



Full-stack Developer

 Mentor individuel  Diplôme de niveau 6 (bac +3/4) *

Become a full-stack developer to write different kinds of code that handle front-end and back-end tasks.

 PÉRIODE DE FORMATION
12 mois à temps plein

 DURÉE DE LA FORMATION
680 heures supervisées

OPENCLASSROOMS

La formation demande un investissement en temps estimé à 1360 heures : 680 heures de formation supervisée (projets encadrés par des mentors) et 680 heures de formation guidée (cours et des ressources pédagogiques). En alternance, la durée totale ne comprend pas le temps passé en entreprise.

La période de formation peut être rallongée en cas de formation à temps partiel. La durée est estimée et dépend du niveau d'entrée en formation, de la disponibilité, du temps alloué par semaine et des capacités et rythmes d'apprentissage de l'étudiant.

*Développeur concepteur logiciel - code NSF 326t - Diplôme de niveau 6 (bac +3/4) - certification professionnelle enregistrée au Répertoire National des Certifications Professionnelles (RNCP) par décision de France compétences publiée le 15/10/2021

At OpenClassrooms, we pinpoint the key skills needed for the most in-demand jobs and develop courses and diplomas to train our students in those areas. That's why we've developed this one-year bachelor's-level diploma in web development, which you can complete entirely online with the help of a dedicated mentor.

What will I do as a full-stack developer?

The full-stack developer can handle both back-end and front-end tasks, although they may not necessarily be an expert in either. If you're torn between learning multiple technologies, this might be the path for you! Full-stack developers may:

- Build a site backend in programming languages such as Ruby
- Use front-end libraries or frameworks
- Manage application deployment and put projects on servers
- Perform sysadmin tasks
- Run SQL queries on databases

Want to deep dive into web development? You can read about it [here](#).

You may be wondering whether to take the **full-stack developer** path or a **more specialized** path! If you're interested in an overview of both front-end and back-end programming, without going deeply into different libraries, then you're in the right place. (Or if you're completely new to programming, consider starting with our associate's-level program, the [Web Developer Path](#), which provides an intro to both the front-end and the back-end.)

If, however, you prefer to attain a **more advanced level** in one type of programming and find a more focused job, we recommend looking into one of our other [development paths](#). Think of the medical world as a parallel. As a doctor, you can be a generalist or a specialist. Generalists can only go so far before specialists need to take over. The same is true for development jobs. **Full-stack developers** can get jobs in **early-stage startups** when there's a need for a developer to do many tasks simultaneously. **Specialized developers** can get jobs in **larger startups** and **large companies** because, by this point, the code base already exists and a more focused talent is required.

How much will I earn?

Web development can be a lucrative career with many prospects opening up as you continue to rack up valuable experience. Here is what you might expect to earn in your career as a full-stack web developer:

United States

Beginner: \$50,000 - \$80,000

2-5 years: \$70,000 - \$90,000

5+ years: \$100,000 +

United Kingdom

Beginner: £30,000 - £40,000

2-5 years: £40,000 - £60,000

5+ years: £60,000 +

Salaries will vary depending on your location or the location of your employer.

What are my job prospects?

This path can prepare you for the following jobs:

- Full-stack developer
- Junior front-end developer
- Junior back-end developer

Who is eligible to enroll?

To be eligible to earn this path's diploma, candidates must demonstrate proof of one of the following prerequisites:

- an associate's degree, or equivalent, in computer science, web development, or software development
- **or** a high school/secondary school degree, vocational certificate, or equivalent, and at least 2 years of professional experience in IT, web development, or software development

All other candidates will need to go through a specific admissions process. These candidates must have:

- an associate's degree, or equivalent, in any subject and at least 1 year of professional experience in any field

- **or** a high school/secondary school degree, vocational certificate, or equivalent in any subject and 3 years of professional experience in any field
- **and** a completed placement test consisting of:
 - OpenClassrooms course completion certificates from [Build Your First Web Pages With HTML and CSS](#), [Think like a computer: the logic of programming](#), and [Manage Your Code Project With Git & Github](#)
 - a personal programming project, accompanied by a 10-minute recorded video that explains the project itself and the code behind it

For all candidates, the admissions process starts with a form to validate the aforementioned prerequisites, as well as the alignment between the candidate's professional goals and this path. Any necessary documents for the candidate's application will be collected via this form. If necessary, an individual interview with the candidate will also be organized.

