

TUTORIAL - MINECRAFT 02

(adapted by Sandro Sousa)

Minecraft is a sandbox (game level editor) video game created and designed by Swedish game designer Markus "Notch" Persson, and later fully developed and published by Mojang. The creative and building aspects of Minecraft enable players to build constructions out of textured cubes in a 3D procedurally generated world (source: <https://en.wikipedia.org/wiki/Minecraft>).

01. Let's read in English and code using Minecraft: hero's journey!

02. Go to <https://studio.code.org/s/minecraft/stage/1/puzzle/1>

03. The page must be in English. So, Set the language to English on the bottom left corner of your browser.

04. To complete the Hour of Code challenge, you'll need to write code to program The Agent. You'll work together with **The Agent (a digital assistant)** to clear any obstacles in your path, so you can pick up the items you'll need for your journey. Only **The Agent can** place and break blocks, and only you (in fact, the character you choose) can collect items.

05. **Minecraft screen** has three main parts. On the left is **Minecraft**. The middle area is the **Toolbox** with commands that The Agent can understand; and on the right is the **Workspace**. That's where you stack the commands to build your program to control The Agent.

06. The agent can walk, turn, and activate pressure plates. It can also destroy blocks and place blocks.

07. When it places the blocks like these minecart rails, it places underneath itself.

08. If you forget what to do, the instructions for each level are at the top.

09. If you want to try again, you can hit the blue Reset button to reset everything from where it started.

10. And if you need to delete a block of code, drag it from your Workspace to the Toolbox. When you do this, a trashcan appears.

11. Remember to hit Run button to make The Agent moving.

12. Choose a character to play.

Remember: only The Agent can place and break blocks, and only you can collect items.

The Agent can also hover over lava, but Steve and Alex can't!

13. Observe that you have 12 (twelve) steps to complete your code.

14. Read the instructions that contextualize the game inside the box. Here's the transcript:

15. Once the Agent has run all of its code, you can move the player with the arrow keys!

“The door is locked, but the Agent is here to help! Snap a **move forward** block to the bottom of the **when run** block in the workspace to get the Agent to the pressure plate .

Then press "Run" and **use** the arrow keys to move out of the house to collect the **chest**.

16. By dragging and placing blocks in this puzzle, you've created a set of instructions in a computer language called Javascript. This code tells computers what to display on the screen. Everything you see and do in Minecraft also starts with lines of computer code like these: **moveForward();**

17. Ok. Now **Continue** reading and coding. Good luck.