Advanced JavaScript Course

The Purpose of this Advanced JavaScript Course is to prepare students to cover the latest JavaScript standard ES 6 (ES 2015) and those JavaScript topics, which are required before starting to learn, React, React Native, Angular 4 and Redux. It covers Functional Programming, Object-Oriented programming, and Asynchronous and Reactive Programming.

The prerequisite for this course is that the students have covered the book "The Smarter Way to Learn JavaScript" by Mark Mayers. The duration of this course will be two months or 8 weeks.

Week	Topic	Learning Material
1	Think functionally	Chapter 1 and topics 2.1, and 2.2 of Functional Programming in JavaScript by Luis Atencio https://www.slideshare.net/LuisAtencio3/functional-programming-in-javascript-by-luis-atencio
2	Functions as First Class Objects, Callback Functions, Arrow Functions, Rest parameters and Default Parameters	Chapter 3 of Secrets of the JavaScript Ninja, 2nd Edition Topic 2.3 of Functional Programming in JavaScript by Luis Atencio
	This function parameter, invocation as a function, invocation as a method and function contexts	Topics 4.1.2, 4.2.1, 4.2.2, and 4.3 of Secrets of the JavaScript Ninja, 2nd Edition
3	Closures, using closures with callbacks, types of variables, and scopes	Topics 5.1, 5.2.2, 5.5.1, 5.5.2, and 5.6.3 of Secrets of the JavaScript Ninja, 2nd Edition Topic 2.4 of Functional Programming in JavaScript by Luis Atencio
4	Pure Functions, Functional Programming, Maps, Searching Arrays, and Reduce	https://medium.com/javascript-scene/master-the-javascript-interview-what-is-a-pure-function-d1c076bec976 https://medium.com/javascript-scene/master-the-javascript-interview-what-is-functional-programming-7f218c68b3a0 Topics 9.2, SEARCHING ARRAYS (pages 237-240) AGGREGATING ARRAY ITEMS (pages 241-242) of Secrets of the JavaScript Ninja, 2nd Edition Topic 3.3 of Functional Programming in JavaScript by Luis Atencio

5	Prototypes, using classes in ES 6, and defining getters and setters	Topics 7.1, 7.3.2, 7.4, and 8.1.1 of Secrets of the JavaScript Ninja, 2nd Edition and https://medium.com/javascript-scene/master-the-javascript-interview-what-s-the-difference-between-class-prototypal-inheritance-e4cd0a7562e9
6	Modularizing JavaScript applications with AMD, CommonJS, and ES 6	Topics 11.1.2, and 11.2 of Secrets of the JavaScript Ninja, 2nd Edition
7	Challenges of Working with Asynchronous code, working with Promises, Async functions, and Introducing Reactive Programming	Topics 6.3 and 6.4.1 of Secrets of the JavaScript Ninja, 2nd Edition Topics 8.2 and 8.4 of Functional Programming in JavaScript by Luis Atencio
8	Reactive Programming using RxJS	Chapters 1, 2, 3, and 4 of RxJS in Action by Paul Daniels and Luis Atencio
	Advanced JavaScript Test	Covering all the topics covered above