

Front End Web Development Advanced Syllabus



Contact Info

While going through the program, if you have questions about anything, you can reach us at support@udacity.com. For help from Udacity Mentors and your peers visit the Udacity Classroom.

Nanodegree Program Info

React is completely transforming the Front-End Development landscape. Come master this powerful UI library, and learn career-ready skills with Udacity.

Version: 3.0.0

Length of Program: 110 Days*

** This is a self-paced program and the length is an estimation of total hours the average student may take to complete all required coursework, including lecture and project time. Actual hours may vary.*

Part 1: Introduction to the Program

Welcome to Egypt "Future Work is Digital" initiative. Learn more about the program and how to navigate the classroom.

Part 2: Build Tools & Single Page Web Apps

Before we dive into React, we need to learn about the build tools available for the Web Front End Developers. Although a lot of these tools are abstracted and scaffolded by React, learning how they function can make a Web Front End Developer more comfortable dealing with these tools.

Project: Evaluate a News Article with Natural Language Processing

Build a web tool that allows users to run Natural Language Processing (NLP) on articles or blogs found on other websites.

Supporting Lessons

Lesson	Summary
Intro to Build Tools	Get a brief introduction to build tools, including how they can help ease and advance your web development, and what some of the most common build tools are.
Basics of Webpack	By the end of this lesson you will understand the reasons developers use webpack, and be able to explain at a high level what webpack does.
Sass and Webpack	By the end of this lesson you will be able to explain what Sass is and its relation to CSS, and understand the steps necessary to use Sass in a project.
Final Touches	Add some final pieces to your Webpack project, get your full functionality back, and learn about Service Workers.

Part 3: React Fundamentals

While the modularity of the React ecosystem makes it really powerful for building applications, there is a great deal to learn. In this first course, you will learn the foundational parts of the React ecosystem that are necessary to build production-ready apps. As this is a project-based course, you're going to start building right away. This gives you an opportunity to get your hands dirty with React, and start mastering the skills you'll need.

Project: MyReads: A Book Tracking App

In the MyReads project, you'll create a web application that allows you to select and categorize books you have read, are currently reading, or want to read.

Supporting Lessons

Lesson

Summary

Why React

You'll discover what makes React great. You will compose simple functions together to create complex ones, write declarative code, discover unidirectional data flow, and that React is just JavaScript.

Rendering UI with React

You'll learn how React creates and renders elements. You'll also convert manual element creation to JSX, use create-react-app to scaffold projects, and get a brief intro to Components.

State Management

You'll learn how to pass data into a component, how to create Functional Components, when and how to use PropTypes, and how to create controlled components.

Lifecycle Events

You'll learn where to fetch remote data in a React application. You'll also learn about the different lifecycle hooks and how to use them.

React Router

You'll learn how to add routing to a React app by using React Router. You'll learn about the BrowserRouter, Link, and Route components to dynamically render pages.

Part 4: React & Redux

Redux excels at state management, and in this course, you'll learn how Redux and React work together to make your application's state bulletproof. As with the previous course, this is hand-on curriculum, and building projects are what it's all about. At the end of this course, you'll leverage React with Redux to build a "Would You Rather?" game.

Project: Would You Rather...?

In the "Would You Rather?" Project, you'll solidify your understanding of Redux by building a web app that lets a user play the "Would You Rather?" game.

Supporting Lessons

Lesson	Summary
Managing State	You'll learn techniques to make your state more predictable by moving your state to a central location and establishing strict rules for getting, listening, and updating that state.
UI + Redux	You'll learn to move away from having state live in the DOM by creating a vanilla JavaScript application whose state is managed entirely by Redux.
Redux Middleware	You'll learn to create custom middleware and add it to your Redux store. This middleware will allow you to enhance your store by hooking into and intercepting actions before they reach any reducers.
Redux with React	You'll learn how to add React to a Redux application and have the state of that application be managed by Redux.
Asynchronous Redux	You'll learn to better abstract asynchronous events by creating your own custom Thunk middleware and adding it to your store.
react-redux	You'll learn to leverage the react-redux bindings in order to leverage the benefits of a UI library like React and a state management library like Redux.
Real World Redux	You'll take your knowledge of Redux and utilize it by building a real-world Redux application. You'll also learn advanced Redux topics like reducer composition and normalization.

Part 5: Digital Freelancing - Intro

Get introduced to the world of digital freelancing.

Part 6: Digital Freelancing - Pro

Welcome to the "Digital Freelancing - Pro"! In this part, we will hone your soft skills in order to be able to communicate with your client. You'll learn how to write a project proposal to win your first gig.

Project: Conquer the Freelancing Marketplaces

After finishing the intro and pro parts of the freelancing specialty, you need to submit a comprehensive project that tests your awareness and readiness for the freelancing work's basic requirements.

Supporting Lessons

Lesson

Summary

مخطط البرنامج

Welcome to the "Digital Freelancing - Pro"! In this part, we will hone your soft skills in order to be able to communicate with your client. You'll learn how to write a project proposal to win your

المنصات التخصصية

ستتعرف على أهمية مواقع المنصات التخصصية مثل Github, Behance, Dribbble, Stack Overflow, Kaggle للاستفادة من تجارب الآخرين و أيضا للترويج لعملك كفري لانسر في المكان المناسب.

إنشاء مدونة

إدارة العملاء

عرض العمل (proposal)

مهارات التواصل

التسويق

إدارة المشاريع

الإدارة الذاتية

تطوير المهارات

الإنضمام للوكالات

Part 7: Congratulations and Next Steps



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