**Exercise: DevOps Planning & Research**

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

I will check other Bank sites to see what functions and technologies they use. I will also research what functions and tools the banks need. After that. I will learn more about these technologies online and see how it works. The next step will be to break the information into small pieces of every technology, and the final step is to find out which one is the starting point and define other key points, which will be sorted by importance. Because I'm a Junior I will talk with some other team members in the DevOps team to give me some advice and if they can check my plan and key points.

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

DevOps is something that stands for two different directions developer and operations. Includes many different tools some of them are: git, AWS, Docker, Kubernetes, Grafana, Jenkins, Azure, etc. The most important part is planning before starting to work on the application because this phase will save time after the team starts working. You need to be a good team player because daily you will communicate with many people from other teams and from yours too. You need to study almost every day something new for processes or tools, but if you want to be good in the DevOps field you should never give up. A DevOps Engineer has very good time management skills because he or she needs to do their work efficiently and finish the project by the deadline.

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

Firstly, if I do not know which tools I need to use, I will try to reach out to a colleague to help me with this tool. I will ask for pointers, maybe a tutorial link, or some general information on how it works. After this, if I need to start studying this tool, I will see the documentation and if don't have all information, I need to explore the tool to find more information on the internet. The final phase is to start to plan from scratch. I will start with the most critical things first and then will upgrade them to the final steps.

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

First, I plan everything I need to make for the application. Next phase use git to check and pull the repository. Then need to make tests and release the application. And after this comes the deploying phase and the operating phase, and the final phase is monitoring. And all of these steps are called CI/CD and represent all DevOps lifecycle. We can use Teams or something like Teams to connect with other developers who work on the project and other team members in the DevOps team for helping each other.

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

I find these functions in other bank sites: mobile app, online banking, chatbot, credit card system, payment system, loan administration, etc. I think we need to have big data with all customer account data, and transaction history. Every customer needs to have access to their transaction history, check account status, can pay a bill, can transfer money to other accounts, etc. We need perfect security versus hacker attacks and malware. To have a tracking function for some doubtful transactions or criminals.

We need to start making the basic system with some of the basics function which the bank needs. Some like a credit card system, payment system, credit system, atm system, etc. After these steps, we need to make more irrelevant steps, online banking system, mobile app, chatbot, FAQ, and so on. Need to optimize all systems to work fast and smoothly and without bugs and unexpected stops. I think we need to make a customer-friendly application for a mobile app and online banking system. The system needs to be detailed and accurate. Work with the system to be easy and user-friendly too.

I will dive more deeply into every step, function, and system, find out what tools and technology need to make every step, and will describe them more specifically at the earliest opportunity.