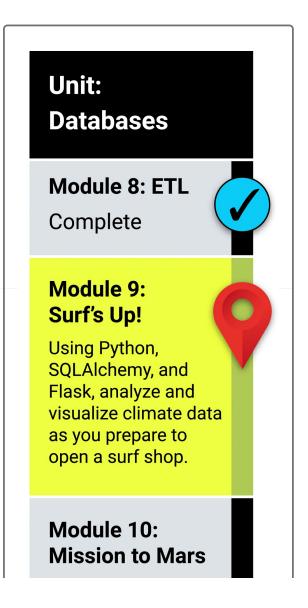# 9.0.2   Module 9 Roadmap

Looking Ahead

In this module, you'll spend time with new tools such as SQLite, SQLAlchemy, and Flask to build on your knowledge of SQL database structures and querying methods. You'll also write and execute Python code in a Jupyter notebook and create graphs using Python.

Unit: Databases

Module 8: ETL
Complete ✓

Module 9: Surf's Up!

Using Python, SQLAlchemy, and Flask, analyze and visualize climate data as you prepare to open a surf shop.

Module 10: Mission to Mars

What You Will Learn

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

- Explain the structures, interactions, and types of data of a provided dataset.

- Differentiate between SQLite

and PostgreSQL
databases.

- Use SQLAlchemy to
  connect to and query a SQLite database.

- Use statistics like minimum, maximum, and average to analyze data.

- Design a Flask application using data.

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 to SQLite, SQLAlchemy, and Flask (15 minutes)

- SQLite and SQLAlchemy (1 hour)

- Precipitation Analysis (1 hour)

- Weather Station Analysis (2 hours)

- Getting Acquainted with Flask (2 hours)

- Build a Climate App Using Flask (2 hours)

- Application (5 hours)