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?

* Firstly, I would start by researching the project and the client needs. See how big the project is and how many resources it requires so that it runs continuously. With all of my knowledge, I will try to make a plan for the project.
* Next, I would ask my more experienced colleagues if they had encountered banking system projects for advice and guidance. Also, I would sit down whit the rest of the team and see what are they planning and thinking about this project*. Even if I’m the only DevOps engineer on the team, I’m not alone on this project.* The DevOps engineer is the key to joining all the other members together.
* We would make a plan for which task on whom to be assigned so that at the end all of that is joined and we would have one software that is finished and ready for deployment.

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

* DevOps practices are made so that one piece of software from start to finish is delivered and runs smoothly when used by the customers. **Continuous integration, delivery, Infrastructure as code and configuration management** are key practices of DevOps. When you want to make updates or add some new changes to the code (infrastructure) it is better to add small changes test and monitor them, rather than big changes which can affect the whole structure. Infrastructure as a code I would implement using some of the tools like **Terraform** because is open-source and can be used for many cloud platforms VS **cloud formation** which is used only for **AWS**.

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

* The planning phase is the most important and time-consuming, because when you have a good plan the bigger part of the job is done. Of course for a good plan especially when you are not an experienced DevOps engineer you have to take time to consult other colleagues, google everything.

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

-Everything that I researched I documented in word documents, excels and draw some diagrams on draw.io, Visio and paint, so I would open those documents and step-by-step explain them to my colleagues. This documentation has to be **neat** so that the other colleagues can read and understand everything.

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

* First I would explain how the meeting with the client went and what they asked us to be done. How the software should look, what should the software does and since it is a banking system how important it is for the software to run smoothly without interruptions and errors. I would explain and talk about how big the project is and what resources it requires, also what tools I would use for better project deployment. My presentation will be interactive I would ask if someone had worked on a similar project and ask for feedback so that we all together can come up with a good solution and plan for the project. Of course, I will open all the documents that I have, explain them and add some of the feedback that the team has given me.