

# Web Developer Professional Program

## **PROGRAM OVERVIEW**

Web-based platforms are increasingly becoming the first and primary touch points between businesses and their customers. In an always on, mobile-first, world, the exchanges have the potential to make or break a business' success, both online and offline.

Well-researched user experience design and robust back-end code alone cannot meet this challenge. Companies rely on front-end developers to be the critical bridge that fuses design with code to form the public face online. Front-end developers who are able to effectively communicate across these two dimensions are critical.

Front-end development combines design thinking, effective communication, and rigorous coding skills to produce the vital public-facing side of websites and web apps that allow these tools to help satisfy user needs and meet business objectives.

Front-end developers collaborate with clients, designers, back-end developers and company leadership to interpret a vision into workable, user interfaces. Front-end developers combine the code structures created by back end developers and the look and feel created by user experience designers into working elements. This includes building, debugging and optimizing the associated code to make highly functional, usable, and accessible end products.

The RED Academy Web Developer Professional Program is designed for students who are interested in collaboratively building websites for people and enjoy the challenge of combining abstract and logical thinking to solve problems creatively.

Through the 12 week RED Academy Web Developer Professional Program, you will learn the fundamentals technical skills required of front-end development including HTML5, CSS3, jQuery, JavaScript, AngularJS, PHP, and WordPress. Underpinning the whole course, you will learn how to code in team based environment, set up collaborative workflows, and communicate across different disciplines of the tech industry.

Front-end developers are expected to be on the cutting edge of design, code, and website trends to ensure that a company's online presence is fresh and effective.

Through our deep connection with industry, RED Academy and our instructors have our finger on the pulse of the evolving expectations and skills desired of front-end developers. In this course, you will begin to have the opportunity to build out your skills in the areas where front-end and back-end development often converge. You will develop a high level understanding and appreciation for back-end development,



enabling you to effectively enter a variety of technical teams and evolve your skills to meet industry expectations.

In RED Academy's Web Developer Professional Program, you will learn from top industry professionals, engage in projects with community partners, network and build connections with hiring partners and professionals in your field, and build a robust portfolio with meaningful projects that will help jump-start your career as a front-end developer.

## LEARNING OBJECTIVES AND APPROACH

# What you'll learn

Below is a snapshot of the major topic areas and related learning objectives of the Web Developer curriculum. RED Academy's curriculum is built through deep consultation with industry professional and hiring partners and is designed to be flexible to evolving needs and trends emerging in the tech industry.

#### HTML5 & CSS3

- Build a solid foundation of HTML5 and CSS3 responsive web development skills
- Write well-structured, semantic mark-up with an eye for accessibility and search engine optimization.

## <u>Sass</u>

- Learn how to use CSS preprocessors and draw upon Sass language features to structure workflow
- Use Sass in conjunction with CSS best practices to produce scalable and maintainable CSS code

## <u>jQuery and JavaScript</u>

- Build on and extend basic jQuery and JavaScript skills
- Learn how to interact with popularJSON-based web APIs using Ajax
- Master essential JavaScript language features such as closures, hoisting, and prototypical inheritanceLearn how to use JavaScript to improve development workflows

#### **WordPress**

- Convert HTML-based sites into WordPress custom themes, and master WordPress template tags and the template hierarchy
- Understand the role of a CMS in managing a website
- Learn WordPress essentials including custom post types, custom fields, and custom taxonomies
- Learn the basics of WordPress plugin development by creating custom sidebar widgets



## **AngularJS**

- Learn how to use AnuglarJS expressions, directives, and services to enhance a website's functionality
- Use the MVC architectural pattern to structure a single-page web app

#### PHP

- Learn the basics of the PHP, including an introduction to object-oriented programming
- Use best practices for writing modern PHP
- Understand how PHP, a server-side programming language, differs from JavaScript, a client-side programming language

#### Gulp

Learn how to use JavaScript task runners to help enhance and automate your development

#### Git and GitHub

- Master version control using Git from the command-line, and open-source your code projects on GitHub
- Understand how Git workflows allow for effective collaboration with others

On a practical level, by combining learnings from all the major topic areas, you will be:

- Well-versed in responsive web development
- Highly competent using the front end technologies of the web (HTML, CSS, and JavaScript)
- Familiar with sought-after JavaScript frameworks such as AngularJS
- Comfortable navigating Git-based version control environment and have essential skills for collaborating on projects in teams
- Competent in building custom WordPress themes from scratch for clients
- Literate in essential WordPress APIs as well as basic plug in development concepts

# **BUILD YOUR PORTFOLIO**

Throughout the program, students will apply their learning through individual and group projects. By the end of the program, students will have a minimum of four projects for their portfolio which will display all the skills they have developed from basic HTML & CSS to building an application using AngularJS.

