Jam! is an interactive music instrument for the NES. Player 1 controls percussion and Player 2 controls melody.

**Player 1: Drums and noise**

A-Button: Bass drum

B-Button: Snare drum

Up: Hi-hat

Left: Noise

Right: Low note

Down: Crash

Start: High note

Select: Change background color

**Player 2: Triangle Synth Wave**

A-Button: C#

B-Button: E  
Select: G#  
Start: B

Up: C#

Down: D

Left: E  
Right F#

**Simple 8-beat**A, Up, B, Up

*or*

A, Left, B, Left

**Simple loop melody:**

Right, Right, Up, Up

**Tricky loop melody:**

Down, Left, Up, Left, Right, Left, Up, Left

Down, Left, Up, Left, Start, Left, Up, Left

**8 Beat with a simple melody:**

A, Left, B, Left x4  
A, Start, B, Start x4

**Mixed noise:**

Hold Right or Start and hold auto fire A

**Telephone call:**

*(Player 2)* Right, Down, Right, Down, Right, Down, Right, Down

**Smoke on Water**

(Player 2) Select, Start, Up, Select, Start Down, Up, Select, Start, Up, Start, Up

(Hold down Auto fire A on controller 1 for a more distorted sound)

**Q&A**

**How do I open the file?**

You need to download a NES emulator and open it from there. I recommend either Nestopia or Fceux.

**Does this actually run on a Nintendo console?**

I haven’t tried, but it should! The only problem would perhaps be the controls. Since I programmed the inputs on a keyboard using a custom layout, it might feel weird or awkward playing it on an actual controller.

**How was this made?**

The rom was entirely programmed in assembly code for the 6502 architecture. I used VisualStudio to code and cc65 to compile the code. I did not code from scratch but found bits and pieces of code online and put it together with trial and error.

**How long did it take?**

It took a very long time. It took me many sessions of endless coding to figure out how to even turn the screen to a different color. Once I figured out controller inputs and loops it got easier.

**Are you going to improve or update the rom?**

Yes, I’ll make small adjustments here and there but nothing big.

**Any future projects?**

Maybe a simple platformer or some mini game and that’s about it. I will be using Python for more serious projects.