

# How to make your own game

In this tutorial, we will show you how to set up the PocketStar and your computer to get ready for developing games!

You need your PocketStar and a micro USB cable; a micro SD card adapter is also recommended to be able to move your game to the SD and load it from the menu.

## 1. Installing the software

Before you can start coding, you have to prepare our computer:

Download the Arduino IDE at <https://www.arduino.cc/en/main/software> and install it. After starting it, go to *File > Preferences* and copy the following Link to 'Additional Boards Manager URLs':

[http://files.zepsch.com/pocketstar/package\\_zepsch\\_index.json](http://files.zepsch.com/pocketstar/package_zepsch_index.json)

Then, click on *OK*.

Now, head to *Tools > Board > Boards Manager...*, scroll down to 'Arduino SAMD Boards' and install it. Scroll down further and install 'PocketStar Boards', too, and close the dialog afterwards.

To be able to code a game, you also need two libraries: The PocketStar library (which can be downloaded at [PocketStarLibLink](#)) and the SdFat library (at <https://github.com/greiman/SdFat>). After downloading both, unzip them and move them to *Documents/Arduino/libraries*.

## 2. Connecting the PocketStar to the computer

To connect the PocketStar to the computer, you have to put it into bootloader mode first.

### The Bootloader Mode

If you restart the PocketStar while pressing the 'right' button, the PocketStar will stay in the bootloader mode, not executing any uploaded code. This is especially useful if the uploaded code crashes and the computer cannot talk to the PocketStar anymore. The USB connection is also disabled while it is in the main menu.

You can restart the PocketStar by inserting a needle into the small hole on the back.

While in the bootloader mode, the screen will stay black and the LED lights up blue.

While you are still in the menu, you can take a shortcut and go to *Settings > Eject SD card* – pressing *A* here also acts as a restart.

Now, connect the PocketStar to your computer. Go to *Tools > Port* – It should show up as 'Arduino / Genuino Zero' (it will always be labelled as Arduino / Genuino Zero while in bootloader mode, and as PocketStar otherwise).

## 3. Uploading a test sketch

Let's check if the computer can upload code to the PocketStar.

A small test sketch is located at *File > Examples > PocketStar Library > PocketStarTest*; open it. Then go to *Tools > Board* again and select 'PocketStar', and choose 'Default' at *Tools > Build Type* and the *Port* labeled 'Arduino / Genuino Zero'. Also make sure the selected *Programmer* is 'Atmel-ICE'.

Now click on the right arrow at the top left of the IDE to upload it to the PocketStar. This will remove the menu, but you can upload it again afterwards.

The computer may need some time to compile and upload the sketch; the screen of the PocketStar should turn green after uploading.

Now you're ready to make your own games – have a look at the documentation (in the library folder) for further information!