

## Javarevisited

Blog about Java, Programming, Spring, Hibernate, Interview Questions, Books and Online Course Recommendations from Udemy, Pluralsight, Coursera, etc

Home core java spring hibernate collections multithreading design patterns interview questions coding data structure OOP java 8 books About Me

Java Certifications JDBC jsp-servlet JSON SQL Linux Courses online resources jvm-internals REST Eclipse jQuery Java IO Java XML

WEDNESDAY, SEPTEMBER 18, 2019

### The 2019 DevOps Developer RoadMap - Your Guide to become DevOps Engineer

DevOps is really hot at the moment and most of my friends, colleagues and senior developers I know are working hard to become a DevOps engineer and project themselves as DevOps champion in their organization. While I truly understand the benefit of [DevOps](#), which is directly linked to improved software development and deployment, from my limited experience I can say that it's not an easy job. It's very difficult to choose the right path in mind of so many tools and practices. Many of my readers also ask me this question is how to become a DevOps engineer, which tools should I learn? which practices should I follow? does learning Maven and Jenkins must for a DevOps guy? **how about Docker and Kubernetes?** Does infrastructure automation part of DevOps? should I learn Chef, Puppet, or Ansible are just some of those questions which keep coming to me.

I have tried hard to answer those with my minimal experience but I couldn't jot down in the manner which is simply awesome and reusable but not to worry, today I am going to share with you an awesome resource which will help you to become the DevOps Engineer you always wanted to be, the **2019 DevOps RoadMap**.

I was casually surfing through internet yesterday when I come across [this](#) excellent GitHub page by [Kamranahmedse](#), which shows a couple of useful roadmaps to become a front-end developer, back-end developer, a full-stack web developer and last but not the least, the DevOps Engineer.

This RoadMap is awesome in any sense as it not only highly what is the role of a DevOps engineer but also tells which tool you need to learn to cover that area. On top of that, it's really visually appealing with nice colors, so you can just take a printout and stick in your desk for easier reference.

In order to complete the roadmap, I have also shared some useful online courses so that you can learn and improve the tool or area you want.



### The 2019 DevOps RoadMap for Developers

Anyway is the 2019 DevOps RoadMap I am talking about:



Follow by Email

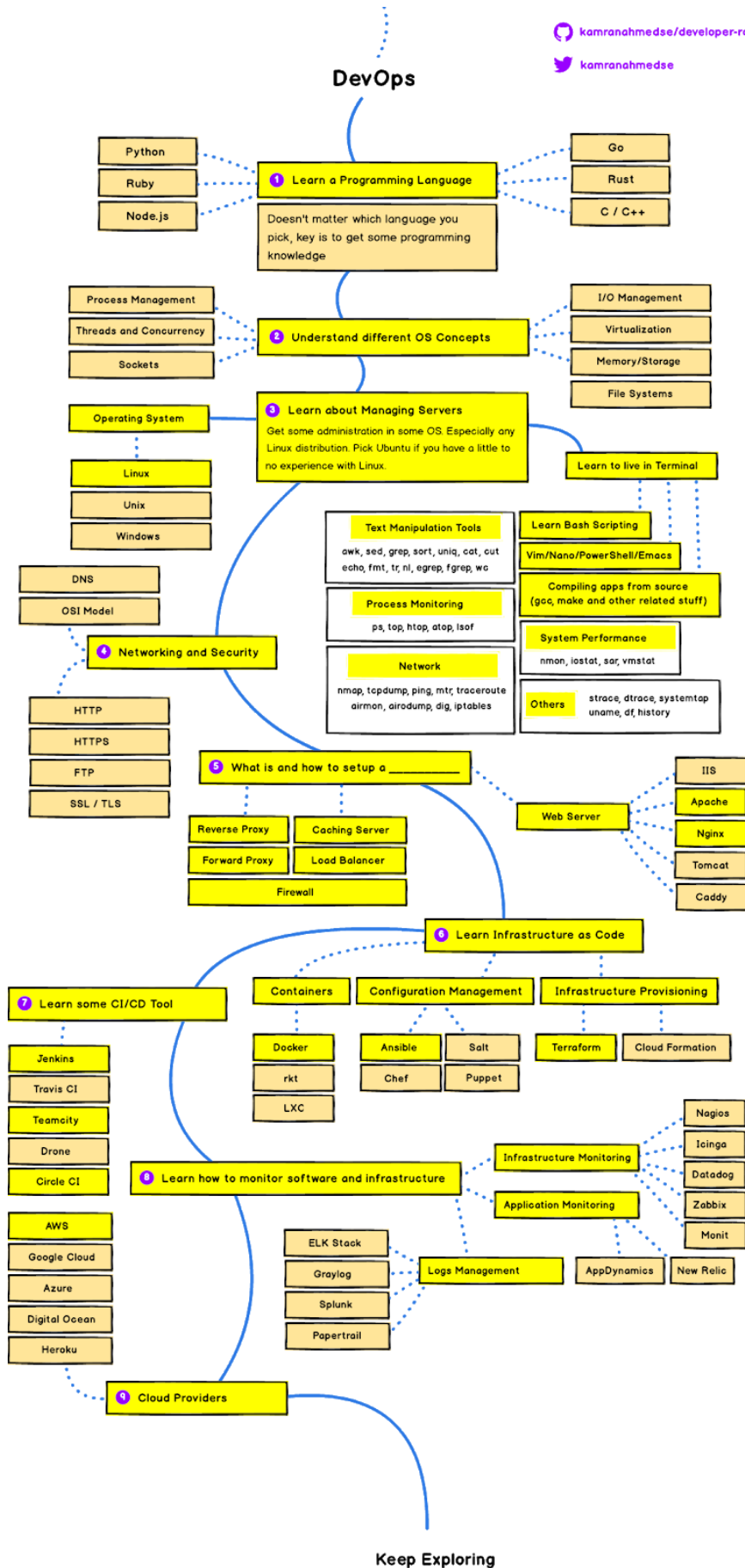
Email address...



