Startel
Dé IT-opleider

Front End Web Development – a Startel special e-learning collection

Dit zelfstudiepakket biedt alles wat je nodig hebt om een goede front-end webontwikkelaar te worden.

Algemene omschrijving

Dit zelfstudiepakket bevat de volgende onderwerpen:

- Web Development Fundamentals.
- Programming in HTML5 with JavaScript and CSS3.
- TypeScript Essentials.
- Front-end Developer collection.
- Introduction to Bootstrap.
- jQuery Essentials.
- JavaScript Frameworks and Libraries.
- Angular 6 Development.
- Reactive Programming with Redux.
- Advanced AngularJS.
- Fundamentals of DevOps.
- Developing Microsoft Azure and Web Services.

Doelgroep

Dit zelfstudiepakket is geschikt voor mensen die front-end webontwikkelaar willen worden.

Leerdoelen

Met dit zelfstudiepakket leer je verschillende front-end programmeertalen beheersen.

Voorkennis

Voordat jij met dit zelfstudiepakket begint, raden wij aan dat je basiskennis hebt in programmeren.

Onderwerpen

Web Development Fundamentals

This course will provide an overview of the concepts and skills necessary to design and publish a web site. It will cover how to use HTML and CSS to develop web site content. It will also provide an overview of the role of languages such as DHTML, XHTML, XML, and JavaScript in web site implementation. It also introduces the user to advanced web techniques such as developing for mobile devices, client and server scripting, and how to manage and connect to databases.

Programming in HTML5 with JavaScript and CSS3

HTML in itself can be quite overwhelming, especially when programming with JavaScript and CSS3. This learning path shows students how to use JavaScript with HTML and CSS, and more abstract elements and processes. Each course will provide a solid background and the necessary concepts for programming in HTML5 and JavaScript while using the latest Windows operating system and Microsoft Visual Studio IDE.

Courses in this collection:

- HTML5 with JavaScript & CSS3: Introduction.
- HTML5 with JavaScript & CSS3: Styling HTML5 & JavaScript.
- HTML5 with JavaScript & CSS3: HTML5 & JavaScript.
- HTML5 with JavaScript & CSS3: APIs & Data Storage.
- Programming in HTML5: More Advanced HTML5 & CSS3.
- Programming in HTML5: Adaptive AI, Graphics, & Animation.
- HTML5 with JavaScript & CSS3: Data Flow, Consuming, & Transmitting Data.
- HTML5 with JavaScript & CSS3: WebSockets & Asynchronous Processing.
- HTML5 with JavaScript & CSS3: Advanced Input Validation.

Besides the courses above, the students have access to:

- TestPrep 70-480: Programming in HTML5 with JavaScript and CSS3.
    - To test your knowledge on the skills and competencies being measured by the vendor certification exam. TestPrep can be taken in either Study or Certification mode.
        - Study mode is designed to maximize learning by not only testing your knowledge of the material, but also by providing additional information on the topics presented.
        - Certification mode is designed to test your knowledge of the material within a structured testing environment, providing valuable feedback at the end of the test.
- Online Mentoring.
    - Mentors are available to help students with their studies for exam 70-480 Programming in HTML5 with JavaScript and CSS3. You can reach them by entering a Mentored Chat Room or by using the Email My Mentor service.

TypeScript Essentials

TypeScript is a strongly typed superset of JavaScript, developed by Microsoft, that compiles to pure JavaScript. TypeScript is intended to be more suitable for developing large scale applications. This series of courses covers the TypeScript language and the Visual Studio 2013 development environment.

Courses in this collection:

- TypeScript Essentials: Getting Started.
- TypeScript Essentials: Advanced TypeScript.

Front-end Developer collection

- FSD Front-end Development: Features of HTML5 & CSS3.
- FSD Front-end Development: Advanced CSS Browser Features.
- FSD Front-End Development: Using JavaScript Functions.
- FSD Front-End Development: Writing Code with jQuery.
- FSD Front-End Development: Frameworks.
- FSD Front-End Development: UI Development with ReactJS.
- FSD Front-end Development: Server Tools.
- FSD Front-end Development: Testing Tools.

Introduction to Bootstrap

Bootstrap is a front-end framework developed to provide consistancy for internal resources. It is a collection of tools that can be easily customized to an organization's needs. In this learning path, you will learn why bootstrap was developed and explore its basic toolsets, as well as the more advanced implementations leveraging jQuery and Javascript.

Courses in this collection:

- Bootstrap Introduction.
- Bootstrap Elements.

jQuery Essentials

jQuery and jQuery UI are JavaScript libraries that provide a lot of extra functionality for building dynamic, interactive web sites. jQuery has many helper functions, widgets, and plugins to create a web page that gives a positive user experience as well as saves a lot of time developing and working around browser compatibility issues. In this path you will learn about jQuery, jQuery UI, and some of their most common and powerful widgets. Additionally, you will learn how to use animation and AJAX to provide a dynamic responsive web site.

