Data Analysis Overview

Task: Understanding Data Analysis and Defining Project Scope

Explanation: In this module, you will recall the fundamentals of data analysis and the different types of analysis, including supervised and unsupervised learning you mastered in the specialization *Data Analysis with Python* ↗. You will define the scope and direction of your data analysis project.

Associated Courses (if you haven't taken them or mastered the skills):

1. <u>Classification Analysis</u> ↗

2. <u>Regression Analysis</u> ↗

3. <u>Clustering Analysis</u> ↗

4. <u>Association Rules Analaysis</u> ↗

Instructions:

1. Introduction to Data Analysis: Understand the concept of data analysis, its importance, and how it plays a crucial role in making data-driven decisions.

2. Supervised and Unsupervised Learning: Differentiate between supervised and unsupervised learning approaches. Understand when to use each method based on the project's objectives.

3. Defining Project Scope: Choose a real-life project of your interest that involves data analysis. Define the specific objectives and goals you aim to achieve through this project.

4. Choosing/collection Project Dataset: You will collect data and process it to be ready for analysis (Please take our <u>Data Wrangling Specialization</u> ↗ if you are not familiar with it). You can also choose a dataset via the following sources, and work from there. Please note that not every dataset is appropriate for ALL analysis, so you may choose a dataset that fits most of them, and change a dataset if it doesn't fit.
   a. <u>UCI Machine Learning Datasets</u> ↗
   b. <u>Registry of Open Data on AWS</u> ↗
   c. <u>Rdatasets</u> ↗
   d. <u>Kaggle</u> ↗
   e. <u>NYC Open Data</u> ↗

5. Project Direction: Explore various data analysis directions and techniques that align with your project scope. Identify potential challenges and opportunities for each direction.

Go to next item   ✓ **Completed**

👍 Like   👎 **Dislike**   ⚐ **Report an issue**