Interview Questions

core java interview question (169)  
Coding Interview Question (72)  
data structure and algorithm (70)  
interview questions (48)  
object oriented programming (31)  
SQL Interview Questions (30)  
design patterns (30)  
thread interview questions (30)

[kamranahmedse/devops-roadmap](https://github.com/kamranahmedse/devops-roadmap)  
[kamranahmedse](https://twitter.com/kamranahmedse)



[collections interview questions \(25\)](#)

[spring interview questions \(19\)](#)

[database interview questions \(16\)](#)

[servlet interview questions \(15\)](#)

[Programming interview question \(6\)](#)

[hibernate interview questions \(6\)](#)

## AWS Disaster Recovery K

Get the AWS Disaster Recovery now. (Includes 2 white papers : \$100 AWS credit).

## Best of Javarevisited

[How Spring MVC works internally?](#)

[How to design a vending machine in Java?](#)

[How HashMap works in Java?](#)

[Why String is Immutable in Java?](#)

[10 Articles Every Programmer Must Read](#)

[How to convert lambda expression to method reference in Java 8?](#)

[10 Tips to improve Programming Skill](#)

[10 OOP design principles programmer should know](#)

[How Synchronization works in Java?](#)

[10 tips to work fast in Linux](#)

[5 Books to improve Coding Skills](#)

## Free AWS Disaster Recover

Everything you need to disaster-proof your AWS data - 2 guides + \$100 AWS credit

## Java Tutorials

[date and time tutorial \(21\)](#)

[FIX protocol tutorial \(15\)](#)

[Java Certification OCPJP SCJP \(26\)](#)

[java collection tutorial \(73\)](#)

[java IO tutorial \(28\)](#)

[Java JSON tutorial \(12\)](#)

[Java multithreading Tutorials \(56\)](#)

[Java Programming Tutorials \(18\)](#)

[Java.xml tutorial \(16\)](#)

[JDBC \(29\)](#)

[jsp-servlet \(37\)](#)

[online resources \(155\)](#)

Now, let's go through the RoadMap step by step and find out how can we learn the essential skills require to become a DevOps guru in 2019:

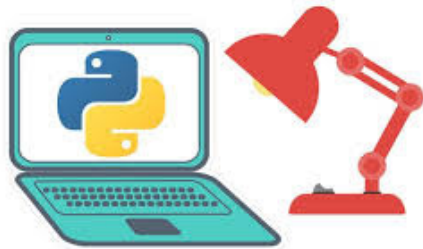
## 1. Learn a Programming Language

Obviously and I assume you guys definitely know one of the three main programming language i.e. Java, Python, or JavaScript. If you didn't, don't worry you can take a look at below courses to learn your choice of language, though I strongly suggest you to learn at least one of these three major general purpose programming language.

