

## Lesson 10: Jumpman: A non-scrolling platform game

Most popular platform games of the Nintendo and Super Nintendo era used scrolling backgrounds, but earlier games had non-scrolling backgrounds, which is easier for a first-time platform developer. First, let's learn the basics of running, jumping, ladders and platforms on a popular form of platform game from the earlier days of PCs; the non-scrolling platformer. (see examples in other folder for scrolling platformers). If you want to get more complex, see the book, *Make Amazing Games in Minutes*. Check out the other examples in the zip file for some much more complex examples of platform games. Open them up and try to learn from the code!

### What You'll Learn

- ✓ Platform movements: running, jumping, ladders and platforms
- ✓ Using Frames to animate a character

Once you understand the basics, adding scrolling will be a cinch!

### Assets:

Score object

Lives

backdrop object: make a Ladder and set collisions: obstacle type to ladder

Active object: gold

Quickbackdrop (blue background)

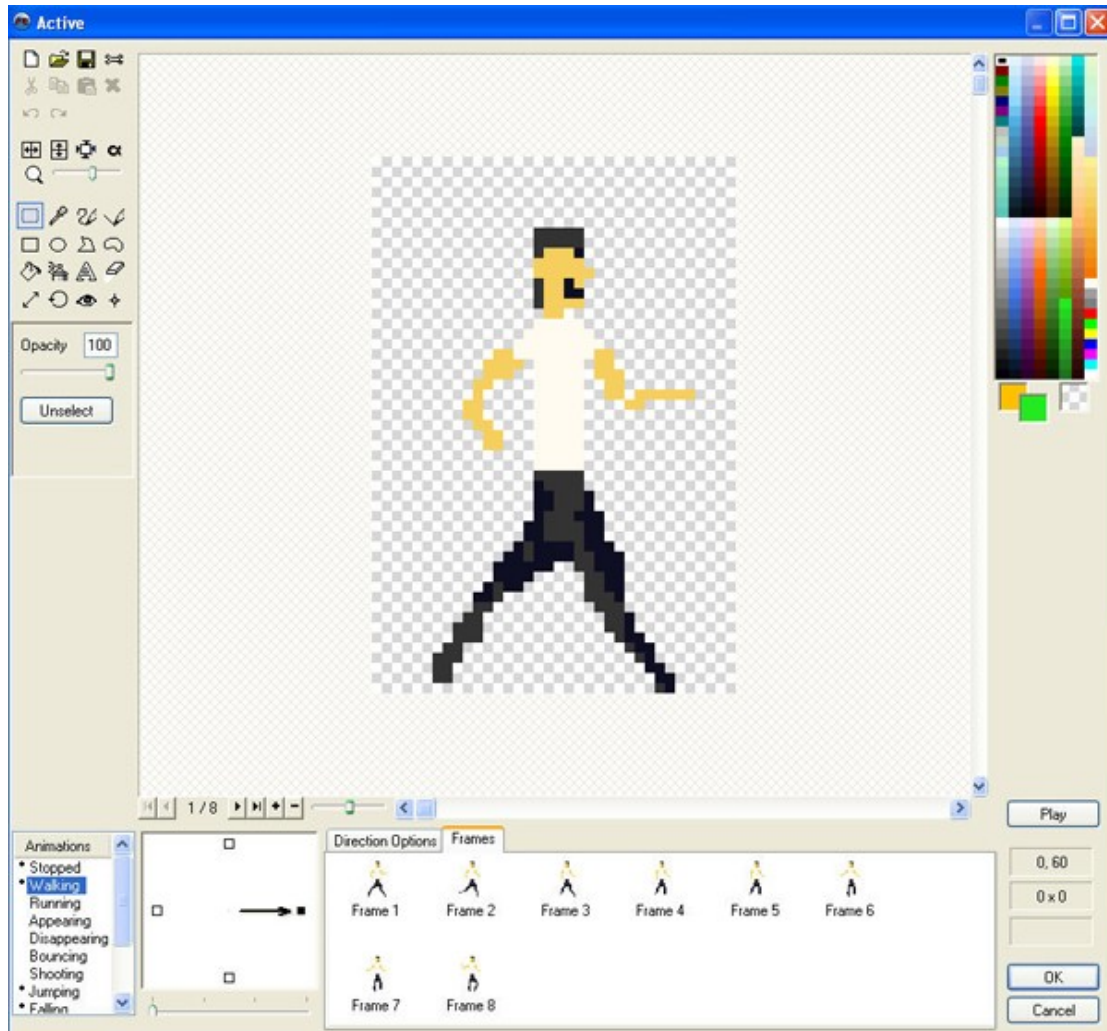
backdrop object: platform: set collisions: obstacle type to platform