Students will also work on projects with community partners on real organizational web development projects. These projects will form the basis of a portfolio showcasing their skills tailored to the needs of industry hiring partners.



# **HOW YOU'LL LEARN**

## **Community Oriented Learning**

Throughout the course, you will work in small teams of no more than six per instructor. This ratio will allow you to gain individualized support and build a strong sense of community within your cohort.

We believe that motivation and self-direction are the keys to learning. RED Academy regularly has a calendar of events, Meetups, volunteer and learning programs, portfolio sessions, workshops and seminars that you can engage in alongside your peers, instructors, mentors, and alumni.

## **Real Time Application of Technical and Soft Skills**

RED Academy is designed around a real-world agency model. You not only learn the technical skills, but also the soft skills to be successful in the tech industry through working on real projects for community partners in small groups with your peers.

RED Academy offers courses in Digital Marketing Strategy, User Experience, and Web Development, but just like agency environments, our programs do not operate in silos. You will benefit from cross-pollination between programs, gaining an appreciation and understanding of all facets of the tech industry.

RED Academy aims to teach students modern workflows, effective client relations, strategies for working with groups, and communicating across different teams and development stages in the tech industry. These learning outcomes will be integrated throughout your course and exercised in your project work, making you a valuable team member regardless of the career path you choose.

#### **Deep Connection to Industry**

RED Academy's instructors and curricula are on the leading edge of industry. Instructors come directly from industry and are well versed in the latest digital techniques and technologies. RED Academy's curriculum is developed through deep consultation with industry to ensure that our graduates are highly employable, creative technologists ready to enter the workforce.

You will apply your learning daily and work up towards building a robust portfolio. By graduation, you will have a portfolio showcasing your learning outcomes with multiple projects including at least one client facing project for a community partner.



## **Supportive Environment**

It can be daunting to learn technical skills in a group environment. RED Academy recognizes this and has developed a positive and fun space to learn and engage in supportive risk taking.

# **LAUNCH YOUR CAREER**

Upon completion of the Web Developer Professional Program, you will be equipped to enter a career in an agency, start up, or freelance environment as a front-end developer. Having gained a strong foundational understanding of all aspects of front-end development, you will be equipped to work as:

Junior Front End Developer

RED Academy is committed to ensuring your career success. Through our industry hiring partners, RED has developed a curriculum tailored to industry needs from the start, and has engaged hiring partners throughout the program through events, workshops, and networking opportunities. RED Academy also has a career development consultant for students to support students in launching their career and identifying clients, positions, and companies that meet their career development goals.

By the end of the program, you will have a sense of the type of environment you wish to work in and have built connections with leading professionals and companies in your industry to jump start your career.

## **LOGISTICS**

## **Duration of Course**

This course is 12 weeks full-time, running from September 21 to December 11 2015.

#### **Prerequisites**

This program requires students to have basic skills in web development, comparable to graduates of the Web Developer Foundation program. As a part of the admissions process, you will meet with the lead instructor who will assess your skills and readiness for the program.

If you are not confident your skills will meet the entrance requirements, we suggest you apply earlier as our instructors will be able to provide you with pre-work to get you ready for the course.



#### **Admissions Process**

Students interested in enrolling in the Web Developer Professional Program must first complete the application form at <a href="http://www.redacademy.com/registration">http://www.redacademy.com/registration</a>. Suitable students will then have a phone interview followed by an in-person interview.

## **Graduation Requirements**

In order to graduate from the program with the skills and competencies necessary to meet the standards of a competent UX Designer, students must attend a minimum of 90% of lectures and labs and complete all assigned projects.

Students will be assigned individual and group projects to practice and demonstrate their grasp of material taught during classroom instruction. Instructors will have the opportunity to continuously review and assess the quality of the student's work and provide feedback on these projects.

#### **Tuition**

The Professional Program costs \$7,995 for 480 hours of instruction. An Early Bird rate of \$5,995 has been set up for the first 10 places in the class. A non-refundable deposit of \$500 is required upon acceptance into the course to reserve one's place. 50% of payment is due 3 weeks before the course starts and full payment is due before the program begins.

Enrolling in a RED Academy course is an investment in your education and career development. We have priced our programs at a competitive rate that takes into account the rigour and quality of our programs and services. While the cost may be daunting, we have set up payment structures and financing options to help lighten the load. If you have any questions or concerns, please do not hesitate to get in touch with our team.

#### CONTACT

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