Code Oregon Resource Guide
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Free Online Coding Training

The Code Player - http://thecodeplayer.com/

- Skill Level: Intermediate to Advanced
- Available Courses: HTML, CSS3 JQuery, JavaScript
- Course Length: self-paced
- Prerequisites: some coding knowledge

Overview

The CodePlayer helps people learn to code by playing code videos, helping people to learn front end technologies like HTML5, CSS3, JavaScript, JQuery easily, quickly and interactively. The free video "walkthroughs" demonstrate how others have created an effect, element, page or app. The video walkthroughs have control options that allow the student to study the code at his/her own pace.

Tools and Features

- Real-time video "walkthroughs"
- Walkthrough description
- Commenting tool
- Timeline slider for pausing and rewinding
- Links to related walkthroughs
- Search tool

Codecademy - https://www.codecademy.com/

- Skill Level: Beginner to Intermediate
- Available Courses: HTML, CSS, JavaScript,JQuery, PHP, Python, Ruby, Ruby on Rails, SQL, Java
- Course Length: variable
- Prerequisites: none

Overview

Codecademy offers free coding classes covering, the core programming concepts in HTML & CSS, JavaScript, JQuery, PHP, Python and Ruby. Users can also learn the web developer skills needed to build professional websites and applications. All courses on Codecademy are self-paced allowing learning through actively coding. Achievements are rewarded with badges, which can be shared with the site community and employers. Codecademy serves as a good primer for self-starting coders offering a taste of all the major coding languages.

Tools and Features

- Hands-on real-time coding
- Teaching resources and pupil tracking tool
- Q&A support forums
- User progress dashboard
- Badges
- Sharable project portfolio

CODE.org® - https://code.org/

- Skill Level: Beginners
- Available Courses: Basic computer science
- Course Length: self-paced
- Prerequisites: none

Overview

Code.org® is a non-profit dedicated to expanding access to computer science, and increasing participation by women and students of color. Their mission is to have every student exposed to computer science. Courses are available in 30+ languages and focus primarily on school age kids, but there is a value in some courses for adults, especially those brand new to coding. The site also provides links to other coding tutorial sites geared towards kids and beginners.

Tool and Features

- Courses available in 30+ languages
- Video introductions
- Downloadable videos
- Block-based coding using drag & drop instruction blocks
- Reveal code option to reveal blocks in JavaScript
- Basic puzzle-based challenges
- Notes for educators

Low-Cost Online Coding Training

Treehouse - https://teamtreehouse.com/

- Skill Level: Beginner to Intermediate
- Price: $25/month or Pro $49/month (Free 14 day trial)
- Languages/Skills: HTML, CSS, JavaScript, Ruby, PHP, mobile, and responsive design
- Instruction: Video, interactive quizzes and code challenges
- Course Length: self-paced
- Prerequisites: none

Overview

Treehouse offers 1,000+ videos alternating between instructors and screen sharing, focusing on HTML, CSS, JavaScript, Ruby, PHP, mobile, and responsive design. Badges are awarded on completion of each topic. Those new to programming can benefit from the Treehouse guided learning paths with a list of courses to work through. Users can practice their new skills through quizzes and interactive Code Challenges. Each topic has an active forum to discuss course content and get support.

Tools and Features

- Courses organized into "Tracks": learning paths to be completed in a specific order
- Video-based courses
- Project-based approach
- Downloadable videos & transcripts
- Interactive coding exercises to practice new skills
- Career & Business courses
- Active discussion forum

Udacity - https://www.udacity.com/

- Skill Level: Beginner to Advanced
- Price: Subscription options ($200 per month)
- Language/Skills: HTML, CSS, JavaScript, Swift, Hadoop, R, Python Sql, Java, Linux
- Instruction: Videos, exercises, quizzes, hands-on projects and mentoring
- Course Length: self-paced
- Accreditation: Verified Certificates
- Prerequisites: none

Overview

Udacity offers self-paced online courses focusing mainly on vocational technology courses for professionals. Courses, which can be taken individually or as part of a learning track, are developed in-house with input from education and industry experts, and are delivered via short videos, exercise, quizzes, hands-on projects and mentoring. All Udacity courses give you free access to course materials, but for a select number of courses you can enroll in the full course ($200/month). This gives you access to projects, code-review and feedback, a personal coach and verified certificates.

