



STUDENT ACTIVATION

Director of Software Engineering

Software:

the programs and operating information used by a computer.

Engineer:

a person who designs, builds and maintains structures or systems.

Software Engineer:

an engineer specializing in designing, building and maintaining software.

What if you could create an app to solve a problem and make the world a better place? Better yet, what if you had a whole team to help you? In addition to designing quality computer programs that are safe and efficient, a **director of software engineering** provides the experience, leadership and communication skills to help your company achieve its goals.

WHAT IS A DIRECTOR OF SOFTWARE ENGINEERING?

The **director of software engineering** is a leadership role. This individual leads one or more teams in the company. They help to coordinate team members to plan and complete projects. They also serve as technical advisors for the teams that report to them. A day in the life of a director of software engineering may involve reviewing current **software** designs, recommending actions, preparing reports, and meeting with various stakeholders. It may also involve supervising and training new staff.



Director of Software Engineering

STUDENT ACTIVATION (Continued)



IS THIS A GOOD CAREER FOR ME?

Me	Director of Software Engineering
I have a curious mind. I like to predict and solve big problems.	They are curious problem-solvers.
I enjoy explaining things. I like working with others.	They are strong communicators. They enjoy working with teams.
I am organized. I like following directions and procedures step-by-step.	They are organized and methodical, often overseeing the work of multiple teams.
I am interested in school subjects like technology, math, and science.	They study computer science, physics, calculus, and engineering.

How can a Director of Software Engineering help me?	How can a Director of Software Engineering help the world?
A director of software engineering helps make sure that you have a positive experience when using an application or program. They ensure that your programs run without errors and do what they are supposed to do. A director of software engineering works with a team to design software solutions to help customers.	A director of software engineering works with their team and clients to create products that meet the needs of people around the world. The programs and applications they bring to life can help to tackle global problems and challenges.

WHAT ARE SOME SIMILAR CAREERS?

Director or Vice President of Software Development makes decisions that bring the company closer to its goals. They develop detailed plans and manage the quality of the programs being created. They also ensure that programs are safe as well as convenient. Lastly, these company leaders must have the ability to communicate software solutions in a clear and concise way.



Director of Software Engineering

STUDENT ACTIVATION (Continued)



HERE ARE SOME WAYS TO PRACTICE THE SKILLS NEEDED TO BE A SUCCESSFUL DIRECTOR OF SOFTWARE ENGINEERING:

- Think of something in your life that you want to keep safe and secure. It could be your computer password or even your home. Make a list of what you currently do to keep that thing safe. Then make a list of ideas to make it even safer.
- Practice being clear in your own communications. Reflect on a time when you could have made a request or given advice more clearly. Write in a journal what you would say if you had the chance for a "do over."
- Research a recent widespread data breach. Investigate what kind of data was stolen or damaged. Then make some recommendations about how businesses and individuals can protect their information in the future.
- Practice using a planner or calendar to keep track of your projects, assignments, and responsibilities. Remember to include checkpoints along the way to completion!



DO YOUR OWN RESEARCH ON THE TOPIC OF SOFTWARE ENGINEERING

How can we help people safely enjoy their favorite programs? How can we help when the program doesn't work the way it should?

