

Computer Science Beginner Course Overview 16 hs



Course Overview

Students will create programs with sequencing, loops, and events. They will translate their initials into binary, investigate problem-solving techniques, and develop strategies for building positive communities both online and off. By the end of the course, students will create interactive games that they can share. Each concept in this course is taught from the beginning, graduating toward experiences that allow for growth and creativity to provide all students a rich and novel programming experience.

Core concepts:

- Digital Citizenship
- Sequencing
- Loops
- Events
- Binary
- Data





Putting a STOP to Online Meanness



Password Tips to Remember



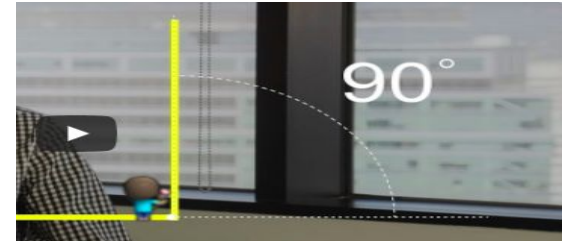
Develop **Sequential** Algorithms using Angry Birds



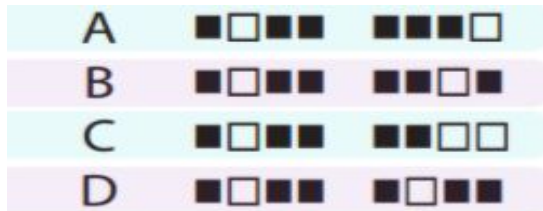
Debugging skills using Maze Game



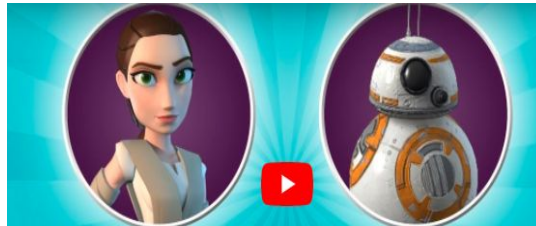
Sequence and **Debugging** using Laurel



Creating Art using Code



Introduction to **Binary** Language



Loops with Rey and BB-8



Harvesting Crops with **Loops**



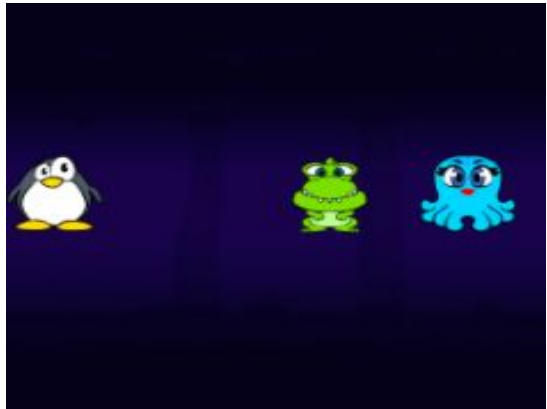
Creating MineCraft game



Create Sticker Art with Loops



Build Flappy Game using **Events**



Build Chase Game with **Events**



Picturing Data



End of Course Project

Course Details

- Start dates and schedules will be coordinated directly with student.
- Each class has a size group of 4 students per group.
- **Course Duration:** 8 monthly classes, 1 hour duration each class
- Includes: Home access for extra practice
- **Total Course Duration:** 16 hours (2 months course)
 - Completion of Beginner Level and into Intermediate Level

