1.0.2

## Module 1

## **Looking Ahead**

Each module in this course is built around a project that mirrors a real-world scenario that would require data analysis and visualization.

This module is a deep dive into Excel, a tool that can be used across all areas of life, from household budgeting to complex financial analysis. Learning the intricacies of Excel will draw on (and enhance) skills you may have already, like computer literacy, data literacy, and quantitative reasoning. Many of the advanced Excel features you'll learn in this module—including formulas, charts, and pivot tables—set the stage for the data visualization languages and tools you'll encounter later in this course. Using Excel in the context of data analytics will help you start to think about data differently. What is data? How does it tell a story? How can data be used to answer specific questions, as well as uncover trends and patterns? Starting today and throughout the rest of the course, you'll learn how to find answers to these questions.

## **What You Will Learn**

By the end of this module, you should be able to:

- · Import data into a table for analysis.
- Apply filters, conditional formatting, and formulas.
- · Generate and interpret pivot tables.
- Calculate summary statistics such as measures of central tendency, standard deviation, and variance.
- Characterize data to identify outliers in datasets.
- Perform an Excel analysis with visualizations.
- Interpret common Excel visualizations

## **Planning Your Schedule**

Here's a quick look at the lessons and assignments you'll cover in this module. You can use the time estimates to help pace your learning and plan your schedule.

- Introduction (15 minutes)
- Lesson 1: Getting Started with Excel (15 minutes)
- Lesson 2: Viewing the Data (1 hour 15 minutes)
- Lesson 3: Using Pivot Tables and Pivot Charts (1 hour 30 minutes)
- Lesson 4: Using Filters and Searches to Deepen Your Analysis (30 minutes)
- Lesson 5: Applying Descriptive Statistics and Visualization (1 hour)
- Lesson 6: Sharing Your Findings (30 minutes)
- Application (5 hours)

© 2023 edX Boot Camps LLC