

# Learning Resources

Pointers to resources for anyone new to the various technologies used at edX.

- [Open edX](#)
- [Python](#)
  - [Free](#)
  - [Not Free](#)
- [Django](#)
- [Databases and SQL](#)
- [HTML/CSS](#)
- [JavaScript](#)
- [Web Platform / Browser Support](#)
- [Multitenancy](#)
- [Docker](#)
- [Git](#)

## Open edX

- [OpenDev](#)
  - [Developer Documentation](#)
  - [Front End Developer Documentation](#)
- [Open edX Tech Radar](#)
  - A visualization of the technologies used in the Open edX ecosystem.
  - It's a radar, so we call the technologies "blips".
  - They're organized by "quadrants" (Techniques, Frontend, Technologies, and Open edX-specific Tech), and arranged into "rings" based on their level of adoption.
  - The radar is generated from this repository: <https://github.com/openedx/openedx-tech-radar>
- [Opaque-keys](#)
  - The important object we use to identify course and course sub-sections/content
  - The format of this object is tricky and the conversion between string and this object can catch you off-guard sometimes.

## Python

### Free

- [Common Python idioms/tricks](#)
- [Explanation of generators \('yield' keyword\)](#)
- [Explanation of decorators](#)
- [Long list of cool Python hidden features](#)
- [Unit test assert methods](#)

### Not Free

- [Learn Python the Hard Way \(great intro\)](#)

## Django

- [Official Django intro and 6-step tutorial](#)
- [Django Girls Tutorial](#) (Really gentle introduction, but easy to flip through if you're more experienced)
- *Two Scoops of Django 1.8* (book)
- [CodeSchool.com: Learn Django](#) (This is a long series of videos)
- [PythonAnywhere](#) is a good (and free) place to host experimental / learning projects
- [Explanation of call order in class-based views](#)
- [Visual representation of call order in class-based views](#)
- [Overview of the different generic class-based views](#)
- [Django REST Framework Tutorial](#)

## Databases and SQL

- <https://www.edx.org/course/databases-5-sql>
- <https://www.edx.org/course/introduction-to-sql-2>

## HTML/CSS

- Official [Sass Tutorial](#)

## JavaScript

- [MDN JavaScript reference](#)
- [Official introduction to Backbone.js](#)
- Crockford's "JavaScript: The Good Parts" [book](#) or [PluralSight course](#)
- Specific topics
  - [Understand JavaScript's "this" With Clarity, and Master It](#)
  - [A Beginner's Guide to JavaScript's Prototype](#)

## Web Platform / Browser Support

- [Mozilla Developer Network](#)
- [CanIUse](#)

## Multitenancy

Read up on pros and cons of multi-tenant architectures (white label sites are multitenant today; we struggle with some of the challenges):

- [Wikipedia: Multitenancy](#)
- [Multi-tenant Vs. Single-tenant Architecture \(SaaS\)](#)
- [Multi-tenancy in the cloud: Why it matters](#)
- [Single Tenant vs Multi Tenant Business Software](#)
- [Learn Django sites framework](#)

## Docker

- [How to set up our devstack environment using Docker](#)

## Git

- [Great, simple cheat sheet](#)
- [Interactive 15-minute git intro](#)
- [Interactive git branching game](#)
- [edX guide to rebasing and squashing](#)
- [How to recover if you rebase incorrectly / otherwise mess up your branch history](#)
- [edX intro to git](#)