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.

* Explain what steps you are taking for planning and research?

- First I would need to review the project requirements and what the goal for the software would be. Because I would be the only DevOps engineer in the team I would need to communicate with all the other members of the team (Devs, QA, PM's etc.) to better understand their capabilities, expectations and areas of responsibility. I will research the market and also consult with other experts in the field to find what would be the best combination of tools and practices for doing the project. I would need to communicate with the team about the plan and to highlight any improvements that need to be done to their workflow. Lastly I would need to track the progress of the project and make any adjustments that might further improve the delivery of the finial product.

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

- The proces for DevOps best practices is a continuous process of development that would improve the overall workflow of the project. Everyone would have their role in the process and communication would be key to get everyone on board with the plan.

* How would you organize your time for planning and research?

- The first thing for organizing my time would be to set a goal for the project. Once we know our goal than we would need to create a schedule for all the tasks and prioritize them based on their importance to the project. We would need to make some sort of milestones so we can track the progress and make any adjustments to adapt to any unexpected events.

* What methods and tools are you using during this process?

- For the research part of the process we can use any information that is supplied by the client or use online resources. We would need to use a communication tool like Teams to have meetings and discuss our plans. Because the software will have multiple versions we would need to use something like Git to track code changes and versions. For the CI/CD (Continuos Integration and Continuos Deployment) we can use Jenkins, Codeship, AWS, Docker, etc. To monitor the system performance and evaluate the efficiency we can use something like Nagios, Splunk or Datadog.

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

- As a DevOps engineer on this project I have done a lot of research on the requirements of our project. Based on my research I have created a plan with best practices that we should implement for this project to ensure everything is finished on time and we have a great finished product. Every one will get a part in the project based on their skill level and continuous communication will be key to ensure the quality and performance of the final software.