

Drillindustry: An automation  
videogame  
Showcase Edition

DrillIndustry is a videogame that I made about automation i.e. building a factory. It is coded in Snap!. I chose this topic because I like to code and I have played other automation video games such as Mindustry and Satisfactory. A challenge I have faced is getting the conveyor belts to rotate properly. I solved it by having the list of all conveyor positions include which ones were touching the mouse pointer and have the rotated conveyor belt only go to the ones touching the mouse pointer, which are the ones currently being placed. A thing that I have really enjoyed during this project is the coding. A thing that Mr. Danny, my mentor has helped me with is having lists of lists with the position of other sprites clones, so that clones of one sprite can go to the position of clones of another sprite. A link to the game is available [here](#).

GOAL: GET 50 RAW IRON, IRON INGOTS AND IRON PLATES

Raw Iron Stored 0

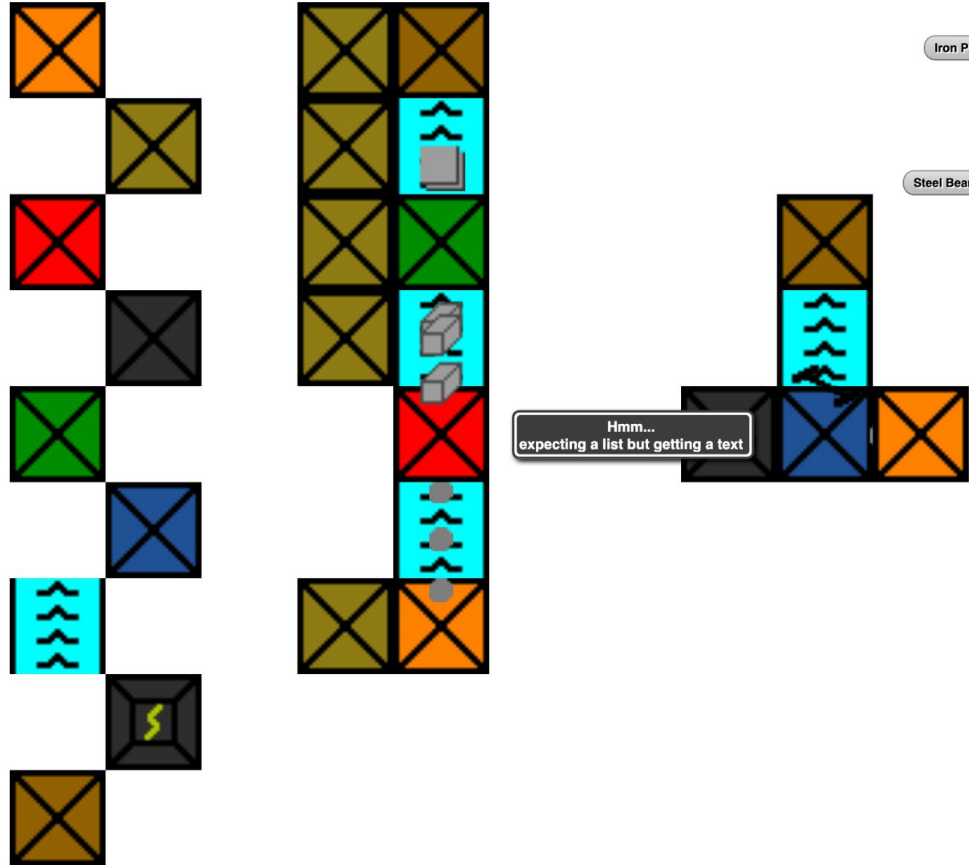
Iron Ingots Stored 0

Iron Plates Stored 52



Game as it was at  
Peer Feedback  
Fest.

