Your Next Week

Saturday April 25	Sunday April 26	Monday April 27	Tuesday April 28
6:30 PM **— DUE Class 12 Code Challenge** **— DUE Class 12 Lab** **— DUE Class 13 Reading** — Class 13 *MIDNIGHT* **— DUE Class 13 Learning Journal**	*MIDNIGHT* **— DUE Class 12-13 Feedback**	*6:30 PM* — Career Coaching Workshop #1 Continued (Mandatory)	*6:30 PM* **— DUE Class 13 Lab** **— DUE Class 13 Code Challenge** **— DUE Class 14 Reading** — Class 14A
Wednesday April 29	**Thursday April 30**	**Friday May 1**	**Saturday May 2**
6:30 PM — Class 14B *MIDNIGHT* **— DUE Class 14 Learning Journal**	*6:30 PM* — Co-working		*6:30 PM* **— DUE Class 14 Mock Interviews** **— DUE Class 14 Lab** **— DUE Class 15 Reading** — Class 15 — Interview Prep 01 *MIDNIGHT* **— DUE Class 15 Learning Journal**

What We've Covered

Module 01

Javascript Fundamentals and Data Models

C01 — Node Ecosystem, TDD, CI/CD
C02 — Classes, Inheritance, Functional Programming
C03 — Data Modeling & NoSQL Databases
C04 — Advanced Mongo/Mongoose
C05 — DSA: Linked Lists

Module 02

API Servers

C06 — HTTP and REST
C07 — Express
C08 — Express Routing & Connected API
C09 — API Server
C11 — DSA: Stacks and Queues

Module 03

Auth/Auth

C10 — Authentication
C12 — OAuth
C13 — Bearer Authorization
C14 — Access Control (ACL)
C15 — DSA: Trees

Module 04

Realtime

C16 — Event Driven Applications
C17 — TCP Server
C18 — Socket.io
C19 — Message Queues
C20 — Midterms Prep

Midterms

Module 05

React Basics

C21 — Component Based UI
C22 — React Testing and Deployment
C23 — Props and State
C24 — Routing and Component Composition
C25 — DSA: Sorting and HashTables

Module 06

Advanced React

C26 — Hooks API
C27 — Custom Hooks
C28 — Context API
C29 — Application State with Redux
C30 — DSA: Graphs

Module 07

Redux State Management

C31 — Combined Reducers
C32 — Asynchronous Actions
C33 — Additional Topics
C34 — React Native
C35 — DSA: Review

Module 08

UI Frameworks

C36 — Gatsby and Next
C37 — JavaScript Frameworks
C38 — Finals Prep

Finals

Interview Prep

- Two slots, (almost) every Saturday starting today
- 3:30pm, 4:30pm
- Optional attendance, 10 points extra credit (in Lab category) for interviewee
- 24 slots total - See schedule here
  - Everyone can sign up once
  - Depending on extra slots, we'll either do **bonus lectures** or allow second sign up

Other Updates

- Thank you all for some great syncs!
- Common thoughts
  - Quarantine sucks
  - Want a better feeling of community
  - Need interview prep/practice
  - Difficult to ask questions
- New weekly slack checkins on Saturday, starting NEXT Saturday
- Wednesday Social Thread

