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?

First of all, I would ask my PM about the requirements of the Project, what kind of infrastructure will be required, what tools and applications will my team use, will it be on-premises or the client want some public cloud solution.

Because it is a solution for Banking system it has to be secure, scalable and will probably use the microservices architecture design approach, so I would need a strategy for implementing automated delivery pipeline.

Also, I would ask if a senior DevOps engineer in my company has experience with similar system to give me hints or point me in the right directions, after that I would research for similar systems for other banks and what are their best practices and what tools do they use.

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

I would schedule a demo presentation for my team where I can explain all my research and why I think we should use certain tools and practices based on my previous findings.

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

I would focus on the tasks that are most important for the kick-off of the project and would research about them first.

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

I will need automated jobs for build and deploying code, automate job to create docker image for every microservice and to push docker images across environments QA, Staging, Production, the jobs need to be monitored so maybe monitoring logs during deployment with GitLab or AWS, UI automation tests with Selenium, API performance with JMeter etc. Probably will use Teams for daily meetings and a browser for a lot of online research.

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

I would start with explaining the best practices based on my research and why I would use them, share some knowledge for other banking systems best practices that I came across to back up my decisions and then I would like to hear the feedback from my colleagues and their suggestions on the topic.