If you want to learn Java then [The Complete Java MasterClass](#) is a great course, which is also recently updated for Java 10.



If you want to learn Python, then [The Complete Python BootCamp](#) is my favorite resource, which will teach you Python 3, the most popular version of Python.



And, if you want to learn JavaScript then you should not look beyond Mosh Hamdani's [JavaScript Basics for Beginners](#) course on Udemy.



If you need more choices and don't mind learning from free resources then you can always take a look at my list of free [Java](#), [Python](#), and [JavaScript](#) courses.

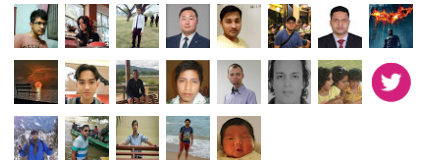
## 2. Understand different OS concepts

This is where the Ops part coming in, earlier it was solely supported guys and sysadmin people who were responsible for knowing about OS and hardware, but with DevOps, now developer also needs to know them. You at least need to know about Process Management, Threads and Concurrency, Sockets, I/O Management, Virtualization, Memory storage and File systems as suggested in the roadmap.

Since most of us work in Linux, I suggest you go through the [Linux Administration BootCamp](#) course on Udemy to learn and understand Linux OS better.

### Followers

Followers (4811) [Next](#)



[Follow](#)

Subscribe to Download the E-book



Download  
The E-book

Building a REST API with  
Spring 4?

Email address...

[Submit](#)

### Categories

[courses \(93\)](#)

[SQL \(55\)](#)

[linux \(38\)](#)

[database \(36\)](#)

[Eclipse \(28\)](#)

[Java Certification OCPJP SCJP \(26\)](#)

[JVM Internals \(23\)](#)

[jQuery \(18\)](#)

[REST \(17\)](#)

[Maven \(12\)](#)

[Testing \(11\)](#)

[general \(11\)](#)



If you need more choices and you don't mind learning from freely available resources then you can also take a look at this list of [free Linux courses](#).

### 3. Learn to Live in terminal

For a DevOps guy, it's important to have a good command in command line, particularly if he is working in Linux. Knowing some Linux shell like Bash, or Ksh and tools like [find](#), [grep](#), [awk](#), [sed](#), [lsof](#), and networking commands like [nslookup](#) and [netstat](#) is mandatory.

If you feel you need to refresh these commands and tools then you should join the [Linux Command Line Interface \(CLI\) Fundamentals](#) course on Pluralsight.

#### lsof

- More a debug tool, [lsof\(8\)](#) shows file descriptor usage, which for some apps, equals current active network connections:

```
# lsof -lTCP -cTCP-65535
COMMAND PID USER FD TYPE DEVICE SIZE/OFF NAME
sshd 755 root 2r IPv4 1357687 0d TCP bgsnag-test-4-1106:ssh->prod100.net.flix.com
15241 (sshd:3388)
plattform 2614 appl 8u IPv4 16618 0d TCP localhost:33668->localhost:5433 (sshd:3388)
postgres 2668 appl 7u IPv4 16619 0d TCP localhost:5433->localhost:3388 (sshd:3388)
epic_play 2887 appl 7u IPv4 15678 0d TCP localhost:3388->localhost:5433 (sshd:3388)
postgres 2892 appl 7u IPv4 15679 0d TCP localhost:5433->localhost:3388 (sshd:3388)
[-]
```

- I'd prefer to: `echo /proc/PID/fd | wc -l`

It's a good refresher for both beginner and experienced Linux users. You will need a [Pluralsight membership](#) to access the course which cost around \$29 per month or \$299 per year but it's worth it.

Pluralsight is like developer's Netflix, it has more than 6000 high-quality courses on latest technology which means you can learn anything and anywhere. I mostly learn while travelling and commuting.

Btw, If you need more choices and want to become master on shell scripting, you can also take a look at my list of [best courses to learn shell scripting](#).

### 4. Networking and Security

Gone are the days of isolation, in today's world, everything is connected to everything which makes networking and security very important. In order to become a good DevOps engineer, you must know about basic networking and security concepts like DNS, OSI Model, [HTTP](#), [HTTPS](#), [FTP](#), [SSL](#), [TLS](#) etc. In order to refresh this concept, you can take a look at this course on Pluralsight.

