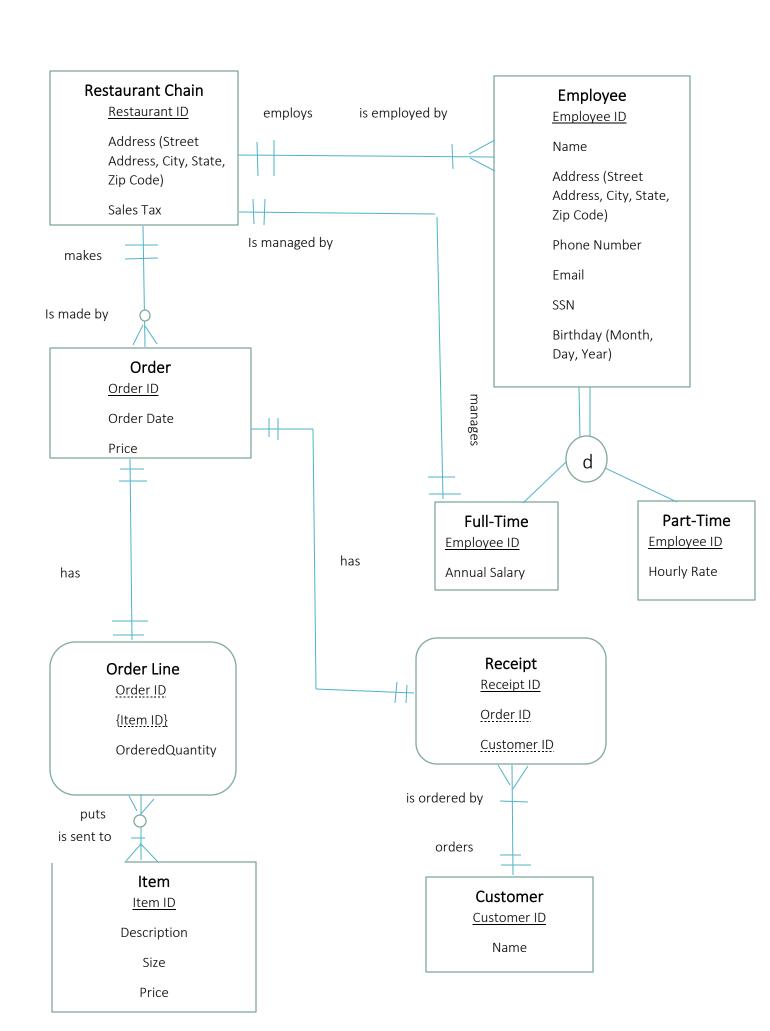
McRonald's

For this project, I will make a database for a fake chain restaurant called McRonald's. In this business, there will be locations all across the US. If this were a real database, I would not have every single order in the same database, rather every chain restaurant location would have their own local database. For the sake of demonstration, I will have every order for each location in the same database. We can imagine that this database is linked to a mobile app that sends orders online to the restaurant location. Customers will be able to order from wherever they are. Customers will only need to provide their name. Credit card numbers are not stored for this sample database, so every order is assumed to be paid for. At each restaurant, there will be a manager to manage it as well as part-time and full-time employees working there. The restaurant location will therefore have a foreign key for a full-time employee to manage it. Each employee has a wage. Part-time employees have an hourly wage, while fulltime employees have an annual salary. The part-time and full-time employees, therefore, will follow the disjoint rule. As for the menu, there will be only a few items on the menu to order. There is a burger, fries, and a drink. Each item varies in size from small, medium, and large. The attribute for size will be optional because a burger will not have different sizes. The price of an item will differ based on the size. For an order, sales tax will be calculated with the price based on the restaurant location. Customers are allowed to have multiple orders, however, only one customer name is assigned to each order for simplicity. A detail left out is that the attribute address will be a composite attribute that has details to store street name, city, state, and postal code.

- McRonald's has many restaurant locations across the US
- Each restaurant has a location ID, address, and sales tax. Each restaurant employs several employees. Each employee has an employee ID, name, address, phone number, email address, SSN, birthdate
- In McRonald's, an employee can be either a part-time employee or full-time employee. A part-time has hourly rate. A full-time employee has an annual salary
- For each restaurant location, one full-time employee is assigned to manage each restaurant called a manager
- Each customer has a customer ID and a name
- Every order a customer makes has an order ID, order date, and a sale price.
- An order can only be made at one restaurant location, but a restaurant location can have multiple orders
- There can only be one customer name under an order, but a customer can have multiple orders
- Each item on the menu has an item ID, description, size, and price



Restaurant Chain

RestaurantID	Address	City	State	ZipCode	SalesTax	ManagerID
(INTEGER)	(VARCHAR)	(VARCHAR)	(CHAR)	(VARCHAR)	(DECIMAL)	(INTEGER)

Employee

<u>EmployeeID</u>	Name	Address	City	State	ZipCode	Phone	Email	SSN	Birthday
(INTEGER)	(VARCHAR)	(VARCHAR)	(VARCHAR)	(CHAR)	(VARCHAR)	(VARCHAR)	(VARCHAR)	(VARCHAR)	(DATE)

EmployeeType	RestaurantID
(VARCHAR)	(INTEGER)

Part-Time

<u>EmployeeID</u>	HourlyRate
(INTEGER)	(DECIMAL)

Full-Time

<u>EmployeeID</u>	AnnualSalary
(INTEGER)	(DECIMAL)

Customer

CustomerID	Name
(INTEGER)	(VARCHAR)

Order

<u>OrderID</u>	OrderDate	SalePrice	RestaurantID
(INTEGER)	(DATETIME)	(DECIMAL)	(INTEGER)

Receipt

<u>OrderID</u>	<u>CustomerID</u>
(INTEGER)	(INTEGER)

Item

<u>ItemID</u>	Description	Size	Price
(INTEGER)	(VARCHAR)	(VARCHAR)	(DECIMAL)

OrderLine

<u>OrderID</u>	<u>ItemID</u>	OrderedQuantity
(INTEGER)	(INTEGER)	(INTEGER)