

## 1. Concept Review

- a. Extra Checkpoints on Learn (added at conclusion of Precourse)
  - i. 17 total w/Prefix: PC-
- b. Udemy's [JavaScript: Understanding the Weird Parts](#)
  - i. \$19 with promo code: YOUTUBE19

## 2. Recursion Practice

- a. [Hack Reactor Recursion-Prompts Repo](#) (40 total)

## 3. Introduction to Algorithms and Data Structures (resources)

- a. [Tutorials Point](#)
- b. [Data Structures Succinctly](#)
- c. [Khan Academy](#)
- d. [Coursera: Algorithms, Part 1 \(Princeton\)](#)
- e. [Data Structure Visualizations](#)
- f. [VisuAlgo](#)

## 4. Data Structures

- a. [Stack](#), [Queue](#), Set, [Tree](#), [Linked List](#), [Hash Tables](#)

## 5. Algorithms

- a. Depth-first Search and Breadth-first Search ([video](#))
- b. Binary Search ([video](#))
- c. [Bubble Sort](#), [Merge Sort](#), [Quick Sort](#), [Insertion Sort](#)
- d. Optional: Dijkstra's, Topology sort

## 6. Big-O Analysis

- a. [HackerRank overview](#) (video)
- b. Hack Reactor Algo Time-Complexity review
  - i. [Slides](#)
  - ii. <https://github.com/beth/algo-time-complexity-review>

## 7. Intro to Backend I: Database Queries

- a. [SQL Zoo](#)

## 8. Intro to Backend II: Node/Express

- a. [Node & Express](#) (Medium article)
- b. [MDN Express/Node](#)
- c. CodeSchool
  - i. Real-time Web with Node.js
  - ii. Building Blocks of Express.js

## 9. Git Commands Review

- a. [Git Koans](#)

## 10. Introduction to ECMAScript 6 (ES6)

- a. [ES6 Features](#)

## 11. Toy Problem Resources

- a. Project Euler, Codewars, Codefights

## 12. Algo & DS Practice

- a. HackerRank, LeetCode

## 13. Command Line/Browser Game Challenges

- a. Tower of Hanoi (3 discs)
- b. Tic-Tac-Toe (2 player)
- c. Your own, be creative!