10.0.2 Module 10 Roadmap

Looking Ahead

In this module, you'll automate a web browser to visit different websites to extract data about the Mission to Mars. You'll store it in a NoSQL database, and then render the data in a web application created with Flask. The completed work will be displayed in your portfolio, which you will also create.

Web scraping is a method used by organizations worldwide to extract online data for analysis. Large companies employ web scraping to assess their reputations or track their competitors' online presence.

On a smaller scale, web scraping automates tedious tasks for personal projects. For example, if you're collecting current news on a specific subject, web scraping can make it a simple process. Instead of visiting each website and copying an article, a web scraping script will perform those actions and save the scraped data for later analysis.

What You Will Learn

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

- Gain familiarity with and use HTML elements, as well as class and id attributes, to identify content for web scraping.
- Use BeautifulSoup and Splinter to automate a web browser and perform a web scrape.
- Create a MongoDB database to store data from the web scrape.
- Create a web application with Flask to display the data from the web scrape.
- Create an HTML/CSS portfolio to showcase projects.
- Use Bootstrap components to polish and customize the portfolio.

Module 9: Surf's Up! Complete **Unit: Visualizations** Module 10: **Mission to Mars** Build an app to scrape websites for data pertaining to the Mission to Mars, and then create an HTML page to display your findings. Module 11: **UFO Sightings** with JavaScript

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)
- Get Started Using Web Scraping Tools (1 hour)
- Open the Window to the Internet (2 hours)
- Automate a Web Browser and Perform a Web Scrape (3 hours)

- Access Data in MongoDB (1 hour)
- Display Data With Flask (3 hours)
- Make It Pretty (3 hours)
- Show It Off (2 hours)
- Application (5 hours)

© 2020 - 2022 Trilogy Education Services, a 2U, Inc. brand. All Rights Reserved.