Tools and Features

- 60+ courses
- Paid access to full course experience ($200/month)
- 5 learning tracks of "Nanodegrees" ($200/month; 4 to 6 months)
- Self-paced learn by doing approach
- Short videos, exercises, quizzes, hands-on projects
- Downloadable course materials (videos, transcripts, etc.)
- Consistent course format
- 1-on-1 mentoring for enrolled students
- Discussion forums
- Project portfolio
- Apps: iOS and Android

Code Avengers - https://www.codeavengers.com/

- Skill Level: Beginners
- Price: $19-$39 per course, life-time access to all course $164, free introductory courses
- Language/Skills: HTML, CSS, JavaScript & Python
- Instruction: Text, diagrams, video and interactive exercises and quizzes
- Course Length: Approx. 12 hours
- Verified Certificates
- Prerequisites: none

Overview

Code Avengers provide over 150 hours of interactive online coding lessons on how to build websites, apps and games using HTML, CSS, JavaScript & Python. Each course takes 12 hours to complete, and is geared for both first-time coders or those with a little coding experience to gain the skills to become job ready as a junior web developer. Students learn at their own pace and every task involves actively building real-life apps, games and websites which can be shared with friends. Code Avengers earn online badges for their coding achievements.

Code Avengers currently offer 8 courses covering HTML, CSS, Java Script & Python from beginning to advanced. The courses are made up of 20, 30, or 40 lessons, each one covering a

single topic with 5 tasks to complete to move onto the next lesson. Each task contains a short text and video instruction that introduces a sub topic, and then a series of instructions the user must follow to write code in order to pass the task.

Tools & Features

- 150+ hours of interactive coding lessons
- 8 courses in HTML, CSS, JavaScript & Python
- 100-200 coding exercise and quizzes per course
- Glossary tooltips
- Automated instant coding feedback
- E-mail support
- Badges and points given as rewards
- Teaching resources for educators and parents

Code School - https://www.codeschool.com/

- Skill Level: Intermediate to Advanced
- Price: $29/month & 12 free introductory courses
- Languages/Skills: HTML, CSS, JavaScript, Coffeescript, Node.js, jQuery, Ruby, Rails, Git, SASS, iOS, Objective-C & Responsive Design
- Instruction: Videos, code challenges and screencasts
- Course Length: 1 to 5 hours
- Accreditation: Badges
- Prerequisites: Basic coding

Overview

Code School offers a combination of videos and challenges covering HTML, CSS, JavaScript, Coffeescript, Node.js. Backbone.js, jQuery, Ruby, Rails, Git, SASS, iOS, Objective-C & Responsive Design. The lessons are concise and generally easy to follow although the pace could be considered too fast for some with little coding experience. Enjoyable teaching style and well developed courses focusing on the "learning by doing" approach by means of a code challenge console. Lesson paths each offering 5 to 10 courses guide learners to acquiring specific skills. The Code School platform has an active support forum tagged by lesson and topic. Code School's introductory content is available for free and there are a wide range of free previews primarily consisting of entry-level tutorials and a free "Try jQuery" course.

Tools & Features

- 40+ courses
- Learn by doing approach
- 4 – 20 minute videos with different instructors
- Code challenges for practice
- Learning pathways for specific skills with 5 – 10 courses
- Variable playback speeds on all videos
- Downloadable videos
- Support forum tagged and separated by lesson and topics
- E-mail support

Other Free and Low-Cost Training Options

- **edX courses** (free to audit) - https://www.edx.org/course
- **Free Code Camp** - http://www.freecodecamp.com/

- **MIT Open Courseware** - http://ocw.mit.edu/courses/find-by-topic/#cat=engineering&subcat=computerscience
- **Udemy** - https://www.udemy.com/courses/search/?q=code&price=price-free&view=grid&lang=en
- **W3schools** tutorials and reference - http://www.w3schools.com/
- **YouTube** - https://www.youtube.com/ - Many colleges have open courses posted on YouTube (Berkeley, MIT, Yale, etc.)

Language/Framework Specific Tutorials

- **AngularJS** - W3Schools (http://www.w3schools.com/angular/)
- **Bootstrap -** W3Schools (http://www.w3schools.com/bootstrap/default.asp)
- **Java** - Learn Java Online (http://www.learnjavaonline.org/)
- **JavaScript** - Eloquent JavaScript (http://eloquentjavascript.net/)
- **NodeJS -** Tutorials Point (http://www.tutorialspoint.com/nodejs/)
- **PHP -** W3Schools (http://www.w3schools.com/php/)
- **Python** - LearnPython.org (http://www.learnpython.org/)
- **ReactJS** - Official React Tutorial (http://facebook.github.io/react/docs/tutorial.html)
- **Ruby** - Learn to Program (https://pine.fm/LearnToProgram/)
- **Sass CSS** - The Sass Way (http://thesassway.com/)

