxxxxxxxx

**Note**: New BalDue   
= abs(Prev BalDue - Payment Amt(payment))

12345678901234567890123456789012345123456

HAB Taxi Services

## Receipt for Car Rental

Receipt No: xxxxxx

Receipt Date: yyyy-mm-dd

Reason for Receipt: xxxxxxxxxxxxxxxxx

Employee Details:

Driver Number: xxxxxxx

Name and Address:

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

xxxxxxxxxxxxxxxxx, xx, xxxxxxx

(xxx)xxx-xxxx (phone)

xxxxxxxxxxxxx (email)

Car Rental Details:

Car Number: xx

Rental Type: xxxxxxxx

Start Date: yyyy-mm-dd

End Date: yyyy-mm-dd

Rental Cost: $###.##

HST: $###.##

Total: $###.##

Balance Due: $###.##

Payment Method: xxxxxxxxxxxx

**Note:** New BalDue = Previous Bal Due + Total Amt (rental)

1 2 3 4 5 6 7 8 9 1

0123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456

HAB Taxi Services

## Profit Listing Report

Enter Start Date : yyyy-mm-dd

Enter End Date : yyyy-mm-dd

Transaction Transaction Description Driver Transaction HST Total

ID Date Number Amount

==================================================================================================

xxxxxx yyyy-mm-dd xxxxxxxxxxxxxxxxxxxx xxxxx $#####.## $###.## $#####.##

:

:

xxxxxx yyyy-mm-dd xxxxxxxxxxxxxxxxxxxx xxxxx $#####.## $###.## $#####.##

==================================================================================================

**Total Revenues:** $#####.##

1 2 3 4 5 6 7 8 9 1

01234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567

HAB Taxi Services

## Expenses Listing Report

Enter Start Date : yyyy-mm-dd

Enter End Date : yyyy-mm-dd

Invoice Invoice Description Employee Subtotal HST Total

No Date Number

==================================================================================================

xxxxxx yyyy-mm-dd. xxxxxxxxxxxxxxxxxxxxxxx xxxx $#####.## $####.## $#####.##

:

:

xxxxxx yyyy-mm-dd xxxxxxxxxxxxxxxxxxxxxxx xxxx $#####.## $####.## $#####.##

==================================================================================================

**Total Expenses:** $#####.##

**Profit (Loss): $Total Revenues - $Total Expenses**

1 2 3 4 5 6 7 8 9

012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789

HAB Taxi Services

## Driver Financial Listing Report

Driver Details:

Driver Number : xxxx

Driver Name :xxxxxxxxxxxxxx

Enter Start Date : yyyy-mm-dd

Enter End Date : yyyy-mm-dd

Transaction Transaction Description Transaction HST Total

ID Date Amount

===========================================================================================

Xxxxxx. yyyy-mm-dd xxxxxxxxxxxxxxxxxxxxxx $#####.## $#####.## $#####.##

:

:

xxxxxx yyyy-mm-dd xxxxxxxxxxxxxxxxxxxxxx $#####.## $#####.## $#####.##

===========================================================================================

**Total Revenues:** $#######.##