Building Database Models

Questions

- How do I delete related rows in other tables?
- How do I hide my database username and password?
- How do I create a class in JavaScript?
- What is a class??!?
- What's an instance?
- How do I create an instance of a class?
- How do I translate my database functions into class methods?
- What is `this`?
- What does `static` do?
- How do I get pg-promise to stop quoting a string?

How do I delete related rows in other tables?

```
create table todos (
  id serial primary key,
  name text,
  completed boolean,
  user_id integer references users (id) on delete cascade
);
```

If you delete a user, it deletes the todo

If you delete a todo, the user stays intact.

`on cascade delete` deletes the holder of the foreign key.

How do I hide my database username and password?

Install dotenv - it reads info from a "secret file" and makes it available to your Node.js program

```
npm install dotenv
```

Put your secrets in a file named `.env`

```
code .env
```

And it will look like-a this:

```
USERNAME=chrisaquino
PASSWORD=cUDDl3z
```

How do I use a .env file with dotenv?

At the top of your index.js:

```
require('dotenv').config();
```

Then, wherever you need some of the secret info:

```
const db = pgp({
    host: process.env.DB_HOST,
    port: process.env.DB_PORT,
    database: process.env.DB_NAME,
});
```

Should I put my .env in git?

Oh hell naw

NEVER EVER EVER

How do I create a class in JavaScript?

Declare the class with the `class` keyword

Put any instance properties in the constructor

```javascript
class User {
    constructor(name) {
        this.name = name;
    }

    greet(otherUser) {
        console.log(`Hello ${otherUser.name}, I am ${this.name}`);
    }
}
```

What is a class?

- a blueprint for a kind of object
- "factory" for objects

What's an instance?

- It is an object created by calling `new User()`
- It is what you build using the blueprint.

What is `this`?

- It's the owner of the function.

How do I translate my database functions into class methods?

- make the `id` one of the constructor arguments
- copy over any "database functions" that expect `id` as an argument
- for each of these, remove the `function` keyword
- remove the `id` argument
- and use `this.id` instead

What does `static` do?

- The static keyword is used with methods
- It makes the method belong to the class, not an instance
- You will not use the keyword `this` inside a static method

How do I get pg-promise to stop quoting a string?

Use the `:raw` modifier with your placeholder

```
static searchByName(name) {
    return db.any(`
        select * from users
            where name ilike '%$1:raw%'
    `, [name])
}
```