

Exercise: DevOps Planning & Research

You are starting as a Junior DevOps in an IT Company. You get assigned to a new Project that develops software solutions for Banking systems. Currently, you are a 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.

- Learn more about the project itself so we can further identify the detailed flowchart and establish various stages;
- Use the online resources and documentation of the needed technologies to plan the best practices;
- Each stage would be with specific goals in the software development life cycle;
- Build diagrams, charts, and all sorts of visual representation items that will help in understanding the process; This would be performed to get an idea of the goals and objectives of the project, and what will be my purpose as a DevOps engineer throughout the process;
- Make sure the methodologies are aligned with the overall objectives;
- Plan and assess the tools and technologies we would use to develop a particular solution;
- Consider common practices on how we can adapt to change and respond to challenges;
- Strive for continuous delivery;
- Communicate and plan with the team about the KPIs and the steps we can take to reduce inefficiency and save time;
- Since we will be working in a fast-paced environment, we need to consider Agile technologies to build solutions in small timeframes;
- Identify how we can implement practices for withholding a large number of users in particular periods;
- Adopting a DevOps model that will be security-compliant;

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

- Evaluate the need to implement DevOps practice
- Align the IT goals with Business goals. The need for implementation of DevOps should be business-driven.
- Encourage collaboration between teams;
- Discuss the common tools that can be used in building a solution;
- Discuss the possible unpredictable circumstances that might arise;
- Discuss practices for risk mitigation;
- Let the team know it's better to start small and scale up;
- Discuss security practices;

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

- Provide an estimation of the workflow by considering previous contributing factors;
- Talk with the team to determine the approximate time when certain features will be delivered;
- Work on small tasks and then upgrade the solution as we progress towards;
- Organize meetings daily to catch up with the progress;
- Work -> reflect -> make progress;
- Organize my time in sections, whether I'm working on reports, coding, creating diagrams, or attending daily meetings (what needs to be done sooner will have priority)

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

- Diagrams, flowcharts, visuals;
- Agile methodologies;
- Integration platforms;
- Infrastructure as a code; learn more about it

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

- Present my findings to the team
- Discuss the best practices - what can be implemented;
- Ask for their feedback and estimation of the solution delivery