Express Yourself

Objectives

- To understand the Star Wars Application
- To create a real-world application for handling reservations using Node/Express

Today's class is critical!

We will be re-using the concepts

throughout the remainder of the course

Review: A New Hope

\$ node 11-StarWars-4/server4.js

Line-by-line commenting of the previous example

Demo: The Empire Strikes Back

\$ node 12-StarWars-5/server5.js

- We've created a new POST route
- This route will take in JSON inputs then DO work with them.
 - o In this case it will save the JSON to the database and return a JSON of the new character.

Activity: The Empire Strikes Back (5 min)

Research the following and be prepared to report back

- body-parser
- .use()
- req.body

What is middleware?

Software glue

body-parser



.use()



req.body

RTFM http://expressjs.com/en/api.html#req.body && https://www.w3.org/Protocols/rfc2616/rfc2616-sec4.html

Demo: Postman

- POST to http://localhost:3000/api/new
- Body > Text > JSON

```
"routeName": "darthvader",
"name": "Darth Vader",
"role": "Sith Lord",
"age": 42,
"forcePoints": 1900
```

Activity: Postman

See 12-StarWars-5 for instructions

Demo: Return of the Jedi

\$ node 13-StarWars-6/server6.js

Activity: Return of the Jedi

Research, discuss with your neighbor, and be preapred to report back on

- .sendFile()
- path
- dirname

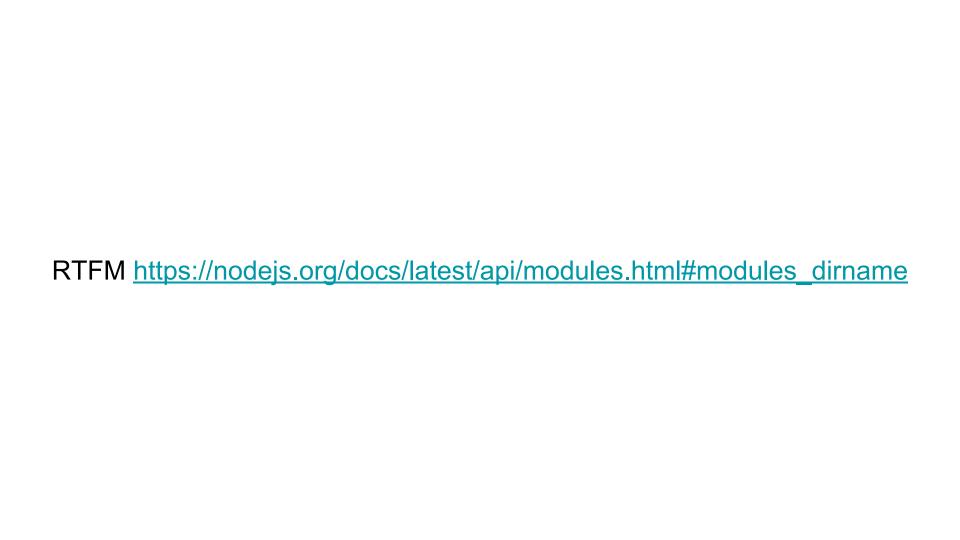
.sendFile



path

RTFM https://nodejs.org/api/path.html

dirname



Why build an absolute path rather than

declare a relative path?



and res.sendFile?

What is the difference between res.json

res.json() represents the HTTP response that an Express app sends when it gets an HTTP request.

res.sendFile() transfers the file at the given path.

Demo: The Force Awakes

\$ node 14-FinalStarwarsApp/server.js

Activity: The Force Awakens

See 14-FinalStarWarsApp for instructions

Be prepared to report out

\$.post()

RTFM https://api.jquery.com/jquery.post/

Review: The Force Awakens

- jQuery is used to grab the values in the form -- then POSTs these values to the API.
- The API then saves the records into the database.



Heroku

Real artists ship

How have we outgrown GitHub pages?

Heroku

- Will both host our files and run our server-side code
- Allows deployment of a back-end and will start up and host our web server and server-side code!
- Manages our application and gives it a public URL that anyone can access
- It's free! To a point...
- heroku.com

Activity: Deploy to Heroku (30 min)

See HerokuGuide.md for instructions

Demo: Homework

\$ node /Users/jarednielsen/FullStack-Lesson-Plans/01-Class-Content/13-express/02-Homework/Solutions/FriendFinder/server.js

http://localhost:8080/

You will build a dating application for compatibility test.

In essence, the application saves each user's survey responses in the database, then compares the responses against everyone in the database to identify the best match.

Activity: Lunch

During the lunch break, divide into groups of four, two each for front-end and back-end development.

!important

For the long weekend:

https://www.codeschool.com/courses/building-blocks-of-express-js

What is the best way to learn?

By napping

By doing

Demo: Hot Restaurant

Everyone make a reservation http://hot-restaurant.herokuapp.com/

Note how reservation requests have been captured http://hot-restaurant.herokuapp.com/tables

Also note

- http://hot-restaurant.herokuapp.com/api/tables
- http://hot-restaurant.herokuapp.com/api/waitlist

You will be building this from scratch today