

VUE.JS

Nature of the Course: Theory + Practical

Total Hours per Day: 2 Hours

Course Duration: 2 Weeks

Course Summary

The Vue.js course at the Deerwalk Training Center (DTC) is designed for novices who wish to learn how to think about and produce meaningful Vue.js codes, as well as read Vue.js codes written by others. The course also teaches how to translate a literary description of a problem (requirement) into a Vue.js application or library. This is a foundational course for anyone with no prior programming expertise who wants to work as a professional Ajax engineer in the future.

Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

- Has attended 90% of all classes held
- Has received an average grade of 80% on all assignments
- Has received an average of 60% in assessments
- The tutor believes the student has grasped all of the concepts and is ready to go on to the second module.

Required Textbooks

- Valentin Bojinov, “Node.js Complete Reference Guide”, Packt.
- Shawn Wildermuth, “Node.js for .NET Developers”, Pluralsight

Prerequisites

- Basic knowledge about programming, bits/bytes, procedures, classes, computer architecture, etc. If you just have theoretical knowledge that is perfectly okay but you should have strong convictions on what programming is, and what you hope to achieve from this class.
- Willing and eager to spend at least 10-20 hours (varying from student to student) per week outside of the training class to read/write codes in JavaScript (self-study and practice).

- There is no prior educational level required for this course. Anyone from 10+2 students to someone who is doing her Ph.D. in Genetic Engineering is welcome to take this course.
- If you are only interested in theory and have no interest/patience in spending at least 10 hours every week throughout the duration of the course, then this course might not be for you.
- If you have absolutely no idea about programming or do not see yourself doing programming in the next six-odd months, then this class may not be for you!

Course Details

Week I

Introduction

- Get to know Vue
- Vue Benefits
- What you should know

The Simplest Form

- Adding Vue to a web page
- Understand execution flow
- A Bootstrap detour
- Thinking declaratively with data binding
- Understanding two-way data binding
- Methods and event handling

Essential Directives, Options, And Tools

- Rendering elements conditionally
- Loading data asynchronously
- Using the created lifecycle hook
- Using the Vue Devtools browser extension
- Rendering list with v-for
- Using additional v-for parameters
- Combining v-for with event handling
- Using computed properties

Week II

Enhancing User Interfaces

- Adding dynamic style attributes

- Adding dynamic class attributes
- Using CSS transitions
- Applying transitions to lists
- Using CSS animations

Vue Components

- Using Vue components
- Registering and using components
- Adding component props
- Managing component content with slots
- Componentizing existing in-DOM templates
- Handling events in component
- Vue CLI
- installing Vue CLI
- Vue CLI project template
- Moving to single-file components
- Building for production

Labs

Lab assignments will focus on the practice and mastery of contents covered in the lectures; and introduce critical and fundamental problem-solving techniques to the students.

Learning Outcomes

- How to use Vue.js to develop object-oriented designs.
- How to recognize JavaScript language components and how they interact in applications.
- How to create stand-alone Vue.js programs and program them.