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?

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

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

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

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

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1. For planning and research, the following steps can be taken:

- Find and define the project goals and objectives.

- Conduct an analysis of the existing infrastructure and identify any areas that need improvement.

- Research the best DevOps practices, especially those that are relevant to the project.

- Create a detailed plan that shows the steps that need to be taken in order to apply those DevOps practices.

- Make sure that everyone on the team sees and learns from the plan and the research that I’ve done.

2. The best DevOps practices:

- The encouragement of collaboration and communication.

- The automation of the entire software development lifecycle.

- The use of automated testing.

- The use of condinuous integration and condinuous delivery ( CI/ CD )

3. When organising my time for planning and research I would:

- Create a schedule that includes all the specific tasks and deadlines of the project.

- Make sure that I prioritize the most important tasks and the ones that have short deadlines.

- Make sure that I leave enough time for research and planning.

4. Methods and tools that I’m using during this process:

- Analyzing documentation.

- Online research.

- Seek help from more experienced experts in the field.

- Practice using DevOps tools such as: version control systems ( Git, SVN ), cloud service providers ( AWS, Azure, Google Cloud ), containers ( Docker ), CI/CD tools ( Jenkins, Azure DevOps services ).

5. Firstly, I would summarize the key findings of my research and define the best DevOps practices that would be helpful for the project. After that I would explain how those practices can be helpful and improve the overall workflow of the team. Finally, I would ask for questions and feedback from the team.