



# Scratch Invaders 2



Register/login at <https://scratch.mit.edu>

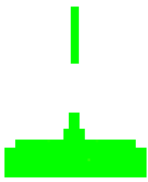
*Defend your planet from the invaders with missiles.*

1) Download *invader* images from:

<https://codeclub67.github.io/images/invader.gif>

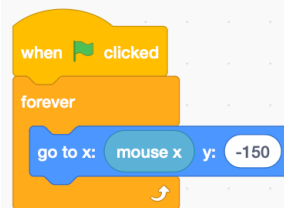
2) Create a new sprite by uploading the *invader* images.

3) Select the  costume and call it **cannon**.



4) Duplicate the cannon, rename the copy **missile**, and select the missile costume.

5) Add cannon code to control it with the mouse:



6) Add missile code (left) so it's hidden when the game starts.



*Use the space key to launch a missile.*

7) Add missile launch code when the space key is pressed. The missile starts at the **cannon** and moves up the screen until it **touches** the top edge.

8) If the missile **touches** an invader it **broadcasts zap** and **hides**. Move the missile off-screen (**set y**) to exit the loop. Add more **if** blocks to detect the **crab** and **octopus** invaders.



*How is an invader is destroyed? Do you just hide it, or something else? In this code, all the visible invaders are clones so we can destroy them by deleting the clone.*

9) All sprites receive the message so you have to check which one is **touching** the missile.

10) **Switch** to 'explosion' costume 10.

11) **wait**, then **delete the clone**.

*Add a solid black space backdrop.*

12) Add a new backdrop to the **Stage** using the paint tool.

13) Mix a black fill colour by setting brightness to 0, and draw a black rectangle covering the highlighted visible area of the screen.

14) Switch to this backdrop at the start.

15) Duplicate the black backdrop, and use the text tool to add "**Game Over**" in big pixelated red letters.

16) When the invaders reach and **touch** the cannon, the game is over.

17) Add **Stage** code to end the game.

*Remember to **Save** your code.*

