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Full-Stack Web Development with React Specialization

Build Complete Web and Hybrid Mobile Solutions. Master front-end web, hybrid mobile app and server-side development in three comprehensive courses.

4.7 6,515 ratings

Jogesh K. Muppala

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 Starts Aug 17

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Financial aid available

15,658 already enrolled

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SKILLS YOU WILL GAIN

Bootstrap (Front-End Framework) Node.js Jquery SASS (Stylesheet Language) Authentication
 Mongodb Express.js

About this Specialization

96,087 recent views

Learn front-end and hybrid mobile development, with server-side support, for implementing a multi-platform solution.

The first two courses in this Specialization cover front-end frameworks: **Bootstrap 4** and **React**. On the server side, you'll learn to implement NoSQL databases using **MongoDB**, work within a **Node.js** environment and **Express** framework, and communicate to the client side through a RESTful API. Learners enrolling in this Specialization are expected to have prior working knowledge of HTML, CSS and JavaScript.

Ideally learners should complete the courses in the **specified sequence**.

Applied Learning Project

Learners will work on hands-on exercises, culminating in development of a full-fledged application at the end of each course. Each course also includes a mini-Capstone Project as part of the Honors Track where you'll apply your skills to build a fully functional project.

Shareable Certificate

Earn a Certificate upon completion

100% online courses

Start instantly and learn at your own schedule.

Flexible Schedule

Set and maintain flexible deadlines.

Intermediate Level

Some related experience required.

Approximately 3 months to complete

Suggested pace of 10 hours/week

English

Subtitles: English, Arabic, French, Portuguese (European), Italian, Vietnamese, German, Russian, Spanish



The courses helped me understand my strengths and weaknesses, and gave me the confidence I needed to quit my job and launch my own startup.

— Zeeshan U.



These courses, from leading institutions all over the world, are only accessible to me through Coursera. I learn something new and fascinating every day.

— Dariya K.



Without Coursera, it would be difficult for skills I need to maintain a consistent pace especially while working full-time.

How the Specialization Works

Take Courses

A Coursera Specialization is a series of courses that helps you master a skill. To begin, enroll in the Specialization directly, or review its courses and choose the one you'd like to start with. When you subscribe to a course that is part of a Specialization, you're automatically subscribed to the full Specialization. It's okay to complete just one course — you can pause your learning or end your subscription at any time. Visit your learner dashboard to track your course enrollments and your progress.

Hands-on Project



Every Specialization includes a hands-on project. You'll need to successfully finish the project(s) to complete the Specialization and earn your certificate. If the Specialization includes a separate course for the hands-on project, you'll need to finish each of the other courses before you can start it.

Earn a Certificate

When you finish every course and complete the hands-on project, you'll earn a Certificate that you can share with prospective employers and your professional network.



COURSE

Front-End Web UI Frameworks and Tools: Bootstrap 4

1

★★★★★ 4.8 6,919 ratings • 2,087 reviews

This course will give you an overview of client-side web UI frameworks, in particular Bootstrap 4. You will learn about grids and responsive design, Bootstrap CSS and JavaScript components. You will learn about CSS preprocessors, Less and Sass. You will also learn the basics of Node.js and NPM and task runners like Grunt and Gulp.

At the end of this course, you will be able to a) Set up, design and style a web page using Bootstrap 4 and its components, b) Create a responsive web page design, and c) Make use of web tools to setup and manage web sites.

This course also includes an honors track that enables you to work on your own project developing a website using Bootstrap 4.

Students enrolling in this course should have prior good working knowledge of HTML, CSS and JavaScript.

COURSE

Front-End Web Development with React

2

★★★★★ 4.7 2,770 ratings • 794 reviews

This course explores Javascript based front-end application development, and in particular the React library (Currently Ver. 16.3). This course will use JavaScript ES6 for developing React application. You will also get an introduction to the use of Reactstrap for Bootstrap 4-based responsive UI design. You will be introduced to various aspects of React components. You will learn about React router and its use in developing single-page applications. You will also learn about designing controlled forms. You will be introduced to the Flux architecture and Redux. You will explore various aspects of Redux and use it to develop React-Redux powered applications. You will then learn to use Fetch for client-server communication and the use of REST API on the server side. A quick tour through React animation support and testing rounds off the course. You must have preferably completed the previous course in the specialization on Bootstrap 4, or have a working knowledge of Bootstrap 4 to be able to navigate this course. Also a good working knowledge of JavaScript, especially ES 5 is strongly recommended.

At the end of this course you will:

- Be familiar with client-side Javascript application development and the React library
- Be able to implement single page applications in React
- Be able to use various React features including components and forms
- Be able to implement a functional front-end web application using React
- Be able to use Reactstrap for designing responsive React applications
- Be able to use Redux to design the architecture for a React-Redux application

COURSE

Server-side Development with NodeJS, Express and MongoDB

3

★★★★★ 4.7 2,244 ratings • 599 reviews

This course deals with all things server-side. We base the entire course around the NodeJS platform. We start with a brief overview of the Web protocols: HTTP and HTTPS. We examine NodeJS and NodeJS modules: Express for building web servers. On the database side, we review basic CRUD operations, NoSQL databases, in particular MongoDB and Mongoose for accessing MongoDB from NodeJS. We examine the REST concepts and building a RESTful API. We touch upon authentication and security. Finally we review backend as a service (BaaS) approaches, including mobile BaaS, both open-source and commercial BaaS services.

At the end of this course, you will be able to:

- Demonstrate an understanding of server-side concepts, CRUD and REST
- Build and configure a backend server using NodeJS framework
- Build a RESTful API for the front-end to access backend services

Instructor



Jogesh K. Muppala

Associate Professor

Department of Computer Science and Engineering

495,176 Learners

12 Courses

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Frequently Asked Questions

› What is the refund policy?

› Can I just enroll in a single course?

› Is financial aid available?

- Can I take the course for free?
- Is this course really 100% online? Do I need to attend any classes in person?
- Will I earn university credit for completing the Specialization?
- How long does it take to complete the Specialization?
- What background knowledge is necessary?
- Do I need to take the courses in a specific order?
- What will I be able to do upon completing the Specialization?

More questions? Visit the [Learner Help Center](#).

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