18CSC303J/ Compiler Design

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Exp-5: CONSTRUCT AN ER-DIAGRAM FOR A PARTICULAR SCENARIO

Aim:- To draw an ER-diagram for a Restaurant Aggregator Website (e.g. Zomato, swiggy) and Car Insurance Company.

Tool used: Draw.io

Procedure:

A workflow created to facilitate the creation of the diagram for Restaurant Aggregator.

1. Mention all the entities involved - Restaurants, Items (menu Items for all the restaurants), Customers, Reviews (by customers for different restaurants), Transaction. Represent them as rectangles in the diagram.

2. For each entity, all its attributes are drawn inside an ellipse and a primary key is represented as underlined text inside an ellipse.

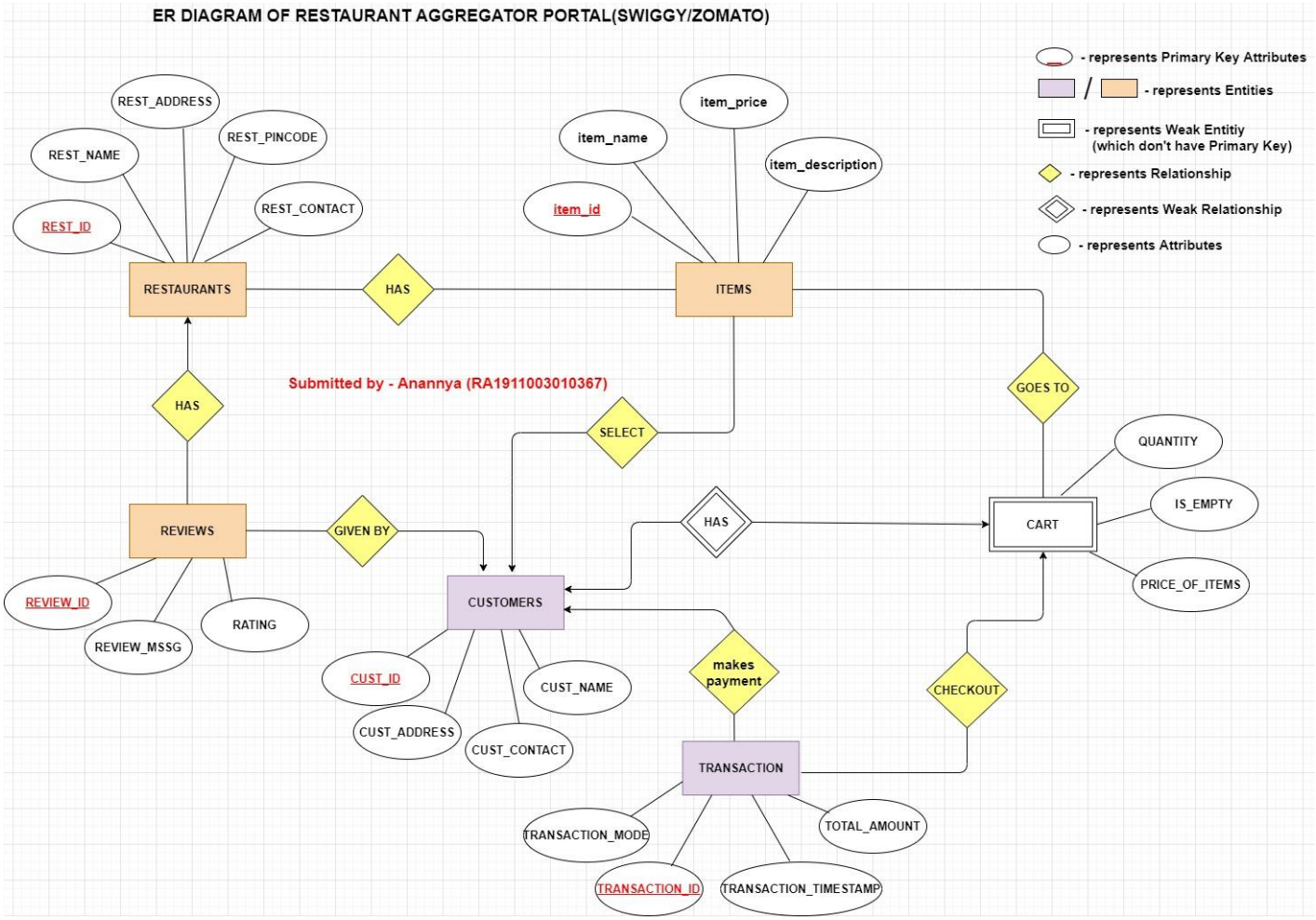
3. All the Relationships drawn are as follows:
   - Each restaurant has many menu items and each menu item might belong to many restaurants and hence many to many cardinality.
   - Each restaurant has many reviews and each review belongs to one restaurant only hence it's one to many relationship.
   - One menu item can be selected by many customers and one customer can select more than one menu items hence it's many to many cardinality.
   - Each customer has a single cart and each cart belongs to a single customer hence it's one to one relationship.
   - From one cart, multiple transactions are possible but a given transaction belongs to an individual cart hence it's one to many transactions.

