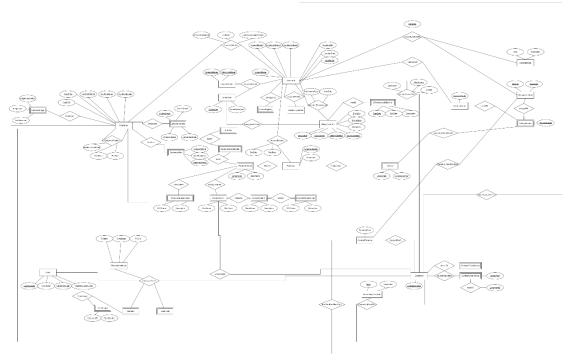
Name Zhang Xinge,QianZhang Date:
2023.11.1
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Net ID: XZ4513, QZ2570
Course Section: CSCI-GA.2433-001
Project #1
Total in points (100 points total):
Professor's Comments:
Affirmation of my Independent Effort:
ZHANG XINGE_Zhang Qian
(Sign here)

# **README:**

This assignment was completed by a group consisting of two students Xinge Zhang and Qian Zhang. Each member is considered to contribute equal effort to this solution.

1. Analyze the sample blueprint and create a corresponding entity-relationship diagram with full documentation.

We draw this ER diagram with draw.io. Due to the large size of the ER diagram and the limitations of the PDF page size, the image displayed here is not clear. For a high-resolution image, please refer to the files we have provided in PNG, SVG, or HTML formats. We have also included the original draw.io project file.



2. Verify that the various cases described in the PowerPoint slides are supported by the model design and if not amend the design accordingly.

### Account (n..n) BillingAccount

WalMart, Columbus uses 3 PO boxes for FSA, Life and A&H invoices. WalMart, Columbus uses 3 PO boxes for FSA, Life and A&H invoices for salaried / hourly employees.

#### True

Keith's Garage can use 1 address for all company business. Cliff's Garage and Scott's Dry Cleaners pays Keith's Garage a fee to do their company paperwork.

True

### Account (n..n) Account

The Archdiocese of Orlando has St. Jude's Church and St. Mary's Church as members and fellow company participants.

True

St. Jude's Church uses the Archdiocese of Orlando as its GroupMaster master and Pepsi Co. as its Flex Master.

True

## Account (n..n) AccountAdmin

WalMart, Columbus uses 3 administrators for FSA, Life and A&H invoices.

True

A particular administrator is an FSA expert and services multiple accounts.

True

### Account (1..n) AccountMember

Keith's Garage has multiple employees.

True

Shannon, currently employed at Keith's Garage, previously worked at (where he purchased / maintains policies) Gary's Trucking Co.

True

Shannon works at Keith's Garage and moonlights at Gary's Trucking Co.

True

Keeping a 13 month history on records to allow Shannon, currently employed at Keith's Garage, previously worked at (where he purchased / maintains policies) Gary's Trucking Co., quits Keith's Garage and returns to Gary's Trucking Co retaining his original policies.

True

### **AccountAlias**

As GroupMaster Columbus, GroupMaster New York, and Flex information is consolidated into the Account table. A decision / data survival tree is applied in the ETL / data cleansing layer. Original entries, in their original state, is recorded in the AccountAlias table for manual review in the APB system.

True

## Account (CompanyCode as part of the logical primary key)

There IS a legitimate reason for:

Two XYZ Corp.'s at 123 Main St., Albany, NY 12345 if one is a Columbus-based group and one is a NY-based group.

There is NOT a legitimate reason for:

Two XYZ Corp.'s at 123 Main St., Albany, NY 12345 if they are BOTH Columbus-based groups or BOTH are NY-based groups.

### Account (n..n) ManagerContract

One company Associate, using a particular SitCode (aka. ManagerContract) of a particular writing number, sells to and services many Accounts.

True

One Account can have an Original Servicing Associate, Servicing Associate, and Assisting Associate, Broker, etc.

True

## Associate (1..n) ManagerContract

One company Associate has many Writing Number authorized through an Insurance license granted by a particular US State DOI.

True

#### Customer (n..n) Customer

Daddy Warbucks gets a health insurance policy for his son and family. He sets up his trust fund to fund the policy. He also gets the dread disease rider, but for his son only.

True

#### Customer (n..n) Contract

Daddy Warbucks gets a health insurance policy for his son and family, so he is the policy owner. He sets up his trust fund to fund the policy, so the trust is the policy payer.

True

Daddy also has a life policy for himself.

True

## Customer (n..n) ContractBenefit

Daddy Warbucks' health insurance policy for his son and family, so the son and family are the beneficiaries of the policy.

True

His son also carries the company's accident insurance for him and his family.

True

# Customer (n..n) Account

Dana's Dry Cleaning has many employees, including Keith.

True

Keith can work at Dana's Dry Cleaning and moonlight at Scott's Garage.

True

## Customer (n..n) Associate

Walt, a long-standing sales associate of the company, passes away bequeathing his commissions to his wife and son.

True

Dave, another long-standing company sales associate and friend of Walt's family, also passes away bequeathing his commissions to Walt's son.

True