Submission Requirements

COMPONENT A: PROGRAM CODE (CREATED INDEPENDENTLY OR COLLABORATIVELY)

Submit one PDF file that contains all of your program code (including comments). Include comments or acknowledgments for any part of the submitted program code that has been written by someone other than you and/or your collaborative partner(s).

IMPORTANT:

If the programming environment allows you to include comments, this is the preferred way to acknowledge and give credit to another author. However, if the programming environment does not allow you to include comments, you can add them in a document editor when you capture your program code for submission.

In your program, you must include student-developed program code that contains the following:

- ☐ Instructions for input from one of the following:
  - the user (including user actions that trigger events)
  - a device
  - an online data stream
  - a file
- ☐ Use of at least one **list** (or other **collection type**) to represent a collection of data that is stored and used to manage program complexity and help fulfill the program's purpose

  IMPORTANT:

  The data abstraction must make the program easier to develop (alternatives would be more complex) or easier to maintain (future changes to the size of the list would otherwise require significant modifications to the program code).
- ☐ At least one procedure that contributes to the program's intended purpose, where you have defined:
  - the procedure's name
  - the return type (if necessary)
  - one or more parameters

  IMPORTANT:

  Implementation of built-in or existing procedures or language structures, such as event handlers or main methods, are not considered student-developed.
- ☐ An algorithm that includes sequencing, selection, and iteration that is in the body of the selected procedure
- ☐ Calls to your student-developed procedure
- ☐ Instructions for output (tactile, audible, visual, or textual) based on input and program functionality

DEFINITION:

List

A **list** is an ordered sequence of elements. The use of lists allows multiple related items to be represented using a single variable. Lists may be referred to by different names, such as **arrays**, depending on the programming language.

DEFINITION:

Collection Type

A **collection type** is a type that aggregates elements in a single structure. Some examples include lists, databases, and sets.

IMPORTANT:

With text-based program code, you can use the print command to save your program code as a PDF file, or you can copy and paste your code to a text document and then convert it into a PDF file. With block-based program code, you can create screen captures that include only your program code, paste these images into a document, and then convert that document to a PDF. Screen captures should not be blurry, and text should be at least 10 pt font size.