

Overview: In Module Five, you have studied how to code for iteration through the use of loops. In Stepping Stone Lab Four, you will develop a simple program with a loop structure for users to enter a list of ingredients.

Be sure to review the Stepping Stone Lab Four guidelines before beginning this lab. The completed code (.java file) from Stepping Stone Lab Three is included in this module to use as a reference for comparison of your work in Module Four as well as moving forward. This code serves a number of functions:

- It allows you to review your own submitted code.
- You may utilize it as a useful foundation for Stepping Stone Lab Three as well as other assignments to come.
- Together with instructor feedback on your submitted code, you are building your own final project application.

The code for this stepping stone lab is short, but the concepts are extremely important. You will use two different looping techniques: a “do” loop and a “for” loop. This stepping stone lab also includes your first application of the Java ArrayList data type. In this stepping stone lab, you will use the ArrayList to store strings, but in future submissions, you will replace these with object types (ingredients).

Prompt: In this lab, you will write a short Java application that uses a loop control structure. Specifically, your application should accomplish the following:

- Create an **ArrayList<String>** to store the list of ingredient names added by the user.
- Implement the **do while loop** structure to allow the user to add ingredients until he or she is done.
- Within your loop, add a **branch control structure** to prompt the user to enter an ingredient or indicate that he or she is finished.
- Use a **for loop** to iterate through the ingredientList to print the ingredients in the list.

Guidelines for Submission: This assignment should be submitted as a Java file.