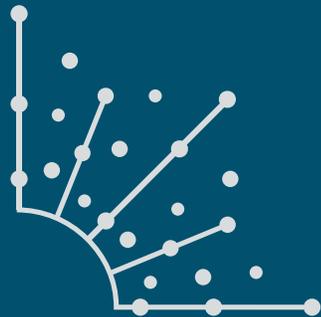


A guide to building a video game in Python

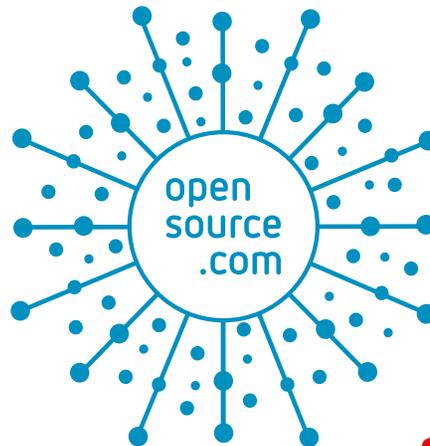


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Follow Jess at [@jlweich](https://twitter.com/jlweich)



The code for this booklet can be found here:
<https://gitlab.com/makerbox/scratch2python>

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Learn how to program in Python by building a simple dice game

Python is a good language for young and old, with or without any programming experience.

PYTHON [1] is an all-purpose programming language that can be used to create desktop applications, 3D graphics, video games, and even websites. It's a great first programming language because it can be easy to learn and it's simpler than complex languages like C, C++, or Java. Even so, Python is powerful and robust enough to create advanced applications, and it's used in just about every industry that uses computers. This makes Python a good language for young and old, with or without any programming experience.

Installing Python

Before learning Python, you may need to install it.

Linux: If you use Linux, Python is already included, but make sure that you have Python 3 specifically. To check which version is installed, open a terminal window and type:

```
python --version
```

Should that reveal that you have version 2 installed, or no version at all, try specifying Python 3 instead:

```
python3 --version
```

If that command is not found, then you must install Python 3 from your package manager or software center. Which package manager your Linux distribution uses depends on the distribution. The most common are **dnf** on Fedora and **apt** on Ubuntu. For instance, on Fedora, you type this:

```
sudo dnf install python3
```

MacOS: If you're on a Mac, follow the instructions for Linux to see if you have Python 3 installed. MacOS does not have a built-in package manager, so if Python 3 is not found, install it from python.org/downloads/mac-osx [2]. Although your version of macOS may already have Python 2 installed, you should learn Python 3.

Windows: Microsoft Windows doesn't currently ship with Python. Install it from python.org/downloads/windows [3]. Be sure to select **Add Python to PATH** in the install wizard. Read my article [How to Install Python on Windows](#) [4] for instructions specific to Microsoft Windows.

Running an IDE

To write programs in Python, all you really need is a text editor, but it's convenient to have an integrated development environment (IDE). An IDE integrates a text editor with some friendly and helpful Python features. IDLE 3 and PyCharm (Community Edition) are two options among many [5] to consider.

IDLE 3

Python comes with a basic IDE called IDLE.



IDLE

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