Course Schedule

# Week 1: Evolution of JavaScript

Learning Objectives:

* Explain the advancements in JavaScript.
* Explain Module pattern.
* Use ES6+ features.

# Week 2: Building The UI Of Modern Applications

Learning Objectives:

* Differentiate between front-end frameworks and UI libraries.
* Describe popular UI frameworks/libraries.
* Compare emerging frameworks/libraries.
* Define key concepts of React.
* Create React components.
* Manage state in React.

# Week 3: Introduction to Node.js

Learning Objectives:

* Define JavaScript closures and event-driven programming with Node.js.
* Describe Connect web framework and middleware pattern.
* Introduction to CommonJS modules and Node.js module system.

# Week 4: Introduction to MEAN

Learning Objectives:

* Describe MEAN and MERN stack architecture.
* Install and run MongoDB.
* Create simple Node.js apps.

# Week 5: Building Fast Web Applications using Express and/or emerging alternatives.

Learning Objectives:

* Explain Express and alternatives.
* Create and configure an Express application.
* Implement MVC pattern.

# Week 6: Continuation of Week 5 discussion

# Week 7: Test 1

# Week 8: Study Week

# Week 9: Managing User Authentication

Learning Objectives:

* Describe Passport strategies.
* Integrate Passport into MVC architecture.
* Utilize Passport for authentication.
* Implement authentication through OAuth providers.

# Week 10: Introduction to MongoDB

Learning Objectives:

* Define NoSQL.
* Examine MongoDB's document model and query language.
* Work with MongoDB shell.
* Connect to MongoDB using Mongoose.

# Week 11: Managing User Authentication (Continued)

Learning Objectives:

* Explain Passport strategies.
* Integrate Passport into MVC architecture.
* Use JSON Web Token for authentication.
* Explain OAuth providers.

# Week 12: Continuation of Week 10 discussion

# Week 13: Learn Angular 2 step by step.

Learning Objectives:

* Understand the architecture and components of Angular 2.
* Set up a development environment for Angular 2 projects.
* Create Angular components, modules, and services.
* Implement data binding and interpolation in Angular 2.
* Utilize Angular directives and pipes effectively.
* Handle user input with event binding and two-way data binding.
* Implement routing and navigation in Angular 2 applications.
* Understand dependency injection and its role in Angular 2.
* Integrate Angular 2 with external libraries and APIs.
* Deploy Angular 2 applications to production environments.

# Week 14: Creating a MEAN CRUD Module

Learning Objectives:

* Setting up Mongoose model.
* Creating Express controller and routes.
* Organizing Angular module.
* Implementing Angular forms and http client.

# Week 15: Test 2

Course Evaluation

Late assignments: Subject to a penalty of up to 10% per week, generally not accepted beyond two weeks after the due date.