# GOAL: GET 50 RAW IRON, IRON INGOTS AND IRON PLATES



Raw Iron Stored 0

Iron Ingots Stored 0

Iron Plates Stored 88

Coal stored 0

Steel Beams stored 71

Max storage 100

Power 14

Hmm...  
expecting a list but getting a text

The game as it is now



Code that makes a block called  
“Coal generator” function.

```
when I start as a clone
wait 0.2 secs
repeat until mouse down? = true
  go to x: round mouse x / 32 * 32 y:
  round mouse y / 32 * 32
broadcast Coal Generator placed
set pickuppable? to true
set something placed to true
change Iron Plates Stored by -15
change Steel Beams stored by -5
script variables x y coal power changed?
set x to x position
set y to y position
set coal to 0
set power changed? to false
set n to 0
forever
  go to x: x y: y
  wait 0.1 secs
  if touching Coal ?
    change coal by 1
  if not power changed?
    if coal > 0
      Power 60
      set power changed? to true
    if power changed?
      if coal < 1
        Power -60
        set power changed? to false
  if key d pressed?
    if power changed?
      Power -60
    else
      Power 60
  delete this clone
```

```
when clicked
point in direction 270
set ask devkeys? to false
set No cost to false
set tutorial skipped to false
set something placed to false
ask
join
Welcome to Drillindustry. Following is a tutorial. All necessary instruction is provided in the tutorial. Good luck. (press enter)
unicode 10 as letter
and wait
repeat until something placed or tutorial skipped
ask
join
Click on a building in the menu. Move the mouse to where you want to put it. Click again. 1/8 (press enter. To skip the tutorial type "skip")
unicode 10 as letter
and wait
if answer = skip
set tutorial skipped to true
if ask devkeys?
ask join Devkeys? unicode 10 as letter and wait
if answer = nocost
set No cost to true
else
ask join Press "d" to delete a building. 2/8 (press enter) unicode 10 as letter
and wait
ask
join
place a conveyor belt and then place a building on top. the building will output in the direction of the belt. 3/8 (press enter)
unicode 10 as letter
and wait
ask
join Conveyor belts also transport items. 4/8 (press enter) unicode 10 as letter
and wait
ask
join
orange is miners red is melters and green is plate constructors use brown to store things. 5/8 (press enter)
unicode 10 as letter
and wait
ask
join
Black is coal miner, tan is solar panels, blue is steel forge, black with a lightning bolt is coal generator. 6/8 (press enter)
unicode 10 as letter
and wait
ask join everything requires iron plates to build so set that production up. 7/8 (press enter)
unicode 10 as letter
and wait
ask join Build solar panels to generate power. nothing works without power. 8/8 (press enter)
unicode 10 as letter
and wait
if answer = skip
set tutorial skipped to true
```

Code that I wrote for the tutorial of the game.

+ keep + clone + at + position + it + is + placed + and + Delete +  
-power consumption +

script variables **x** **y**

set **x** to **x position**

set **y** to **y position**

forever

go to x: **x** y: **y**

if **key d pressed?** and **touching mouse-pointer ?**

Power -power consumption

delete this clone

Code that all clones have after they are placed

+ Pick + up + Cost (Iron plates) + Cost (Steel Beams) + x + y +

if

mouse x < x + 17 and mouse x > x - 17  
and mouse y < y + 17 and  
mouse y > y - 17 and  
Iron Plates Stored > Cost (Iron plates) and pickuppable? and  
Steel Beams stored > Cost (Steel Beams)

or

mouse x < x + 17 and mouse x > x - 17  
and mouse y < y + 17 and  
mouse y > y - 17 and No cost and pickuppable?

set pickuppable? to false

create a clone of myself

Code for picking up the blocks.

+ cloneMovementForPlacing +

wait 0.2 secs

repeat until mouse down? = true

go to x: round mouse x / 32 × 32 y:

round mouse y / 32 × 32

if -192 = x position or -160 = x position

set pickuppable? to true

delete this clone

Code for buildings going to the mouse position and snapping to a grid so that you can place them easily

Conveyor belt texture