Active object: exit sign in the top right

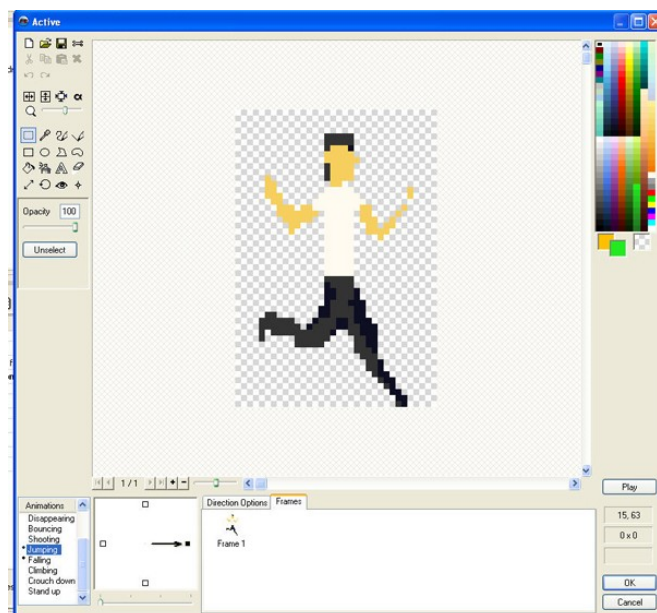
Now our jumpman (or woman): Make an active object. Set movement to platform.

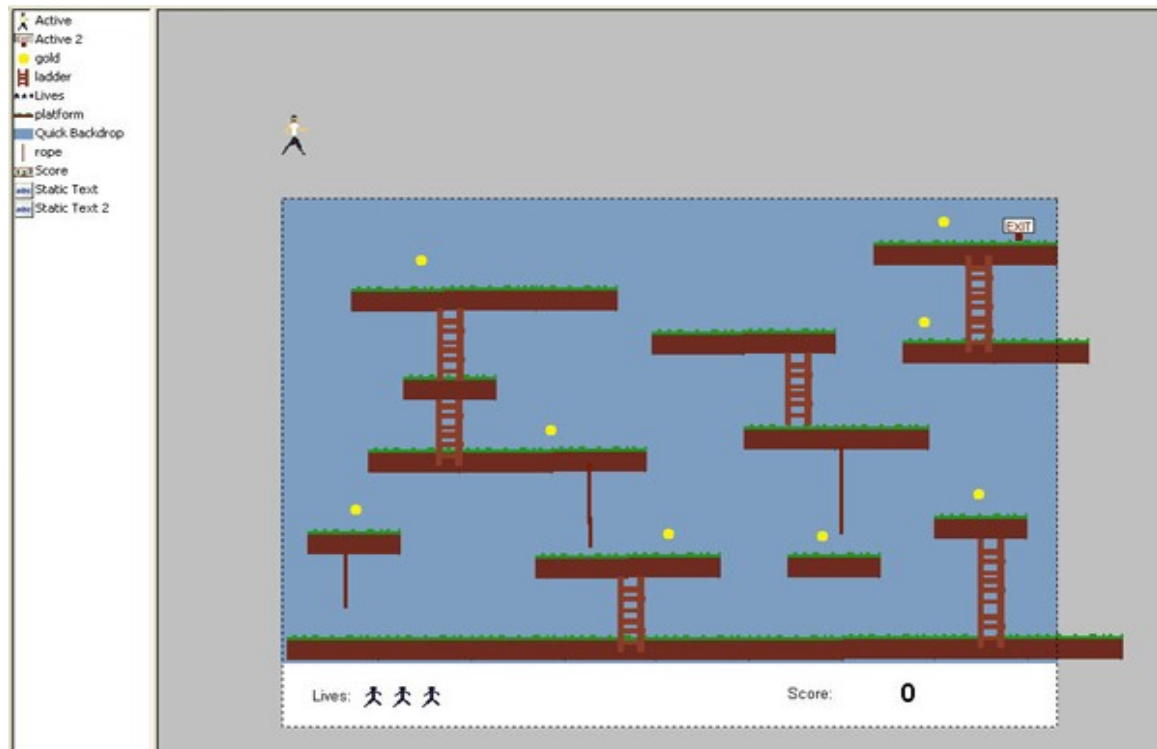
Under stopped (right direction) create a man facing direction right. Okay, my man is pretty sad looking, and we could probably call him mullet-man, but you get the idea. Copy it. Click on the left directional arrow and paste it then click on "flip horizontal".

