Unit 15: CODE: Maze: Loops

Content Area: **Unified Arts**
Course(s): **Computer Science 1, Computer Science K**
Time Period: **May**
Length: **10 Days**
Status: **Published**

Unit Summary

Building on the concept of repeating instructions from Getting Loopy, this stage will have students using loops to more efficiently traverse the maze.

Student Learning Objectives

Students will learn to...

- identify the benefits of using a loop structure instead of manual repetition.
- create a program for a given task which loops a single command.
- break down a long sequence of instructions into the smallest repeatable sequence possible.
- create a program for a given task which loops a sequence of commands.
- employ a combination of sequential and looped commands to reach the end of a maze.

Essential Questions

- What are loops?
- Why do we use them?

Enduring Understandings

Students will understand that...

- a loop a structure can be utilized instead of manual repetition.

Application

Students will be able to independently use their learning to…

- utilize a loop structure.

Skills

Students will be skilled at...

- creating a program for a given task which loops a single command.
- creating a program for a given task which loops a sequence of commands.
- employing a combination of sequential and looped commands.

Resources