Climate Action - Design

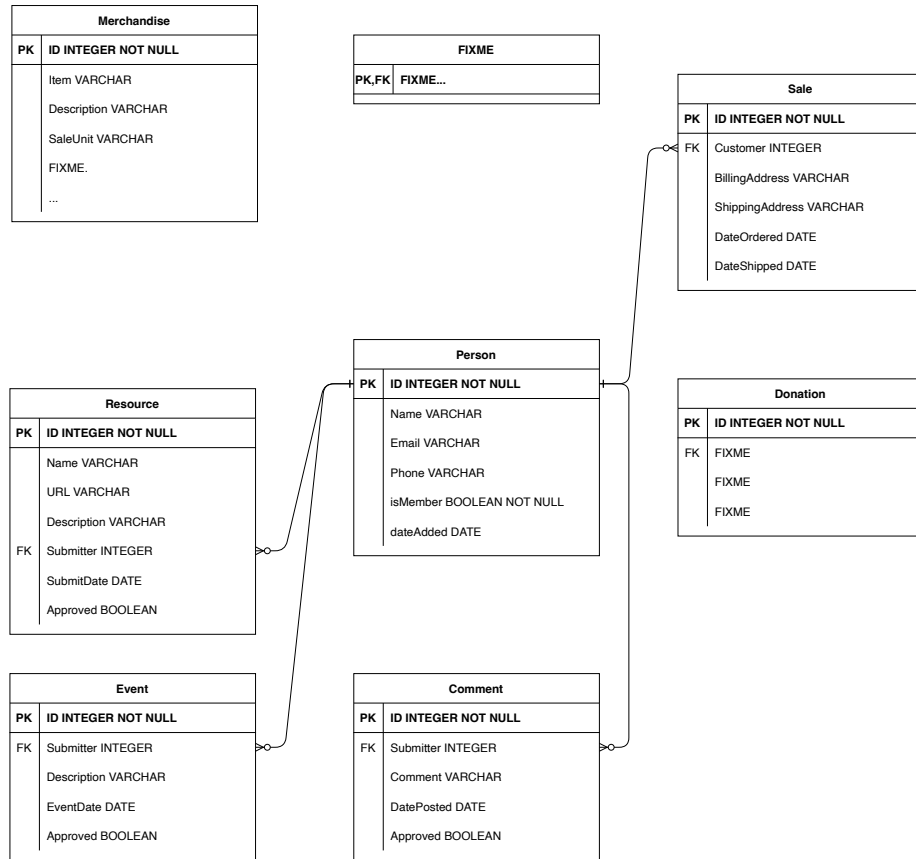## IT 120 - Databases

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Design

This framework supplies many of the entities for the Climate Project. It is missing:

- Donation attributes
- Merchandise attributes
- a way to make sales

As in the assignment: either attach the design file in Canvas, or Commit/Push ("Sync" in VSCode) and mention in a Canvas text entry that you have pushed.

Starting design

Merchandise

PK	ID INTEGER NOT NULL
	Item VARCHAR
	Description VARCHAR
	SaleUnit VARCHAR
	FIXME.
	...

FIXME

PK,FK	FIXME...

Sale

PK	ID INTEGER NOT NULL
FK	Customer INTEGER
	BillingAddress VARCHAR
	ShippingAddress VARCHAR
	DateOrdered DATE
	DateShipped DATE

Resource

PK	ID INTEGER NOT NULL
	Name VARCHAR
	URL VARCHAR
	Description VARCHAR
FK	Submitter INTEGER
	SubmitDate DATE
	Approved BOOLEAN

Person

PK	ID INTEGER NOT NULL
	Name VARCHAR
	Email VARCHAR
	Phone VARCHAR
	isMember BOOLEAN NOT NULL
	dateAdded DATE

Donation

PK	ID INTEGER NOT NULL
FK	FIXME
	FIXME
	FIXME

Event

PK	ID INTEGER NOT NULL
FK	Submitter INTEGER
	Description VARCHAR
	EventDate DATE
	Approved BOOLEAN

Comment

PK	ID INTEGER NOT NULL
FK	Submitter INTEGER
	Comment VARCHAR
	DatePosted DATE
	Approved BOOLEAN

Donation

Complete the Donation entity that appears in the Climate-Database-partial (SVG or Draw.io) starting design:

- review the Donation document in the collected Sample Documents
- fill in attributes
- avoid 3NF violations by linking to Person

Include in your submitted ERD:

- a simple entity box with name for any linked entities (there is no need to include attributes that already appear in the diagram)
- relation lines between entity/entities
- attributes with types for the data you want to add to Donation

Merchandise

Extend the Merchandise entity that appears in the Climate-Database-partial (SVG or Draw.io) starting design:

- review the merchandise and inventory in the Sample Documents
- add attributes to support inventory levels

Include in your submitted ERD:

An entity diagram for Merchandise with:

- attributes with types for the data you want to add to Merchandise

Sales

Add support for making sales to the Climate-Database-partial (SVG or Draw.io) starting design:

Look at the Sales samples in the sample documents. Note the samples have a "Item2/Quantity2" column. This is a 1NF violation which you will need to address, and if you address it well, you will get a database design that would allow a customer to order three or four or even more items in one sale. This will be good for revenue!

In the sample diagram, I have provided room for an additional table.

Please double-check that item quantity and item price are in the right place.

Include in your submitted ERD:

- any new entities you need to connect Sale and Merchandise
- PK/FK relation lines between entity/entities that you need to describe the sale sample