Courses in this collection:

- Introduction to jQuery.
- Events, Manipulating Elements, and AJAX.
- Common Widgets and Animation.

JavaScript Frameworks and Libraries

This learning collection will give the learner a firm grasp of some of the most common and effective frameworks, libraries, and any other tools that are commonly used in JavaScript. Learn the basics of Angular, an enterprise-level framework popular with several IT professionals, as well as React, an open-source library great for building user interfaces. This is only a slice of the pie, as several other JavaScript tools are demonstrated and condensed to provide a full experience for anyone keen to learn the concepts of each and how they assist in JavaScript.

Courses in this collection:

- Introduction to Popular Frameworks.

- Introduction to ReactJS and Grunt.
- Web Application Libraries.
- jQuery and TypeScript.

Angular 6 Development

Angular 6 is an incremental upgrade to Angular that deprecates some older functionality, added some new features, and fixed a lot of bugs. In this path, we'll learn about Angular 6 and how to deploy Angular 6 apps, learn about service workers and how to create reactive apps, use the latest Angular Material components, and delve into unit testing Angular.

Courses in this collection:

- Angular 6 Development: Introduction.
- Angular 6 Development: Libraries.
- Angular 6 Development: Reactive Programming.
- Angular 6 Development: Angular Material and Angular Elements.
- Angular 6 Development: Testing & TDD.
- Angular 6 Development: Dependency Injection and ng-bootstrap.

Reactive Programming with Redux

Redux is an open-source JavaScript library that is generally used to manage application states. Redux is commonly used with React libraries and others like Angular. In this course you'll learn the approach of Reactive programming using various components of React and Redux. This course also covers various advanced concepts with extensive coverages of essential debugging and testing skills for single-page applications and complex applications.

Courses in this collection:

- Reactive Programming Using Redux.
- Build & Integrate React Applications with Redux Capabilities.
- Enhance Reactive Applications with Advanced React.
- Build and Test SPA Using React and Redux.

Advanced AngularJS

AngularJS is an open source JavaScript based web development framework maintained by Google. AngularJS extends HTML and supports the creation of modern, dynamic, single-page applications that run in client browsers. This path of courses covers advanced aspects in AngularJS application development, from handling data on the client side, to AngularJS animations, and securing AngularJS applications.

Courses in this collection:

- Working with Data in AngularJS.
- AngularJS Security Considerations.
- AngularJS and TypeScript.
- AngularUI Companion Frameworks.
- AngularUI Utilities and Modules.

Fundamentals of DevOps

A DevOps organizational structure allows for joint collaborative processes between IT development and IT operations to occur, leveraging an Agile methodology. When implemented, the collaboration and related processes can allow an organization to achieve faster, better software delivery services.

Courses in this collection:

- DevOps Methodologies and Development.
- DevOps Management and Capabilities.
- DevOps Testing and Delivery.

Developing Microsoft Azure and Web Services

Cloud computing is becoming the primary development method for web apps. In this course collection, you will learn the skills and gain the knowledge necessary to leverage developing web apps using the Azure Cloud in the development environment provided by Microsoft.

Courses in this collection:

- Developing Azure and Web Services: Introduction.
- Developing Azure and Web Services: Entity Framework.
- Developing Azure and Web Services: IIS & Web Services.
- Developing Azure and Web Services: Consuming Services.
- Developing Azure and Web Services: Azure Services.
- Developing Azure and Web Services: Azure Storage.
- Developing Azure and Web Services: Messaging, Security, and Troubleshooting.
- Developing Azure and Web Services: Advanced Deployment.
- Developing Azure and Web Services: Diagnostics, Debugging, and ACS.
- Developing Azure and Web Services: Azure Scalability.
- Developing Azure and Web Services: API Management and Monitoring.
- Developing Azure and Web Services: Deployment Strategy.
- Developing Azure and Web Services: Configuring Web Applications for Deployment.
- Developing Azure and Web Services: Working with Assemblies.
- Developing Azure and Web Services: Web API Services.
- Developing Azure and Web Services: Hosting Web APIs.
- Developing Azure and Web Services: Managing Data.
- Developing Azure and Web Services: WCF Transactions & Services.

Besides the courses above, the students have access to:

- TestPrep 70-487: Developing Microsoft Azure and Web Services.
    - To test your knowledge on the skills and competencies being measured by the vendor certification exam. TestPrep can be taken in either Study or Certification mode.
        - Study mode is designed to maximize learning by not only testing your knowledge of the material, but also by providing additional information on the topics presented.
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- Online Mentoring.
    - Mentors are available to help students with their studies for exam 70-487 Developing Microsoft Azure and Web Services. You can reach them by entering a Mentored Chat Room or by using the Email My Mentor service.