



CoderDojo Carindale

Morning Session

Thomas Meng

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What is TIC-80?



TIC-80 is a fantasy computer for making, playing and sharing tiny games.

There are built-in tools for development: code, sprites, maps, sound editors and the command line, which is enough to create a mini retro game. At the exit you will get a cartridge file, which can be stored and played on the website.

Also, the game can be packed into a player that works on all popular platforms and distribute as you wish. To make a retro styled game the whole process of creation takes place under some technical limitations: 240x136 pixels display, 16 color palette, 256 8x8 color sprites, 4 channel sound and etc.

Ok... but why?

I think TIC-80 is a fun and structured way to learn text based programming as opposed to drag and drop (like Scratch).

Like Scratch, we will be following a tutorial each week you should end up with a neat game at the end. You will be given more powerful tools to create your game with but you will also have more power to shoot yourself in the foot (so to speak).

A screenshot of the TIC-80 CODE EDITOR window. The window has a title bar with icons for file operations and a menu bar. The code is written in a syntax-highlighted format with a dark background. The code defines a function TIC() that handles button presses and prints a message. The status bar at the bottom shows the current line and column, and the total number of lines and characters in the file.

```
CODE EDITOR
x=96
y=24

function TIC()
    if btn(0) then y=y-1 end
    if btn(1) then y=y+1 end
    if btn(2) then x=x-1 end
    if btn(3) then x=x+1 end

    cls(13)
    spr(1+t/60//30*2,x,y,14,3,0,0,2,2)
    print("HELLO WORLD!",84,84)
    t=t+1
end

Line 11/22 col 1 314/65536
```

Getting started

You are welcome to download the program if you have unstable Internet or if it is running slowly.



Creating your first TIC-80 game

We will be creating pong as your game.

I have created some helpful functions in TIC-80 that will make your life a whole lot easier when creating games that involve objects bumping into each other. You can download my file at github.com/ThomasMengMXC/CoderDojoResources/raw/master/base.tic