### 5. What is and how to setup

As a DevOps champion, you should know what is set up in your machine and how you can set that up, only that you can think about automating it. In general, a DevOps engineer should know how to set up a Web Server like IIS, [Apache](#), and [Tomcat](#). He should also know about Caching Server, Load balancer, Reverse Proxy, and Firewall etc.

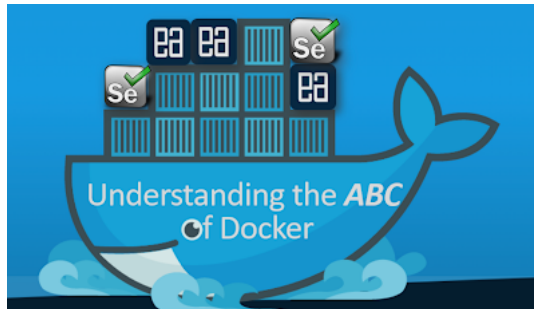
#### Blog Archive

- ▼ 2019 (259)
  - November (38)
  - October (62)
  - ▼ September (44)
    - Top 5 Web Development Frameworks for Python Progra...
    - Top 5 courses to learn Programming and Coding in ...
    - Top 5 Spring Boot Features Java Developers Should ...
    - Top 5 Google Cloud Platform (GCP) Courses and Cer...
    - Top 20 Libraries and APIs Java Developer should kn...
    - Top 10 Udemy Programming Courses and Certification...
    - Top 5 Courses to Crack the PMP (Project Management...
    - 10 Free Websites to Learn Git Online for Beginners...
    - These are the best Book to Learn Java 8 in 2019?
    - Top 10 Free Courses to Learn Python in Depth - Bes...
    - Python vs JavaScript - Which is better to learn Pr...
    - Top 5 Books to Learn Concurrent Programming and Mu...
    - Top 5 Courses to learn D3.js - The best JavaScript...
    - Top 5 Career Options for Experienced Java Programm...
    - Clean Code by Uncle Bob - Book Review - Must read ...
    - Top 5 Courses to learn Microsoft Excel Macros, VBA...
    - 10 Web Development Frameworks Full-Stack Software ...
    - Top 10 Big Data and Hadoop Tutorials, Books, and C...
    - How to Crack Java Programming Interviews in 2019? ...
    - Top 10 courses to Learn Angular and React in 2019...
    - Top 5 Courses to Learn Unity Game Development in 2...
    - How to Find Multiple Missing Integers in Given Arr...
    - Top 5 Courses to Learn Flutter in 2019 - Best of L...
    - Is "Java Concurrency in Practice" Still Valid in t...
    - The 2019 DevOps Developer RoadMap - Your Guide to ...
    - Teachable and Thinkific vs Udemy? Which Platform ...
    - Top 5 MongoDB Online Training Courses for Programm...
    - Top 5 MySQL Courses for Programmers and DBAs to Le...
    - Why Every Programmer or Blogger should Create Onli...
    - Top 5 Courses to Learn Web Development in 2019 - B...
    - Top 5 NoSQL Databases Programmers Should Learn in ...
    - How to avoid deadlock in Java?
    - Top 5 Courses to Learn SOA (Service Oriented Archi...
    - 10 Things Every Programmer and Software Developers...
    - CodeCademy vs Udemy vs OneMonth - Which Platform B...
    - The 2019 React Developer RoadMap - Guide to become...
    - Top 5 Object Oriented Programming and Design Cours...

## 6. Learn Infrastructure as code

This is probably the most important thing for a DevOps engineer and this is a very vast area as well. As a DevOps engineer, you should know about containers like [Docker](#) and [Kubernetes](#), Configuration management tools like Ansible, Chef, Salt, and Puppet, Infrastructure Provisionings like Terraform and Cloud formation. Here are some of my recommended courses to learn these tools.

If you want to learn Docker then the [Docker Mastery: The Complete Toolset](#) From a Docker Captain course on Udemey is the best course to start with. It provides comprehensive coverage of all the tools a DevOps engineer will need.



If you want to learn Kubernetes then I suggest you join the [Learn DevOps: The Complete Kubernetes course](#). This will teach you how to build, deploy, and manage Kubernetes.



