Opening a pet adoption agency where we rescue and care for animals and try to find owners who are a good match for them.

KEY FEATURES:

- Users can view a list of animals by type, story of the animal, date they were rescued, name
- Users can sign in to receive emails and to volunteer at the animal rescue
- Users can sign up to visit animals for adoption
- Users can view information regarding adoption, such as cost per adoption
- We will need to database information on the backend regarding supplies for each animal type as we will use this data to request donations and when we are ordering supplies

Tables with Columns:

1. User - basic table that stores user information
    a. User_id - serial primary key - used to track all users, unique to each user
    b. Email VARCHAR(150) - want to store email for communication purposes
    c. Password text - unique
2. animal - table for the critters
    a. Animal_id - serial primary key - used to track all animals, unique to each animal
    b. Animal_name VARCHAR(75) - used to give each animal a quirky name to establish an emotional connection and therefore torment the hearts of those that do not participate in the adoption process.
    c. Animal_type VARCHAR(50) - it may be useful to know how many cats and hamsters we have on hand when we need to order supplies for the critters
3. Volunteer - table stores basic data for the volunteers
    a. Volunteer_id serial primary key - each volunteer will be issued an id to track their participation
    b. volunteer_date timestamp - to track hours - could have one for clock-ins and outs to track total hours as well, but I'm going to keep this simple
    c. Animal_types_certs - the volunteers will have to go through certification and training processes in order to be allowed to care for different animal types so this field will help keep track of that process - if I had more time, I would create a sep table for tracking cert_ids as well that would serve as an association table
4. Adoption - table for keeping track of where animals are going
    a. Record_number - serial primary key - will create a unique identifier for each adoption
    b. User_id - the foreign key that links the user to the adoption process
    c. Animal_id - the foreign key that links the animal to the adoption process
5. Supplies - table for keeping track of the number of needed supplies for each animal
    a. Supply_id serial primary key - each inventory item will be granted a unique identifier
    b. Type_id foreign key - establishes a link between animal type and supplies
    c. On_hand integer - tracks number of each inventory item

6. Animal_type - table for keeping track of the number of each animal - used in conjunction with supplies to help determine the number of supplies needed
    a. Type_id serial primary key - each type of animal will be granted a unique identifier
    b. Animal_id foreign key to create a link between animal type and animal tables

Relationships between the tables: note to self, think about the relationship between the rows of separate tables, will the records of table A need to access one or many records in table B?

1. One-to-one
    a. USER to ADOPTION - users can adopt several times but each adoption is its own event
    b. USER to VOLUNTEER - each user can only become a volunteer once
    c. ANIMAL to ADOPTION - each animal can only be adopted once
    d. ANIMAL to ANIMAL_type - one animal belongs to one type
2. One-to-many
    a. USER to ANIMAL - many users can access each animal
    b. ANIMAL to SUPPLIES - each supply item can be given to many animals
    c. VOLUNTEER to ANIMAL_type - each volunteer can work with multiple animal types
3. Many-to-many
    a. ANIMAL to VOLUNTEER - many volunteers can volunteer to help many different animals
    b. ANIMAL_type to SUPPLIES - each supply will be needed by many different animal types, each animal_type will need many different supplies