Tools

- **HTML Validator** - https://validator.w3.org/
- **CSS Validator** - https://jigsaw.w3.org/css-validator/
- **JavaScript Validator** - JS Lint (http://www.jslint.com/)

Text Editors (free)

- **Atom** - https://atom.io/
- **Brackets** - http://brackets.io/
- **Komodo Edit** - http://komodoide.com/komodo-edit/
- **Notepad++** - https://notepad-plus-plus.org/download/v6.9.html
- **VIM** - http://www.vim.org/download.php

Coding Practice

- **Code Wars** - http://www.codewars.com/
- **CodeEval** - https://www.codeeval.com/
- **CoderByte** - https://coderbyte.com/
- **CodinGame** - https://www.codingame.com/start
- **CodingBat** - http://codingbat.com/
- **DevDraft** - http://www.devdraft.com/
- **Ruby Quiz** - http://rubyquiz.com/

Documentation Resources

- OverAPI - http://overapi.com/
- Read the Docs - https://readthedocs.org/
- Reddit Web Development SubReddit - https://www.reddit.com/r/webdev/
- Web Design Repo - https://rrrepo.co/repo/webdesign

Funding for Training

- RebootNW - http://www.rebootnw.org/
- WorkSource Portland Metro - https://www2.worksourceportlandmetro.org/TrainingEducation.aspx

Job Readiness

Cracking the Coding Interview book by Gayle Laakmann - http://www.amazon.com/Cracking-Coding-Interview-Programming-Questions/dp/098478280X)
Dice Careers - http://insights.dice.com/tech-job-hunting-basics/
Eugene/Springfield: SiliconShire - https://siliconshire.org/
FindBacon Jobs - https://findbacon.com/
JobScan 5 free job scans per month - https://www.jobscan.co/ (Promo to start with additional 10 free scans: https://www.jobscan.co/promo/tenfree)
MIT Career Handbook - https://gecd.mit.edu/resources/career-handbook
MIT Cover Letters - https://gecd.mit.edu/jobs-and-internships/resumes-cvs-cover-letters-and-linkedin/cover-letters
MIT Resumes - https://gecd.mit.edu/jobs-and-internships/resumes-cvs-cover-letters-and-linkedin/resumes
Portland: Mac's List Jobs and Internships - https://www.macslist.org/
Portland: Mac's List Podcast - https://www.macslist.org/category/find-your-dream-job-podcast/
Portland: PDX Pipeline Jobs - http://pdxpipeline.com/jobs/
PortlandTech.org - http://portlandtech.org/
Stack Overflow Careers - http://careers.stackoverflow.com/

Tech Events

Portland: Calagator - http://calagator.org/

Networking and mentorship

Meetup.com - http://www.meetup.com/
Portland: Angular Meetup - http://www.meetup.com/ngpdxers/
Portland: ChickTech - http://www.meetup.com/ChickTech-Portland/
Portland: Code Fellows Events - http://www.meetup.com/codefellowspdx/
Portland: Code Oregon Meetup - http://www.meetup.com/CodeOregon/
Portland: D3JS Meetup - http://www.meetup.com/PDX-D3-js/
Portland: Drupal Meetup - http://www.meetup.com/Hello-Drupal/
Portland: eBay's Tech Tuesdays - http://www.meetup.com/eBay-Tech-Tuesdays/
Portland: Free Code Camp Portland - http://www.meetup.com/Free-Code-Camp-Portland/
Portland: Thursday Night Frontend - http://www.meetup.com/Thursday-Night-Frontend/
Portland: JavaScript Admirers - http://www.meetup.com/Portland-JavaScript-Admirers/

Portland: Mentorship Saturdays - http://www.meetup.com/Mentorship-Saturdays/
Portland: PHP Meetup - http://www.meetup.com/PDX-PHP/
Portland: PyLadies Python Meetup - http://www.meetup.com/PyLadies-PDX/
Portland: ReactJS Meetup - http://www.meetup.com/Portland-ReactJS/
Portland: Ruby on Rails PDX - http://www.meetup.com/ruby-on-rails-pdx/
Portland: Tech Academy Meetups - http://www.meetup.com/Tech-Academy-Portland-Meetup/
Portland: Treehouse Meetups - http://www.meetup.com/Treehouse-Portland/
Portland: Women Who Code - http://www.meetup.com/Women-Who-Code-Portland/

News

Portland Business Journal Tech - http://www.bizjournals.com/portland/industry-news/technology