Adoptable Dogs Database

Computational Databases Final Project

Ashley Schwartz

Project Goal

RDBMS

Design a RDBMS through an ER model for an adoptable dogs database

Development

Develop a web application using PHP/HTML/MySQL

Use

Test and use the website created for CRUD operations on the database
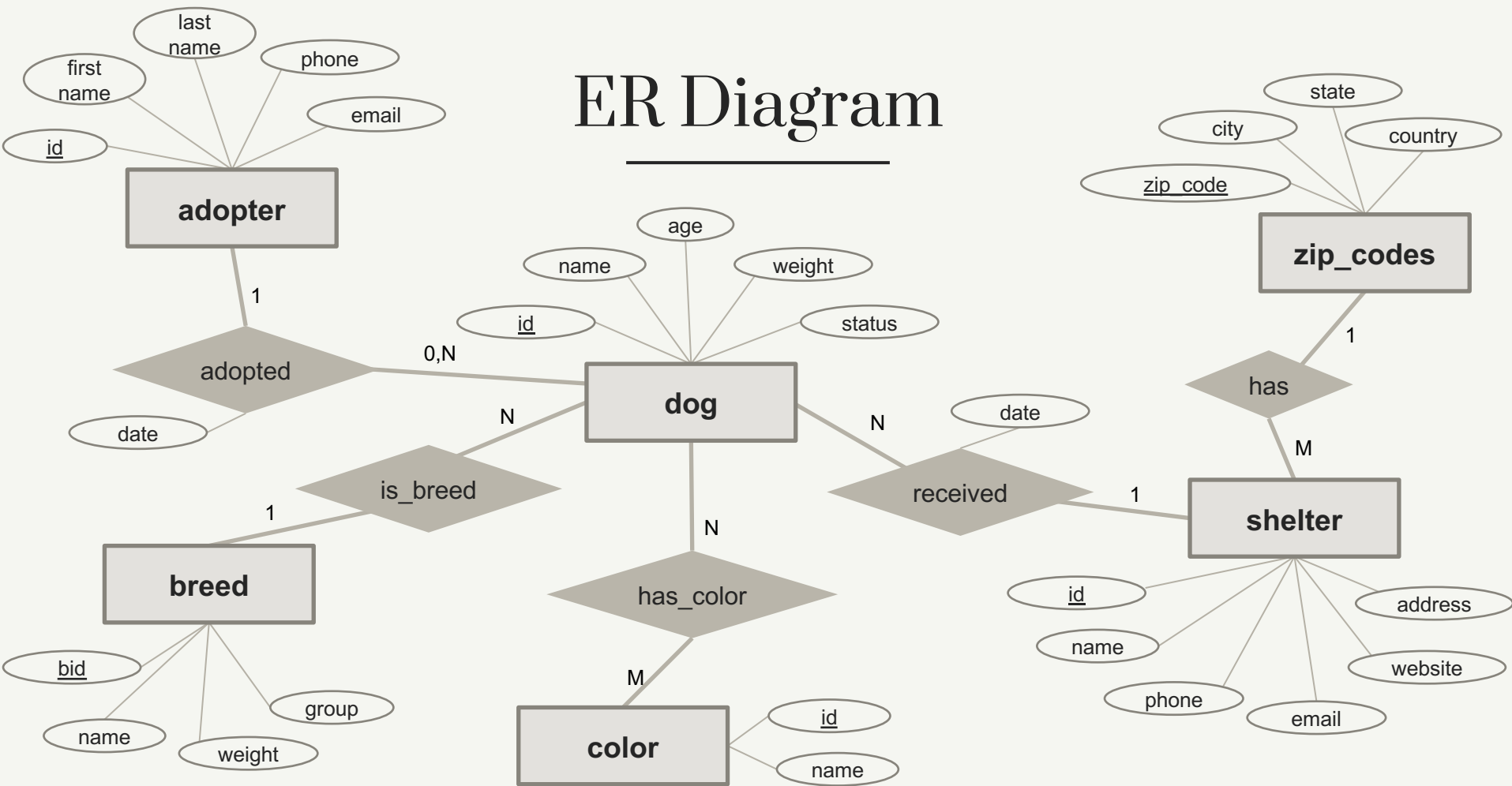
Adoptable Dogs Database
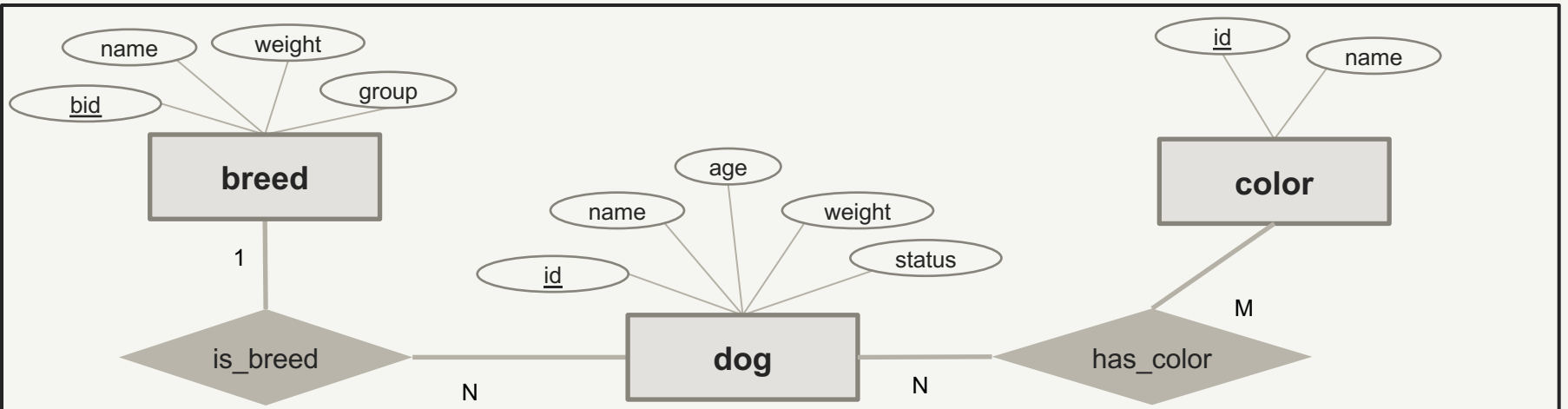
Scope and Aim

