



multiverse





multiverse








SWE Workshop



Back End Module
Week 1



Agenda

-  Welcome to the Back End Module! (10 min)
-  Icebreaker (10 minutes)
-  Demo Lesson (20 minutes)
-  Breakout (40 minutes)
-  Daily Review (20 minutes)

multiverse



Icebreaker





Icebreaker

What's one thing you've learned
on-the-job so far? 

multiverse



Daily Objectives





Today's Objectives

What are we doing today, and why should we care?

By the end of today, we should be able to:

- Understand what RESTful means
- Write a RESTful API route handler
- Use Query Strings in a route handler



REST - What is it?

Representational State Transfer?!

- Sending ***representations*** rather than ***resources***
 - Client can manipulate the resource via the representation
- Requests are separate & unconnected, and no client information is stored between requests . . . It's ***stateless***
- Information is transferred in a standard form (Hello, JSON!)
 - Also HTML, XLT, Python, PHP, plain text



REST - What is it?

Representational State Transfer?!

- Things to keep in mind:
 - Scalable
 - Routes are reusable
 - Easy to understand, verb & noun based



HTTP Verbs & Nouns

- What are some verbs?
- Nouns

Less specific



More specific

RESTful

`app.post('/dogs', ...)`

`app.get('/animals/dogs', ...)`

Not RESTful

`app.get('/dogs/create-dog', ...)`

`app.get('/animals/1/spaniel', ...)`



Query Strings & req.query

```
https://www.example.com/noun?key1=value1&key2=value2
```

- key: value pairs
- Use req.query to access:
 - `const { color } = req.query`
`const blackCars = await Cars.findAll({where: {color: black}})`
 - Can also use `req.query.color` (think about DRY code, though)
 - Accessing the whole query object:
 - `const queryObject = req.query`

multiverse



Demo

To Be Continued in the Editor...



multiverse



Breakout Rooms





Breakout Rooms



We have 40 minutes!

Jump in with your partner, and work on the exercises!

While working on the problem, remember:

- Discuss the problem, come up with a solution **together**
- Collaborate on the project.
- Switch **Driver** 🏎️ and **Navigator** 🚗 halfway through

multiverse



Daily Review





Daily Review



We have 20 minutes!

Let's Vote: Which portions of the workshop would we like to review together?

AND/OR

Extensions we can explore:

- PUT vs PATCH
- Middleware

Where to go from here:

- Express Router: Routes, Controllers



multiverse

Thank you



Get in touch
info@multiverse.io