DBMS Lab Assignment

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**TOPIC ASSIGNED: INSURANCE COMPANY**

**Important Functions of Insurance Company:**

1. An Insurance company have multiple types of insurances like Life Insurance, Car Insurance, etc.
2. An (1) Insurance company have multiple (i.e. N) policies.
3. A (1) policy has (1) reimbursement payment (Insurance Company Pays).
4. A (1) policy can have multiple (N) Policy Holders.
5. A (1) customer can have multiple (N) Policies registered in their name.
6. A (1) customer have an (1) Agent.
7. An (1) agent have multiple (N) customers.
8. A (1) customer lives at a (1) particular address.
9. A (1) customer meets with (N) accidents.
10. An (1) agent works at a (1) particular location.

**Entities and its Attributes:**

* Insurance: Insurance Type, Insurance ID
* Policy: Policy Number, Issue Date, Term Cost, Amount Coverage, Policy Type, (Insurance ID)
* Payment: Transaction ID, Date of Payment, (Report ID)
* Customer: Customer ID, First Name, Last Name, Aadhar Number, Date of Birth, Driving License Number, Contact Details, (Pincode), (Agent ID), (Policy Number)
* Address: State, City, Pincode
* Agent: Agent ID, First Name, Last Name, User Name, Date of Birth, Aadhar Number, Contact Details, (Pincode)
* Accident: Date, Report ID, Police Report Document, Damage Cost, Fault, (Customer ID)

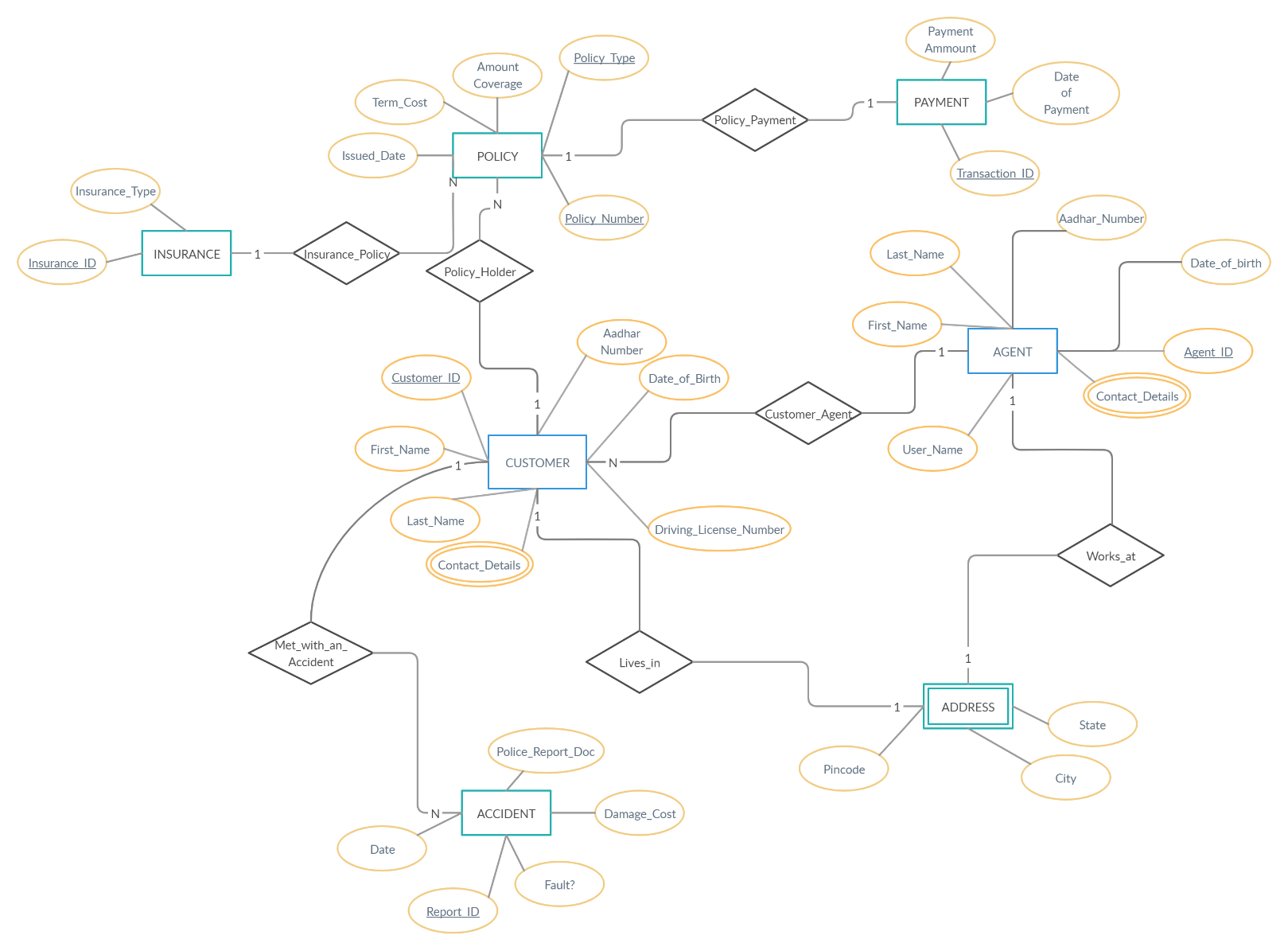
Note: Attributes inside Parantheses are Foreign Keys