- Information about adoptable dogs
    - physical characteristics
    - shelter
- Information about shelters
- Information about adopters

Entities

- Dog
- Shelter
- Zip Codes
- Adopter
- Breed
- Color

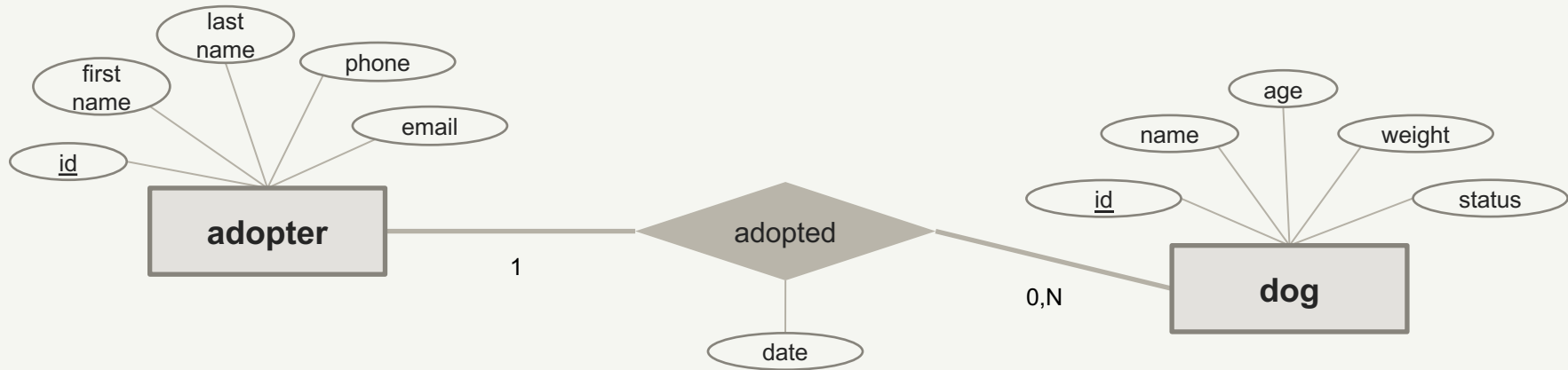ER Diagram

breed

bid	bname	bweight	bgroup

dog

did	dname	dage	dweight	dstatus	*bid*

color

cid	cname

has_color

did	*cid*

assumption: a dog can only be one breed (mixed is an option)

assumption: a dog can be many colors

assumption: an adopter can adopt many dogs

dog
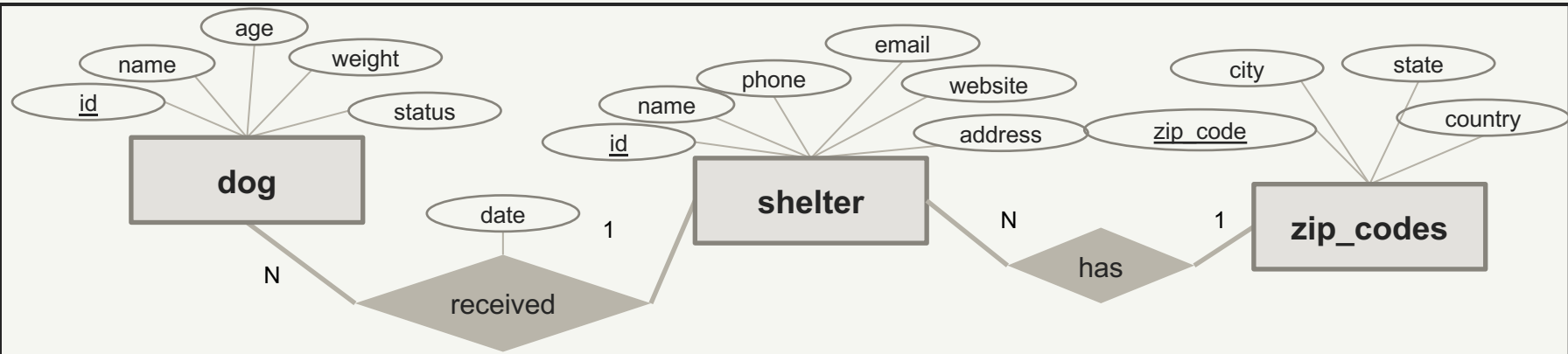
did	dname	dage	dweight	dstatus	*bid*

shelter

shid	sname	phone	email	website	address1	*zip_code*

received

shid	*did*	date

zip_codes

zip_code	city	state	country

assumption: a shelter has many dogs, multiple shelters can have the same zip code
normalization to avoid data redundancy, transitive dependency: 3NF

Web Application

Adoptable Dogs Database

Search for an Adoptable Dog

Search the database for an adoptable dog. You can search based on age or based on breed

AGE SEARCH   BREED SEARCH

Add an Adoptable Dog

This action allows you to add an adoptable dog to the database.

LINK

Add an Adoption Entry

Update a dog to adopted and enter the adopter's infomation.

LINK

Update a dog's info

This action allows you to update a dog in the database. An example of an acceptable update is weight change.

LINK

Development

Typical User Workflow

Search for dog → Adopt the dog → Add Adopter Info

CRUD Operations

Create

- create a new dog
- create an adopter (adoption required)

Read

- search dog by age
- search dog by breed

Update

- update dog info
- update dog to adopted (upon adopter creation)

Delete

- delete a dog

Assumptions

- adoptable dog information is the most important

- participating shelters are predefined but can be added on the backend

- searching for dog means you are interested in adopting

Limitations

- predefined breed choices

- predefined color choices

- predefined shelters

- choose a specific dog to adopt

- up to 2 colors

Demo