## Arduino in Tinkercad

## Contents

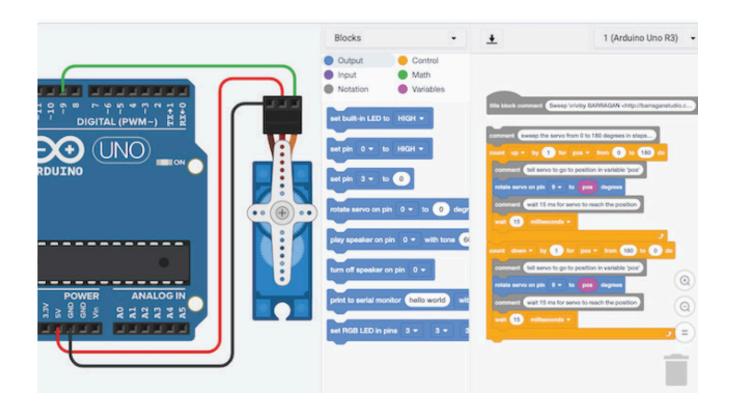
Arduino in Tinkercad



## Arduino in Tinkercad

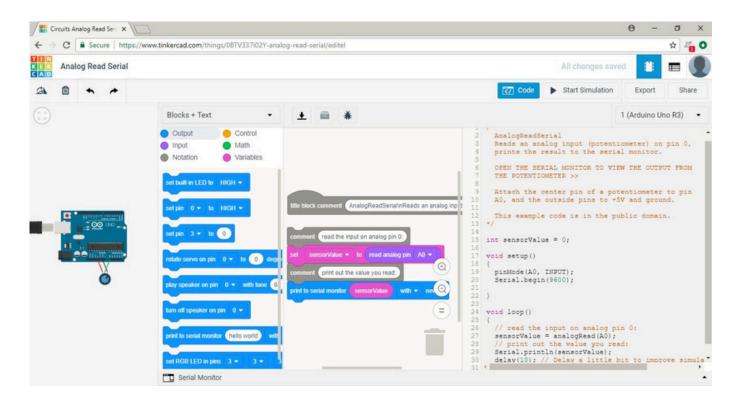
TinKercad allows you to code your Arduino using two different approaches.

The blocks code editor offers beginners a visual system of functions that they can drag and rearrange.

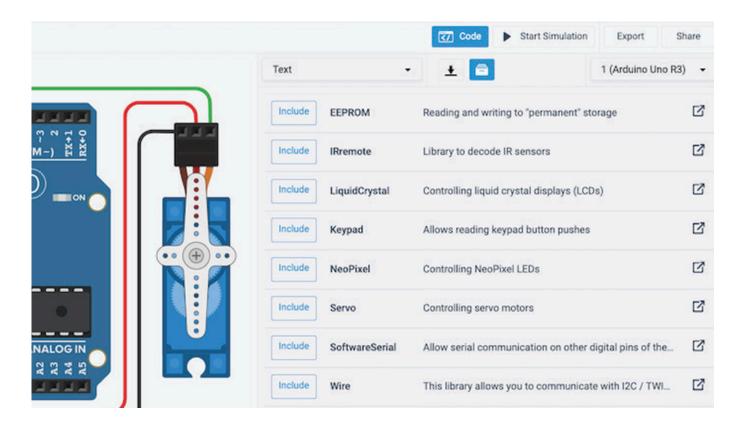


Part of the magic of learning to code Arduino in TinKercad is that the editor will automatically generate text-based code (C++) from users' blocks code.

By switching the code view to Blocks + Text, user can see the logic of their blocks code translated to C++ code. Modifications made to their blocks code will instantly update in the text view, providing insight into the logic and syntax of C++.



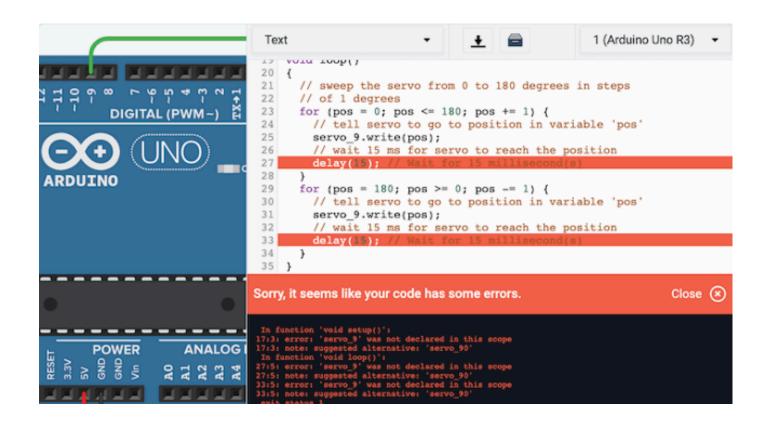
Once user are ready to create their code directly in the text editor, they can switch to a pure text view. This view offers an experience similar to programming with Arduino's IDE editor.



Tinkercad's Arduino text editor includes eleven built-in libraries. You can view and add these libraries to your project by selecting the file box icon above your code.

The included libraries represent some of the most popular and common librar ies used in Arduino. It is possible, though, to run code that requires Arduino libraries beyond the included examples.

When you open an Arduino library source file (.c or .cpp) you'll find that it is simply a clipping of C++ Arduino code. By copying and pasting this library clip ping into the appropriate sections of your Arduino code, you may be able to effectively make it work.



One of the biggest challenges in learning to code is learning how to trouble shoot problems when the code isn't working as planned.

When a student's code doesn't work, Tinkercad's error console will automatically pop into view. Similar to how errors are reported in the Arduino IDE, this error console will report and highlight the suspected issues that need fixing.