The next step in moving beyond simple linear regression is to consider "multiple regression" where multiple features of the data are used to form predictions.

More specifically, in this module, you will learn how to build models of more complex relationship between a single variable (e.g., 'square feet') and the observed response (like 'house sales price'). This includes things like fitting a polynomial to your data, or capturing seasonal changes in the response value. You will also learn how to incorporate multiple input variables (e.g., 'square feet', '# bedrooms', '# bathrooms'). You will then be able to describe how all of these models can still be cast within the linear regression framework, but now using multiple "features". Within this multiple regression framework, you will fit models to data, interpret estimated coefficients, and form predictions.

Here, you will also implement a gradient descent algorithm for fitting a multiple regression model.