CSCI - GA 2433 Project 1 Report
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In the Account section, the Account entity has attributes location, location address(multi valued attribute), CompanyCode. Combining CompanyCode and location address, we can uniquely identify each table record. Each Account may have multiple AccountMember, so there is a 1:N relationship between Account and AccountMemer. An account may have multiple billing addresses, at the same time, a billing address may correspond to several companies. The billing address information is stored in the BillingAccount entity. So Account and BillingAccount have a M:N relationship. Account and AccountAdmin also have a M:N relationship. An administrator can supervise multiple accounts, and an account can be supervised by several administrators. Any company listed in Account can have multiple companies as its 'master', and a company can have multiple companies as their members and fellow company participates. Therefore, the Account entity has a many to many relationship with itself. Also, multiple Account can share one AccountAlias, hence AccountAlias: Account = 1:N. Lastly, each Account can be transacted by multiple ManagerContract, while each ManagerContract can service many Account, hence Account:ManagerContract = M:N.

In the Associate section, Associate is uniquely defined by their Name (FirstName, MiddleInitial, LastName),and can be divided into Associate Broker and Associate Recruiter. Each Associate has multiple writing numbers, and can use either to write to a business; while each ManagerContract can only list one Associate on it. Hence Associate:ManagerContract = 1:N.
Lastly, Associate can have relation with any other Associate, so Associate:Associate = N:N.

In the Contract section, since each contract can have multiple benefits, and each benefit has multiple ContractPremium, Contract:ContractPremium = 1:N.

In the Customer section, a Customer can sign multiple Contract and a Contract can be Contract by multiple Customer. The relationship between Customer entity and Contract entity is N:N. A contract can include many Customer as its beneficiaries. At the same time, a Customer may be involved in multiple Contract. Therefore, Customer has a M:N relationship with ContractBenefit. An individual can work at multiple companies, which is described in Account entity, and obviously, a company can hire multiple employees. So we have a M:N relationship between Account(companies) and Customers(employees). An Associate can include multiple customers in their contract, and a Customer may appear in multiple contracts signed by different associates. We have an M:N relationship between Customer and Associate.