# Creating an App

### 1 Week

#### Lesson Overview

This lesson further explores the topic of computer programming by introducing additional programming concepts like conditionals and loops. These concepts will help you understand how the software that vou use every day is written.

In the assignment, you will continue to use Thunkable to program a new app - one that translates English to another language of your choosing! The assignment also has you reflect on the programming concepts of conditionals and loops and how they are used in everyday applications.

### **Learning Objectives**

- Design and program a mobile app
- Test and share a mobile app
- Describe the purpose of using conditionals in programming
- Describe the purpose of using loops in programming

Is Thunkable blocked in your district? Check out the Alternative Programming Lessons

# **RI CS Proficiency**



Computational Thinking & **Programming** 

- ✓ Control Structures 

  ✓ Data Structures
- ✓ Algorithms✓ Variables✓ Computational Design

#### Lesson Material

The following course material will help you learn the concepts necessary to complete the Computer Programming (Part 1) assignment.

Watch: Intro To Conditional Statements [0:45 min | transcript]

Watch: Programming With Conditional Statements 1 [2:40 min | transcript]

Watch: Programming With Conditional Statements 2 [4:19 min | transcript]

## Discuss:

- How can you relate the concept of IF statements and IF/ELSE statements in computer programming to everyday decision-making scenarios, like deciding whether to wear a jacket based on the weather?
- Can you think of other situations in your daily life where you make decisions using similar logic? Explain it in simpler terms and give an example.
- Watch: Intro To Loops [0:37 min | transcript]
- Watch: Programming With Loops [6:07 min | transcript]

### Discuss:

- How does the concept of loops in programming help computers solve problems quickly and accomplish things that might be challenging or impossible for humans to do alone?
- Can you recall a time in your life when you had to repeat a similar task multiple times, like sending birthday wishes to friends? Provide an example and explain it in simpler terms.

## **Student Activity Guide**

Creating an App Assignment

## **Teacher Resources**

- Creating an App Slides
- Creating an App Grading Rubric
- Creating an App Answer Key
- <u>L11 Vocabulary</u>

# **Optional Extension**

Hour of Code: Creating a Calculator App in Thunkable