4. Cart is a weak entity as it's unique for each individual so we don't need to assign a primary key to it.

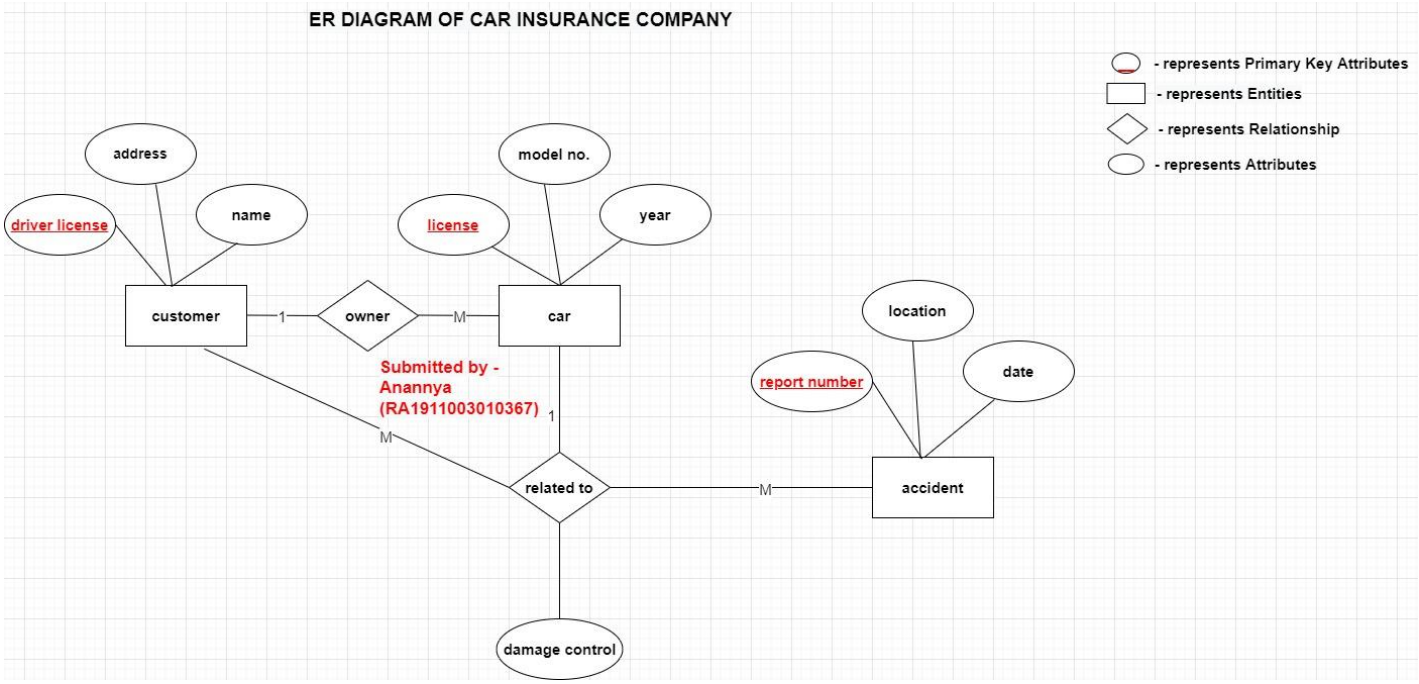
➢ Same procedure for making the diagram of Car Insurance

Output:

- **ER Diagram of Restaurant Aggregator Portal**



- **ER Diagram of Car Insurance**



Result: Hence the ER diagram for the Restaurant Aggregator and Car Insurance is being constructed using the above-mentioned tool draw.io