# Create your Own Flappy Game



Created by Code.org on September 17, 2015; last modified by Tom Seaman on September 17, 2015

# **Unit Summary**

This unit, developed and hosted by Code.org, is designed to get students of all ages excited about computer programming. It is best used as a follow-on to the "Let's Learn Computer Science" sequence of 4 courses, or can be completed independent of those courses.

This unit introduces students to the programming concept of event handling, which is the primary mechanism underpinning the popular game, Flappy Bird. It starts off with a video that explains event handling in easy-to-understand terms. Students learn to create programs that respond to events by dragging and dropping "blocks" which represent commands, and connecting them together in a logical fashion toward a goal. A series of ten puzzles introduces students to new types of events, and students must decide which blocks (commands) to use in respond to those events. Ultimately, the unit allows students to create their own custom version of the game and share it with their friends.

### At a Glance

• **Grade:** 3-5, 6-8, 9-12

Subjects: Science, Math, Arts, English Language Arts
Topics: Computer Science, Engineering, Design

· Higher-Order Thinking Skills: Creativity, Collaboration, Persistence, Problem Solving

• **Key Learnings:** Computer programming concepts, vocabulary, collaboration

Content Type: Unit Plan
Time Needed: About one hour
Prerequisites: Ability to read

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## **Learning Outcomes**

- Students should gain an understanding of how to build a computer program
- Students should gain a firm grasp of some important concepts in computer programming: the concept of event handling, as well as variables and parameters.
- Students should gain experience with computational thinking, creating algorithms to complete tasks, breaking down complex problems into smaller problems, and collaborating with others to achieve a better result than one could on one's own.
- Students should learn problem solving and techniques for persevering through difficult challenges.

# **Things You Need**

Computer with internet connection

This course requires students to use a computer or tablet with an internet connection. Students may work independently on the hands-on activities, but we recommend they work in pairs or threesomes to learn to collaborate to solve the challenges. The course utilizes YouTube to embed the instructional videos. If YouTube is blocked at your school, Code.org will attempt to play the video content through its own hosted non-YouTube video player. Additional IT help here.

### Link to the Unit Plan

https://studio.code.org/flappy/1

Students who have completed computer science lesson 4 put their skills to work creating their own version of the popular mobile game Flappy Bird.