And, if you want to learn Chef then there is no better course then [Chef Fundamentals: A Recipe for Automating Infrastructure](#) on Udemey. Probably the best course to learn Chef at this moment.



If you need more choices on Docker, you can explore this list of [10 essential courses for DevOps Engineer](#).

## 7. Learn some Continuous Integration and Delivery (CI/CD) tools

This is another very important thing for DevOps gurus and champion, i.e. to set up a pipeline for continuous integration and delivery. There are a lot of tools in the CI/CD area e.g. Jenkins,

How to parse JSON with date field in Java - Jackso...

Top 5 Java Multithreading and Concurrency Courses ...

How to Ignore Unknown Properties While Parsing JSON...

Top 5 Statistics and Mathematics Courses For Data ...

Top 5 Online Training Courses to Learn Vue.js Java...

Top 5 courses to Learn Docker and Kubernetes in 20...

Top 30 Eclipse Keyboard Shortcuts for Java Program...

- August (34)
- July (26)
- June (14)
- May (18)
- April (11)
- March (5)
- February (1)
- January (6)
- 2018 (40)
- 2017 (774)
- 2016 (109)

### References

1. [Oracle's Java Tech Network](#)
2. [jQuery Documentation](#)
3. [Microsoft SQL Server Documentation](#)
4. [Java SE 8 API Documentation](#)
5. [Spring Documentation](#)
6. [Oracle's Java Certification](#)
7. [Spring Security 5 Documentation](#)

### Pages

[Privacy Policy](#)

Copyright by Javin Paul 2010-2018. Powered by [Blogger](#).



But, I strongly recommend learning at least Jenkins, as it's most widely used and probably the most mature CI/CD tool in the market. If you don't know Jenkins then this course is best to start with.

6/8

Thanks for reading this article so far ... Good luck on your DevOps journey! It's certainly not going to be easy, but by following this roadmap and guide, you are one step closer to becoming a DevOps engineer.

Other **Programming Articles** you may like

[10 Reasons to Learn Python in 2019](#)  
[10 Programming languages You can Learn in 2019](#)  
[10 Tools Every Java Developer Should Know](#)  
[10 Reasons to Learn Java Programming languages](#)  
[10 Frameworks Java and Web Developer should learn in 2019](#)  
[10 Tips to become a better Java Developer in 2019](#)  
[Top 5 Java Frameworks to Learn in 2019](#)  
[10 Testing Libraries Every Java Developer Should Know](#)

Please consider entering subscribing to this blog if you'd like to be notified for every new post, and don't forget to follow [javarevisited](#) on Twitter!

All the best for your DevOps Journey !!



## The Ultimate AWS Starter Kit

Disaster-Proof Your AWS Data with this free starter kit

N2WS

By javin paul at [September 18, 2019](#)

Labels: [best of javarevisited](#), [courses](#), [DevOps](#), [online resources](#)

### 5 comments :

[William Leeson](#) said...

This really is in which the Ops component arriving, previously it had been exclusively backed men as well as sysadmin individuals who had been accountable for understanding regarding OPERATING SYSTEM as well as equipment, however along with DevOps, right now creator must also [Redirect Http to Https](#) understand all of them.

[December 13, 2018 at 7:08 AM](#)

[William Leeson](#) said...

Great nice.

[December 13, 2018 at 7:39 AM](#)

[Unknown](#) said...

Really awesome article and flowchart. I know there's a ton of other tools and tooling categories out there and new ones emerging, like orchestration/cluster management with tools like Kubernetes and Nomad. Is that stuff more of an extra bonus would you say? Service discovery + service mesh and secrets management are two others that might be useful.

[April 4, 2019 at 7:53 AM](#)

[Anonymous](#) said...

It's really great article but I am bit confused that it's about making someone as DevOps Engineer or a multitasking Labor. Will all that a person can keep remembered?

[May 26, 2019 at 10:04 AM](#)


[javin paul](#) said...

DevOps is a very important role and mostly senior developer who has good knowledge of business, domain, architecture, infrastructure and tools play that role

[May 26, 2019 at 6:26 PM](#)

### Post a Comment

Enter your comment...

 Comment as: hakobhn@gma ▾

Sign out

Publish

Preview

☐ Notify me

[Newer Post](#)[Home](#)[Older Post](#)Subscribe to: [Post Comments \(Atom\)](#)

Search This Blog

Search