Lab 12 Review

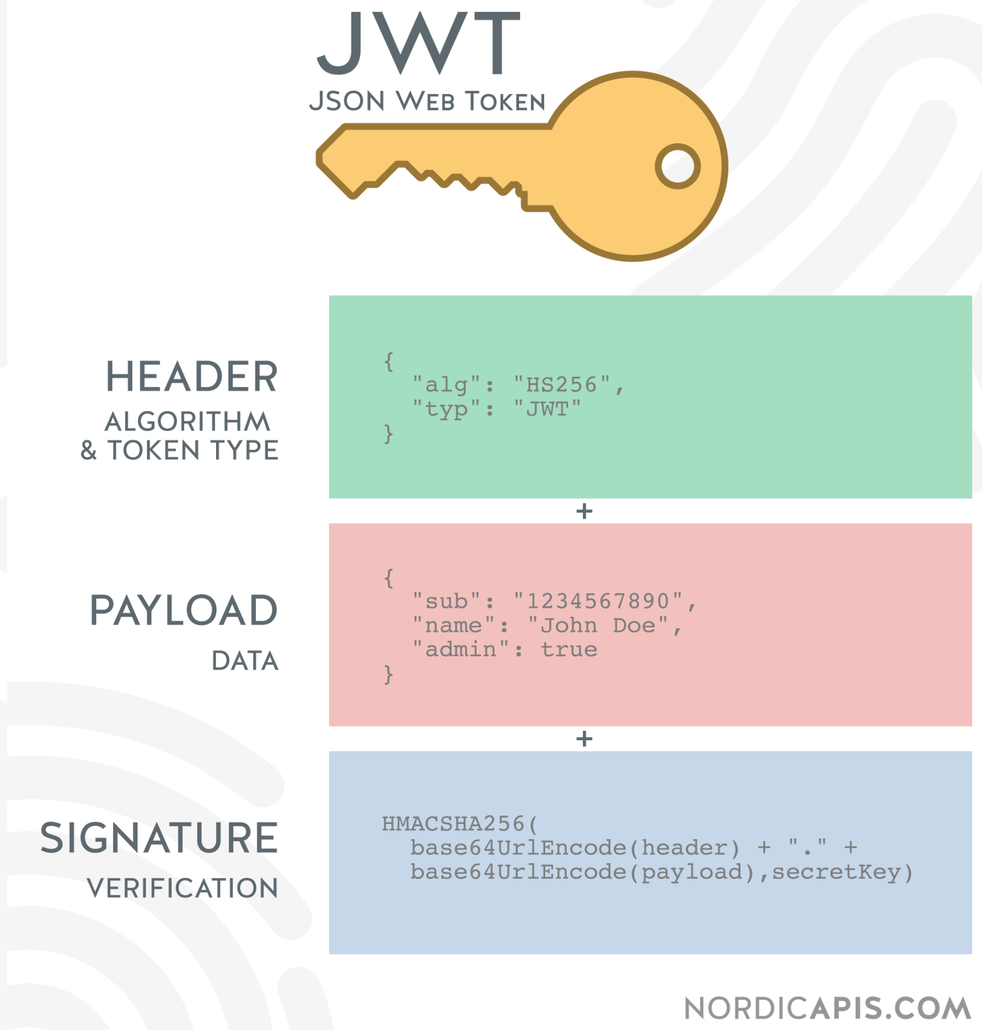
Class 13

Bearer Authorization

seattle-javascript-401n16

JSON Web Token

- A very common way to keep a client logged in
- The server generates a unique token
  - This is an encrypted string
  - Only the server has the encryption key
  - The data encrypted is typically some unique reference to the current user (user id for example)
- **JSON Web Token** is a package that generates tokens for us

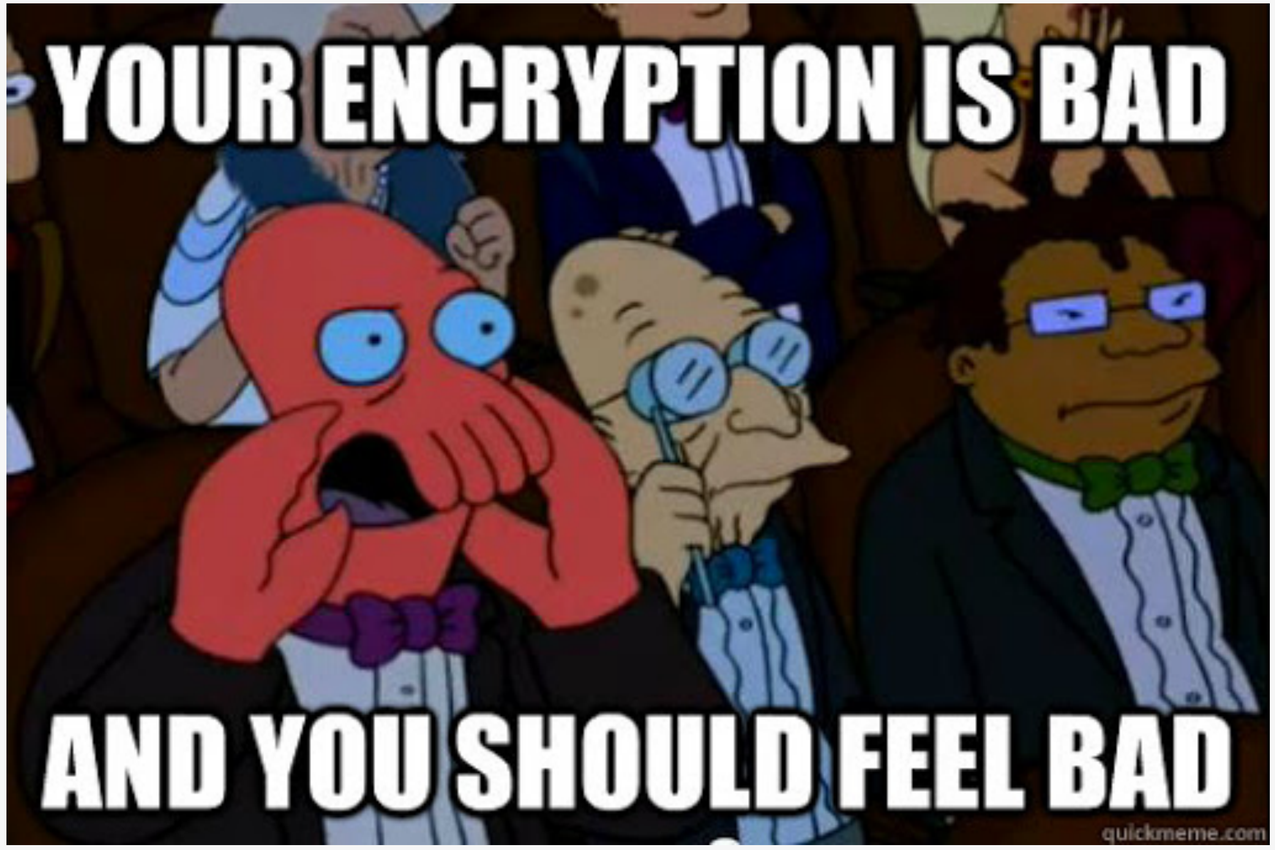


Adding “Bearer”

- When we create a token, we should add the word “Bearer”
- This tells us how to decrypt it later!
- Allows for one auth middleware that handles *everything*
- Client grabs this from response and sends it back on future requests
- We can now hide pages if a Bearer token isn’t present (or redirect to sign in!)

Securing JWT Further

- JSON Web Tokens are “light encryption”
  - Still pretty secure
  - But a little susceptible to hacking
- We can add security by
  - Creating a **timeout** for the JWT
  - Generating a new JWT after every successful client request



Mongoose Methods

- You can write **methods** upon an individual record
    - Very useful when you want to use a record's information to output something
- You can write **statics** upon an entire model
    - Not so useful; our model class wrapper can handle these operations

Lab 13 Overview