**1 ) MAPPING REGULAR ENTITIES**

**OUTLET**

|  |  |  |  |
| --- | --- | --- | --- |
| **Outlet ID** | **Oulet location** | **Outlet name** | **Phno** |

**RESERVATION**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Reserve id** | **Reservation date** | **Pickup date** | **Expected return date** | **advance** |

**EMPLOYEE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Id** | **Name** | **salary** | **Mobile no** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Cust\_id** | **address** | **Mail id** | **license** |

**CUSTOMER**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Plate number** | **model** | **A/C** | **Insurance expiry Date** | **Insurance cost** | **Num seats** |

**VEHICLE**

**Discount**

|  |  |  |
| --- | --- | --- |
| **Promo id** | **start** | **end** |

**2) Mapping weak entity types**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Reservation id** | **Bill id** | **Taken date** | **Return date** | **Tax\_amt** | **total** | **Refund** |

**Rent**

**3) 1:1 relationship**

**Selects , takenby , pays**

1. **Reservation Selects(number of seats) Vehicle**

**RESERVATION**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Reserve id** | **Reservation date** | **Pickup date** | **Expected return date** | **advance** | **Num of seats** | ***pid*** |

**pid – fk to vehicle**

1. **Vehicle Takenby Rental**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***Reservation id*** | **Bill id** | **Taken date** | **Return date** | **Tax\_amt** | **total** | **Refund** | ***PID*** |

**RENT**

1. **Customer pays rental**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Reservation id*** | **Bill id** | **Taken date** | **Return date** | **Tax\_amt** | **total** | **Refund** | ***PID*** | ***CID*** |

**RENT**

**4) 1:N**

1. **Customer makes upto 3 reservations only , employee\_works\_at**

**RESERVATION**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Reserve id** | **Reservation date** | **Pickup date** | **Expected return date** | **advance** | **Num of seats** | ***pid*** | ***cid*** |

1. **Reservation made at Oultet ( so employee can view it in his view and approve the rent if customer shows up )**

**RESERVATION**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Reserve id** | **Reservation date** | **Pickup date** | **Expected return date** | **advance** | **Num of seats** | ***pid*** | ***cid*** | ***Outlet\_id*** |

1. **Employee registers vehicle ( in case the of insurance expiry date passed) that employee must take care of paying insurance( using his ui to maintain the cars he registered)**

**// maybe create page to pay insurance,etc**

**VEHICLE**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Plate number** | **model** | **A/C** | **Insurance expiry Date** | **Insurance cost** | **Num seats** | ***Emp\_id*** |

1. **Employee approvesRent of a reservation   
    ( in case when customer shows up on expected pickup date, or else see that taken date has passed and closes rental with refund of a percentage of advance taken)**

**RESERVATION**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Reservation id*** | **Bill id** | **Taken date** | **Return date** | **Tax\_amt** | **total** | **Refund** | ***PID*** | ***CID*** | ***\*approves\**** | ***EID*** |

1. **Outlet has vehicles**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Plate number** | **model** | **A/C** | **Num seats** | ***Emp\_id*** | ***Outlet id*** |

**VEHICLE**

1. **Employee works at outlet**

**EMPLOYEE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Id** | **Name** | **salary** | **Mobile no** | ***Outled\_id*** |

**5) M:N**

1. Rent eligible for discount code?

|  |  |  |
| --- | --- | --- |
| ***Disc\_id*** | ***Bill\_id*** | **\*deduction** |

**GotDisc**

**6) Multivalued attribute**

**Outlet\_contact**

|  |  |  |
| --- | --- | --- |
| ***Outlet\_Id*** | ***mail*** | ***Ph no*** |

**FINAL RELATIONAL MAPPING:**