- **Language:** Candidates whose native language is not English will need to submit proof of a B2 English level on the CEFR scale, an IELTS band score of 6.5, or a TOEFL score of 80.
- **Equipment:** Candidates must also have access to a computer (PC or Mac), headphones, a microphone, a webcam, and a good internet connection for mentoring sessions (3.2 Mbps upload and 1.8 Mbps for download). In addition, to master the skills on this path, you will need to:
 - Have at least 8 GB of RAM (16 GB is more comfortable) and 100 GB of storage space available on your computer.
 - Have administrator rights to your computer in order to install required programs.

What will I learn?

In this path, you'll learn how to:

- Create web projects with JavaScript
- Use React, a popular JavaScript library
- Write backend Ruby code
- Create Ruby on Rails applications
- Integrate React with Ruby on Rails
- Query a database that uses and stores information
- Deploy a website online
- Implement unit and integration tests
- Write project documentation
- Optimize performance
- Analyze a project and choose a technical solution
- Design technical architecture using UML diagrams

How will I learn at OpenClassrooms?

Our learning method is unique and revolves around two elements: **professional projects** and dedicated **mentoring sessions**.

Projects

At OpenClassrooms, learning is [project-driven](#) because that's the fastest way to become proficient. Projects offer hands-on experience so you can hit the ground running when you start your new job.

Want to see an example of a project? Read our blog post [here](#).

Mentorship

During your path, you will be assigned a mentor who will offer one-to-one support via weekly video conference sessions. This mentor will offer guidance on your projects, help define objectives and guide you until you reach them. Our mentors are dedicated professionals who are experts in their field and have experience in sharing their know-how with our students.

Any questions? Contact our student advisors at +44 20 3868 9900 or +1 (929) 376 0101, or [request more information here](#). Opening hours: Monday to Friday 8.30am- 6.00pm UK time, until 1 pm Eastern Time.

Get started with your training

Set yourself up for success in your path. Find out what you are going to learn and get to know your mentor. You will also define your learning goals in this first project!

Compétences cibles

- Prepare for your training

Cours associés



Understanding the Web

 Facile  4 heures

Does the web interest you, but you aren't totally clear on how the whole thing works behind the scenes? Learn internet history, vocabulary, logistics, and more with this course!



Learn How to Learn

 Facile  6 heures

Learning quickly and effectively is a key skill that can improve your learning capacity and help you take control of your personal and professional development.

Projet 2 - 80 heures

Integrate a WordPress theme for a client

Your new client, a real estate agency in the mountains, needs a website to show the chalets they sell. You'll use WordPress to build their site!

Compétences cibles

- Adapt a WordPress theme to client needs
- Select a WordPress theme based on client needs
- Write documentation destined for non-technical users

Cours associés



Build Your First Web Pages With HTML and CSS

Facile

10 heures

Learn to create your first web pages using HTML and CSS, the two most important languages on the web. No coding experience required!



Create Web Page Layouts With CSS

Facile

10 heures

Go beyond basic HTML and CSS skills and learn how to create great layouts using CSS layout techniques!



Build quick and beautiful WordPress sites



Facile



10 heures

WordPress is an indispensable tool for building any type of website. It'll serve you well to know how to launch a good-looking site quickly on the platform.

Analyze a client's needs for their film festival

Learn how to translate the needs of a client into a clear, attainable solution!

Compétences cibles

- Write a project brief
- Choose an appropriate technical solution
- Detail project specifications
- List functionalities requested by the client

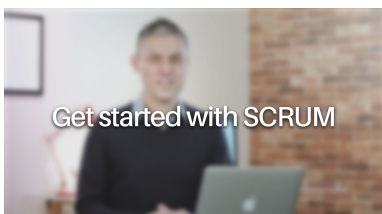
Cours associés



Break Down and Integrate a Mockup

 Moyenne  6 heures

Web developers should be able to break down the mockups they receive from designers. How can they integrate these designs in HTML and CSS?



