Showcase your skills: How to prepare for the interview

As you've been learning, there are many steps that go into preparing for your job search in the data career space. Before you even start applying for jobs, it's important that you take two key steps. You need to build a professional online presence and develop your portfolio to showcase your skills to potential employers. This is also a great time to connect with mentors, who can provide professional insight and help you prepare for the application process. The interview will often be the final step in this process; in addition to all of the other job prep you'll do, preparing for the interview will help you approach this last step confidently. To help get you ready for the job market, this reading will explore four different interview types and offer interview questions that this certificate program will help you answer.

Establishing your professional narrative

Establishing a professional narrative, or brand, can help you build connections between your daily work and the positive influence it has on something bigger. This something bigger could be an exciting project that you helped finish or a positive change in your organization or community! This

applies to the work you have done previously and the work you hope to do in the roles you apply for. Framing your experience and goals around your professional narrative allows you to develop a stronger sense of the value you bring to an organization and your own career goals. Keeping your professional narrative top of mind is important as you prepare to enter or navigate the data professional career space. Your personal brand is the value you offer potential employers. It can often provide answers to questions posed during the interview process.

Interview question types

There are many different types of interview questions and each organization has its own priorities for what they want to know about each applicant for each role. Interview questions typically belong to one of four categories:

- **Behavioral questions**: These questions ask you to describe how you have handled specific situations in the past, and your personal characteristics. They are designed to assess your skills, experience, and problem-solving abilities, as well as your fit for the company culture.

- **Technical questions**: These questions ask you to demonstrate the knowledge and skills presented in your resume or portfolio. In job interviews for technical

positions, an employer may ask for a demonstration of specific tasks, prior projects, or even a take-home assessment. Often these technical demonstrations are presented as a separate assignment that you will complete outside of the interview itself. These questions are designed to assess your technical skills and expertise.

- **Situational questions**: These questions ask you how you would handle hypothetical situations. Similar to behavioral questions, employers typically use situational questions to develop a preliminary understanding of how your skills fit the role. Situational questions are designed to assess your judgment, critical thinking skills, and ability to apply knowledge to new situations.

- **Subject questions**: These questions ask you about your knowledge of a specific subject or area, usually pertaining to the field or industry that you're applying for. These questions are designed to determine how well you understand the relationship between the role you're applying for and the broader context of the company. Employers may also use these questions to assess your understanding of how the company works in contrast to direct competitors in the marketplace.

These are just a few examples of the types of questions you might be asked in interviews. These categories aren't

universal, and different organizations have different interview styles– they may even ask questions that combine categories. For example, an interviewer might give you a hypothetical situation and ask you for an example of a previous situation you've encountered that relates. This is a combination of a behavioral and situational question. Generally, the goal of interview questions is to assess your skills, experience, and general fit for the role; so keep that in mind as you prepare.

Applying course skills

As you progress through this certificate program, you will learn industry skills that interviewers will be interested in asking about. Throughout your learning journey, it will be useful to identify and keep in mind key skills you will need to be able to discuss. The following is a list of questions that you might be asked in an interview for data professional positions. You will find questions in this list that are representative of the four interview question type categories explained in the previous section. Finishing your certificate will mean you're prepared to answer all of these questions!

Course 1

- As a new member of a data analytics team, what steps could you take to be fully informed about a current

project? Who would you like to meet with?

- How would you plan an analytics project?

- What steps would you take to translate a business question to an analytical solution?

- Why is actively managing data an important part of a data analytics team's responsibilities?

- What are some considerations you might need to be mindful of when reporting results?

Course 2

- Describe the steps you would take to clean and transform an unstructured data set.

- What specific things might you review for as part of your cleaning process?

- What are some of the outliers, anomalies, or unusual things you might consider in the data cleaning process that might impact analyses or the ability to create insights?

Course 3

- How would you explain the difference between

qualitative and quantitative data sources?

- Describe the difference between structured and unstructured data.

- Why is it important to do exploratory data analysis (EDA)?

- How would you perform EDA on a given dataset?

- How do you create or alter a visualization based on different audiences?

- How do you avoid bias and ensure accessibility in a data visualization?

- How does data visualization inform your EDA?

Course 4

- How would you explain an A/B test to stakeholders who may not be familiar with analytics?

- If you had access to company performance data, what statistical tests might be useful to help understand performance?

- What considerations would you think about when presenting results to make sure they have an impact or

have achieved the desired results?

- What are some effective ways to communicate statistical concepts/methods to a non-technical audience?

- In your own words, explain the factors that go into an experimental design for designs such as A/B tests.

Course 5

- Describe the steps you would take to run a regression-based analysis.

- List and describe the critical assumptions of linear regression.

- What is the primary difference between R2 and adjusted R2?

- How do you interpret a Q-Q plot in a linear regression model?

- What is the bias-variance tradeoff? How does it relate to building a multiple linear regression model? Consider variable selection and adjusted R2.

Course 6

- What kinds of business problems would be best addressed by supervised learning models?

- What requirements are needed to create effective supervised learning models?

- What does machine learning mean to you?

- How would you explain what machine learning algorithms do to a teammate who is new to the concept?

- How does gradient boosting work?

Begin with the end in mind

At this point in the certificate program, you are still early in your learning journey. Because of that, you have the opportunity to consider everything you're going to learn in the context of your final goal: taking the next step in your data professional career. Part of taking that next step involves interviewing with potential employers. As you learn more and more skills and become familiar with new tools, keeping these interview questions in mind can help you frame how what you're learning now applies to future job roles. These questions can also help you frame your focus in each course–by considering how you might use the new skills and knowledge you're learning, you can better

understand why the work you're doing now is so important!

Starting now, you can keep your final goals in mind and continue to build them into your professional narrative. That way, by the end of this program, you will already have a strong framework for communicating with potential employers.

Key Takeaways

The interview is an opportunity to share how you can add value to an organization. Recognizing your growing skillset and how you might communicate those skills to potential employers is a great way to showcase not just your technical know-how, but your ability to communicate effectively too. This reading is a great resource to keep in mind as you build your skills and your professional narrative in preparation for your job search.