DevOps Engineer Versus Software Engineer: Comparative Essay

A new buzzword with a culture of combining operations and developments is rocking the industry in recent years. It is has eventually outdone the traditional software development in many ways. There are many benefits and advantages that traditional software development is a thing of the past. But, many organizations are now adopting this new culture to develop, manage, operate, and monitor software. Yes, we are talking about DevOps.

However, being a software engineer or a DevOps engineer has its pros and cons that we will discuss below. Lets us discuss the Software Development Life Cycle and DevOps Life cycle Management. Learn DevOps at StarAgile institute by taking up the DevOps certification training.

SDLC is a development of software by various models of software development such as agile, scrum, waterfall model, etc. DLCM is the culture that combines operations and development with continuous integration and a continuous delivery pipeline. DLCM consists of a plan, code, build, test, release, deploy, operate, and monitor as phases. Here the code is committed in the version control repository very often and frequently released or deployed in the production. The waterfall model which is very often used in the SDLC is the sequence of steps by which the software is developed and deployed in the production. Here the preceding activity is completed and then the current activity is started and so on. Each activity depends on the completion of the preceding activity. Let us now discuss the difference between the roles of a software engineer and a DevOps engineer.

Who is a Software Engineer?

A software engineer is one who develops software and applications as per the phases of SDLC. They see the big picture of working with fellow developers with collaboration and work in the teams to make the applications as desired by the customers. They generally apply engineering principles and mathematics to overcome the issues and solve them. They are usually computer science graduates who know algorithms, software engineering, programming or coding, and scripting knowledge.

Job role, salary, and career growth of a software engineer

Role of a software engineer - It deals only with developing software by applying engineering principles, mathematics, and algorithms.

Salary - As per the PayScale data, the median annual salary of the software engineers is $84,336 according to the September 2019 analysis. The top 10% however earn around $125,000 per annum. The growth is estimated to be an average of 21% year on year between 2018 till 2028.

Growth Prospects - There are 2 branches to the growth of software engineers one is that of software architect who specializes in programming, coding, and scripting and knows one or

more programming languages such as Java, C/C++, Python, Ruby, Bash, etc. And the second-growth path is that of the project manager who has more of project management skills and is certified in PMP or Prince2 etc.

What makes you a DevOps Engineer?

DevOps engineering is a new part of the computer science field that combines operations and development in one field. The DevOps engineers are part of the DevOps culture that arouse as the software development became complex and there was massive overhead to the operations people.

The DevOps engineers are tech-savvy people who work end to end from development, testing, production, maintenance, and monitoring of the software applications. So they generally begin with software development and goes on to require multiple skills that of coding, scripting, automation, tools, communication, collaboration, and business skills to oversee the design, and distribution, manage teams and test user interfaces, etc.

Make use of the DevOps course online at StarAgile and leverage your skills to become a DevOps engineer and take your career to new heights.

Responsibilities, Salary, Skills, and career prospects of DevOps engineer

Responsibilities - DevOps engineer has increased responsibilities than that of a software engineer in that he needs to manage the end to end process of development and operations, manage the teams, need collaborating skills, good communication, automate the manual and repetitive and complex work, need coding and scripting skills to customize the automation of tools and have passion towards not only developing software but manage and monitor them in production. Explore and learn DevOps skills by taking DevOps online certification at StarAgile institute.

Salary - As per the recent survey and analysis by PayScale Inc the median salary of DevOps engineers is around $93,000 per year and while the top 10% earn approximately $135,000 per year

Skills - The DevOps engineers as discussed must have varied skills that of software development, coding, testing, automation, working with DevOps tools, scripting, managing and monitoring software in the production, etc. Apart from these technical skills there are some soft skills required such as empathy, leading teams, managing teams, having business skills, good communication, good collaboration skills, and working in a team setup.

Career Prospects - DevOps engineers is having many roles in themselves. However, DevOps engineer can grow in 2 lines they are DevOps architect who specializes in one or more of the DevOps technical lines. The second is that of DevOps consultants who grow as the advisory to the issues and problem resolution and business consultancy.

If you are a beginner to travel in the DevOps career path, then take a look at some DevOps projects to understand the difference DevOps makes in development.

DevOps engineer Vs Software engineer

DevOps Engineer Vs Software Engineer

Serial # Categories DevOps engineer Software engineer

1. Definition Software development + Operations combined Deals with software engineering
2. Average Salary in US $84,000 per year $97,000 per year
3. Skills required Good Communication,
    1. Collaboration,
    2. Business Skills,
    3. Team building,
    4. Empathy,
    5. DevOps tools,
    6. Automation skills,
    7. Software Operations,
    8. Software Development skills, coding and scripting etc. Software Engineering,
    9. Mathematics,
    10. Algorithms etc.
4. Growth prospects DevOps Architect,
    1. DevOps consultants Software Architect,
    2. Project Manager
5. Types Work with frequently committing code and release software frequently Work generally with agile or waterfall model which works with doing each phase in sequence
6. Benefits Faster delivery of code,
    1. Cost Reduction
    2. Fewer errors and bugs
7. Usage Used for complex code development Generally used for simple software development
8. Profiles Any Graduate with the above skills and to know the concepts of computer science Computer Graduate with computer engineering skills

Final Thoughts

We have discussed above the difference between a DevOps engineer and a Software engineer. However, we need to understand that they both require that you need to build skills in computer science and software skills. StarAgile institute has various training programs in agile, scrum, project management, and DevOps skills.

We stress the importance of getting trained in the DevOps certification course because many organizations developing and operating software are transitioning to DevOps culture. It is predicted that the DevOps market will reach around $10.30 billion by 2023 a Compounded Annual Growth Rate (CAGR) of 24.7%. Because of the benefits that DevOps adoption provides the growth rate is very high in DevOps. StarAgile provides an online DevOps course that can be taken at the convenience of home and office.