Learn About Agile Project Management and Scrum

 Facile  6 heures

Learn the principles of agile software development. Discover how a Scrum Team plans a Sprint, builds feedback, creates retrospectives, and holds daily stand-ups.

Projet 4 - 100 heures

Build your portfolio site using React

A portfolio site allows you to show your projects and is a great asset for any developer. Build your first portfolio site using the hottest front-end technology: React!

Compétences cibles

- Build a React single-page app
- Build components with React

Cours associés



Learn Programming With JavaScript

 Facile  15 heures

Build a strong foundation in web development by learning and practicing JavaScript, one of the major programming languages on the web. You'll even create a simple application!



Write JavaScript for the Web

 Moyenne  10 heures

Use your JavaScript skills to build interactive, dynamic web apps. Learn to interact with your users and to leverage external APIs to build rich, immersive user experiences.



Manage Your Code Project With Git and GitHub



Facile



6 heures

Install Git and GitHub and learn basic Git commands to manage your code and deploy your development projects.

Map out a technical solution for the food delivery site ExpressFood

ExpressFood allows people to order their favorite meals and desserts for delivery at home! Help them set up a data structure that ensures no one goes hungry.

Compétences cibles

- Create technical architecture using UML diagrams
- Design a database schema
- Use a schema when designing a database

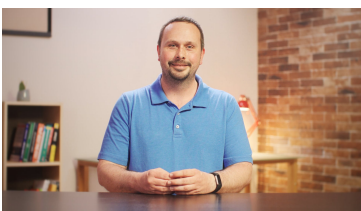
Cours associés



Apply a Domain-Driven Design Approach to Development

 Facile  4 heures

Use DDD to communicate the technical architecture to the various stakeholders in your project, and learn functional modeling using UML use-case diagrams and class diagrams.



Design the Logical Model of Your Relational Database

 Facile  4 heures

Ready to store your application's data? Let's cover the basics of SQL and design the structure of your first relational database with an Entity Relationship Diagram (ERD).



Implement a Relational Database with SQL



Facile



4 heures

Ready to put your database modeling skills to use? Design and build a physical relational database with Structured Query Language (SQL) and learn the tools to manipulate your table data.

Track your fitness habits

Combine a Ruby on Rails back-end with a front-end in React to build a cool activity tracker, allowing you to add activities and monitor your overall fitness trends.

Compétences cibles

- Use Ruby with a database
- Handle user logins securely with the Devise Rubygem
- Perform basic programming tasks with Ruby
- Create a Rails app

Cours associés



Learn the Command Line in Terminal

 Facile

 4 heures

The command line in Terminal is where a lot of programming efficiency happens. Take this course to better communicate with your computer!

Projet 7 - 100 heures

Create a website for a prestigious bike race

Allow people to track riders, see Flickr photos from the event, and more via a site back-end, front-end, and external APIs!

Compétences cibles

- Design a database schema
- Develop a website for a client
- Use an external API in JavaScript
- Write tests that assess the functionality of a program

Cours associés



Build Your Web Projects With REST APIs

 Facile  4 heures

Enhance your web projects with REST APIs by accessing data that can be integrated into your own applications. APIs will add a whole new dimension to your software!

Projet 8 - 100 heures

Build an aid platform for your neighborhood

Help those in need by building a platform that links people needing help with volunteers in the vicinity. You'll create the back-end and front-end yourself, use an external maps API for localization, and make sure the whole thing looks great on mobile.

Compétences cibles

- Deploy Rails apps
- Design wireframes for web or mobile
- Create a Rails app

Cours associés



Learn the Command Line in Terminal



Facile



4 heures

The command line in Terminal is where a lot of programming efficiency happens. Take this course to better communicate with your computer!

Survey the technology landscape

Create your own dashboard to stay up to date on all the latest and greatest tech happenings!

Compétences cibles

- Set up a system for staying up to date with technology
- Identify tools and resources for staying up to date with technology

Cours associés



Stay Up to Date With Innovations in Your Field



Facile



4 heures

Learn how to stay abreast of industry changes, pinpoint areas for professional development, and work more efficiently in the digital age.