Project Scenario

Estimated time: 10 minutes

Introduction

You have recently been hired as a Data Analyst by a global IT and business consulting firm renowned for its expertise in IT solutions and highly experienced consultants. To stay competitive in the rapidly evolving technology landscape, your organization regularly analyzes data to identify emerging and future skill requirements.

Roles and responsibilities:

As a Data Analyst, you will contribute to this initiative by collecting data from diverse sources and identifying trends for this year's report on in-demand skills. One key source for your analysis will be the latest Developer Survey, a comprehensive dataset offering insights into the global developer community.
Your initial task is to gather data on the most sought-after programming skills from various sources, including:

- Job postings
- Training portals
- Developer surveys, such as the latest Stack Overflow Developer Survey

After collecting sufficient data, you will analyze it to identify key insights and trends. Some of the trends you will explore include:

- Which programming languages are most in demand?
- Which database technologies are currently most sought after?
- Which Integrated Development Environments (IDEs) are the most popular?

You will begin by scraping internet websites, accessing APIs, and working with datasets like the latest Stack Overflow Developer Survey in various formats such as .csv files, Excel sheets, and databases.
After gathering the data, you will apply data-wrangling techniques to prepare the data for analysis.

Once the data is prepared, you will employ statistical techniques to analyze the data, identifying key trends and insights. You will then synthesize your findings using IBM Cognos Analytics to create a dashboard that visualizes the results. Finally, you will share your insights through a presentation, showcasing your storytelling and data analysis skills.

Evaluation:

Throughout the course, you will be evaluated using quizzes in each module as well as through the final project presentation.