Select "walking" and give it eight frames of changes to simulate the man walking. My animation is pretty bad, but you get the idea.



Create a figure for “jumping” and one for “falling”. I’ve used the same graphic for both.





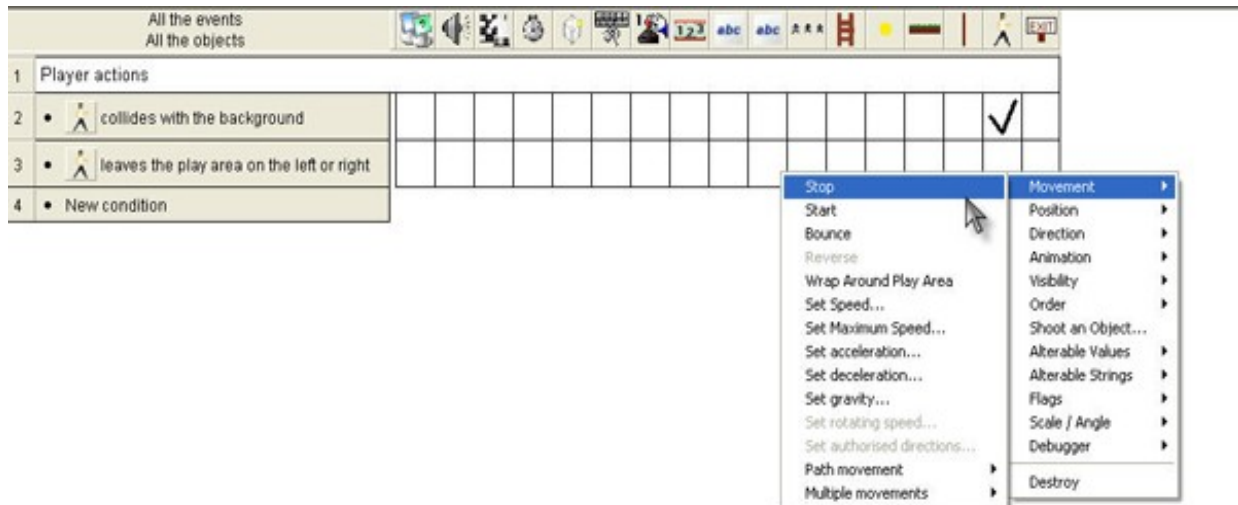
## Setting it up

Level 1 in our game will let the player get used to the controls and won't contain any enemies, so let's start there. Build a level by dropping in many platforms and ladder objects. Be careful about the placement of the ladder objects: If they are too low, your player will fall down the platform they touch. Play with the heights of the ladders as they compare to the edge of the platform to explore different movement options: A ladder that almost reaches the top will stop a player from falling down, but a ladder that reaches over the top of the platform becomes a place to fall down.

Copy and paste a bunch of gold too.

Put jumpman (JM) in the bottom left and set movement to platform: this will default with a jump as shift key.

We want JM to not be able to leave the screen, so select: jm collides with the background > JM stop, then a new line that says if JM's position leaves left or right screen, stop.



Now to collect coins: when JM collides with a coin, add 10 to score and destroy the coin.

When JM collides with the exit sign, add 50 points and go to the next level (frame).

Clone the level1 frame and name it level2. We can make our second more interesting by adjusting the location of platforms, inserting traps and having bad guys, etc. See if you can develop this on your own!