Make a tile puzzle game

We’re gonna make a game

Puzzlescript is a nifty HTML5 framework for playing, making, hacking, and sharing puzzle games. Let’s hack around enough for you to know how to make your own game if you want.

Go to puzzlescript.net.

Click on a game to play it.

Play the game. Is it fun? Too hard? Too soft? Just right?

Click on hack to get under the hood.

You can hack ALL the games on puzzlescript!
Whoa, this thing looks crazy!
Let's back up and start at the beginning with the tutorial game.

Get to know your screen!

RUN. Start the game.

REBUILD. Reload the game to see changes.

EXPORT. Download a single-file HTML copy of your game.

SHARE. A shareable link will be displayed in the console.

DOCS. Where all the knowledge is.

Editor. Write your code here.

Game window. View and play your game here after clicking RUN or REBUILD.

Console. For feedback, messages from the program and debugging.
Parts of the program

**OBJECTS**

This area is where you'll define the looks of everything in your game, from your player to the walls and the background and more. You might have a lot of them. Each object has three parts, which you can see to the right.

- **The object name.** (Make something up.)

- **The colors to use in the object.** In the next section, they will be referred to numerically, starting with zero, from left to right. So, black = 0, Orange = 1, White = 2, Blue = 3.

- **The “drawing” of the object.** Periods are transparent. You can kinda see in this section that the Player object is going to look vaguely humanlike.

Try changing the colors and the layout in the Player object. Click REBUILD at the very top of the screen. Did the player change?

Six sections you’ll need in your program are **Objects**, **Legend**, **Collisionlayers**, **Rules**, **Winconditions**, and **Levels**. There are others (like **Sounds**) but these are the main ones. Let's look at each one.
**Legend**
For each object you just created, choose a single character to represent it on the maps you'll draw in Levels.

**Rules**
Look! This game has one rule!
The glory of a good puzzle game is that it will have a couple basic rules, and then dozens of different levels so you can explore and exploit those rules.

---

**Collision Layers**
How should your objects layer? Objects on each subsequent line will be drawn “over” the objects on the preceding line. So, having Background on a layer by itself makes sense because then everything else is drawn on top of it.

Objects that share a line will collide. So in this example, Player cannot walk through a Wall, which is good. Unless you’re a g-g-g-ghost! In which case, have Wall on a line before Player so the Player can pass through it.

---

So, puzzelscript’s rules syntax is unique, and pretty weird looking at first. Let’s spend some time here before moving on to the last two program sections.

---

These are some of the objects you so lovingly crafted at the beginning of the program.

---

Blocks of [ ... | ... ] describe a place on the screen, a collection of cells, or tiles, where something might happen; an arrangement of objects.

---

Okay? So you basically have a sentence that reads, “If a player tries to go forward but there’s a crate in the way, then make the player and the crate both go forward.”

---

This is kind of a then statement. If the condition on the left of this arrow happens, then the game should do whatever instruction is on the right of the arrow.

---

Lastly, these little dudes are verbs that pretty much mean “go.”
Rules! Still!

So in other words, this rule defines a crate pusher. That’s pretty cool.

Oh! Or this! You pull crates, but then when you walk into one, you trade places with it. It’s like, “pull, pull, pull, SLAM!” Aww yeah.

But what if you want to make a crate puller? That’d be rad.

Add this second rule

Now you’ve basically got a whole different game. Check out Rules 101 under DOCS for more stuff to try.
5 WINCONDITIONS
How to beat the level and proceed to the next level.
In this game, all of the Targets must be touching a Crate.

6 LEVELS
Remember way back in Legends when you assigned each object a character? Time to put 'em on the map!
This game only has two levels, which is a shame. You should totes draw some more.

What’s next?

- Read through the rest of the DOCS on the site. There's lots more you can do, including adding sound effects and displaying text to the player between rounds.
- Play a few more different games. Get ideas from them. Build on them.
- Puzzlers not your thing? That's fine. The ideaLAB has programs for making other kinds of games. Ask about Stencyl, GameSalad, or gamemaker. Twine is a free tool for making HTML text games that you can use anywhere.
- Don’t know what your thing is yet? That’s fine, man. You don’t have to have it all figured out. Try asking other people what kind of stuff they like.