Diagram

Description automatically generatedDiagram, schematic

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| Domain Type Name | Type Definition | Reason Introduced | Example |
| Description | VARCHAR(50) | For attributes which are character based descriptions | type\_desc in entity X |
| Amount | NUMBER(7,2) | For attributes which represent monetary amounts | x\_amt in entity X |
| Time | TIMESTAMP WITH LOCAL ZONE | Date and time attributes which require a very clearly defined time element | date occur in entity X |

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| Constraint type | Name given | Reason for introducing it |
| NOT NULL | Name not null | The names of the customers could not be null on the table customers. |
| UNIQUE | Address unique | The address must be unique in the table competitors. |
| ORDER BY | Order data by | Ordered data by custName in order so data is easier to read |
| GROUP BY | Group data by | statement to organize similar data into groups |
| PRIMARY KEY | The PRIMARY KEY constraint uniquely identifies each record in a table. | Staff need to be identified uniquely so staffID was made the primary key |
| FOREIGN KEY | The FOREIGN KEY constraint is used to prevent actions that would destroy links between tables | RestID is foreign key in the table Managers as it is Primary key in the table restaurant and they both contain restID |

MAJOR DECISIONS

I decided to create a table for restaurants, tables, customers, staff, booking Receipts, customer guests and Managers. I created a unique primary Key for each table.

I added a foreign key in the table Manager that connected it to the restaurant table as each restaurant needs a manager, but a manager cannot manage multiple restaurants, due to this I implemented the one-to-one relationship between them.

I also added a foreign key in the table booking receipts that connected it to the customer and staff table as each customer can have one staff member, but a staff member could have multiple customers. Because of this I implemented the one-to-many relationship between them.

I also added a foreign key into the Customer guest table. I used the foreign key bookingID from the booking receipts table to connect them.