Exercise: DevOps Planning & Research

You are starting as a Junior DevOps in a IT Company. You get assigned to a new Project that develops software solutions for Banking systems. Currently, you are single devoted DevOps engineer on that project with mixed team members (Devs, QA, PM’s etc). Before the Kick-off of the Project, you are given the task to plan and research the best practices for the project.

1. Explain what steps you are taking for planning and research?

- Planning and research for the project can involve many different steps and processes. To begin with, I would start by researching what the banking systems require in terms of software solutions. This involves understanding the needs of the project, the target audience, and the current technologies and standards that are used in banking systems. After I have a good understanding of the requirements of the project, I would then research DevOps best practices that are best suited for the project. This would include researching and understanding the principles of DevOps and the benefits it can provide. I would also research the most current technologies, tools, and processes that are available to support DevOps. This plan should include tasks such as setting up and maintaining development/testing/production environments, automating CI/CD pipelines, creating reports, monitoring performance and debugging, and selecting and integrating tools.

1. How would you describe the process for DevOps best practices to your colleagues?

- When describing the process of DevOps best practices to my colleagues, I would explain that DevOps is a set of practices that focus on improving collaboration and communication between development and operations teams. It helps to streamline the process of software development and deployment. I would also explain that DevOps practices involve automating processes and using tools to make development and deployment easier and more efficient. I would use everyday examples to make the process clearer and more understandable.

1. How would you organize your time for planning and research?

-To organize my time for planning and research, I would start by setting out a timeline for the project. This would include setting deadlines for completing the research, developing the plan, and presenting it to the team. I would also create a schedule of tasks that need to be completed to reach the deadlines. I would make sure to allocate enough time for researching DevOps best practices and for developing a plan that is suitable for the project. I would create a daily to-do list as well in order to keep track and focus on one small task at a time.

1. What methods and tools are you using during this process?

-During the process, I would be using a variety of methods and tools. These would include researching DevOps best practices, reading articles and documentation related to DevOps, attending workshops and seminars, and consulting with experts on DevOps. As for tools, I would be using automation tools, version control systems, and other DevOps-related tools to help manage the development process. For the planning phase I would use an Agile tool to empower the entire software team to gather ideas and conduct research. This will help in prioritizing and organizing the further development steps. Additionally, I would use tools such as Git, Jenkins, and Kubernetes to automate the deployment process and create pipelines.

1. Describe the short (imagined) presentation of your research and planning, for your team briefly:

-In the presentation of my research and planning to the team, I would start by introducing my process and outlining the goals of the project. I would then explain the value of DevOps and point out the best practices that we should use. After that, I would include descriptions of the tools and methods that I have researched and would recommend for our project. Lastly, I would provide a timeline and an overview of the steps needed to complete the project on time. This should give the team a better understanding of the project and enable them to make the best possible decisions for their project.