**Relational Database Schema:**

* **INSURANCE:** (Insurance\_Type: *STRING, NOT NULL, FOREIGN KEY*; Insurance\_ID: *INTEGER, PRIMARY KEY, AUTO INCREMENT*)
* **POLICY:** (Policy\_Number: *INTEGER, PRIMARY KEY, AUTO INCREMENT*; Issue\_Date: *DATE, NOT NULL*; Term\_Cost: *FLOAT, NOT NULL*; Amount\_Coverage: *FLOAT, NOT NULL*; Policy\_Type: *STRING, NOT NULL;* Insurance\_ID: *INTEGER, FOREIGN KEY*)
* **PAYMENT:** (Transaction\_ID: *INTEGER, PRIMARY KEY;* Date\_of\_Payment: *DATE, NOT NULL;* Payment\_Amount: *FLOAT, NOT NULL;* Report\_ID: *INTEGER, FOREIGN KEY*)
* **CUSTOMER:** (Customer\_ID: *INTEGER, PRIMARY KEY, AUTO INCREMENT*; First\_Name: *STRING, NOT NULL*; Last\_Name: *STRING, NOT NULL*; Aadhar\_Number: *STRING, UNIQUE, NOT NULL*; Date\_of\_Birth: *DATE, NOT NULL*; Driving\_License\_Number: *STRING, NOT NULL*; Contact\_Details: *STRING, MULTIPLE VALUES, NOT NULL;* Pincode: *INTEGER, FOREIGN KEY;* Agent\_ID: *INTEGER, FOREIGN KEY*; Policy\_Number: *INTEGER, FOREIGN KEY*)
* **ADDRESS:** (State: *STRING, NOT NULL*; City: *STRING, NOT NULL*; Pincode: *INTEGER, PRIMARY KEY*)
* **AGENT:** (Agent\_ID: *INTEGER, PRIMARY KEY, AUTO INCREMENT*; First\_Name: *STRING, NOT NULL*; Last\_Name: *STRING, NOT NULL*; User\_Name: *STRING, NOT NULL, UNIQUE*; Aadhar\_Number: *STRING, UNIQUE, NOT NULL*; Date\_of\_Birth: *DATE, NOT NULL*; Contact\_Details: *STRING, MULTIPLE VALUES, NOT NULL;* Pincode: *INTEGER, FOREIGN KEY*)
* **ACCIDENT:** (Date: *DATE, NOT NULL*; Report\_ID: *INTEGER, PRIMARY KEY, AUTO\_INCREMENT*; Police\_Report\_Doc: *IMAGE, NOT NULL*; Damage\_Cost: *FLOAT, NOT NULL*; Fault: *BOOLEAN, NOT NULL;* Customer\_ID: *INTEGER, FOREIGN KEY*)

Note: BOOLEAN ‘0’ is for when Policy Holder is at fault in the accident, BOOLEAN ‘1’ is for when Policy Holder can claim insurance and not at fault in accident.

**Entity-Relationship Diagram**

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**Link:** <https://github.com/akshayjain3450/DBMSProject>