

Process

You should...

- Add on to the template provided to create functionality to the cat sprite
- Adapt the code to make it your own

This is what your code should end up looking like !



Template

<https://scratch.mit.edu/projects/667002641>

Click **Remix** to get started with your project

By the end of the project, your code should look like this

This template is the code needed to get you started with this project

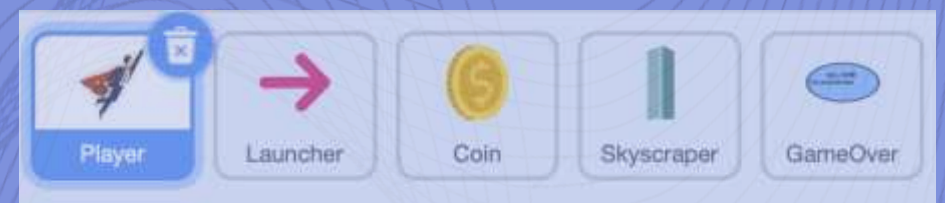
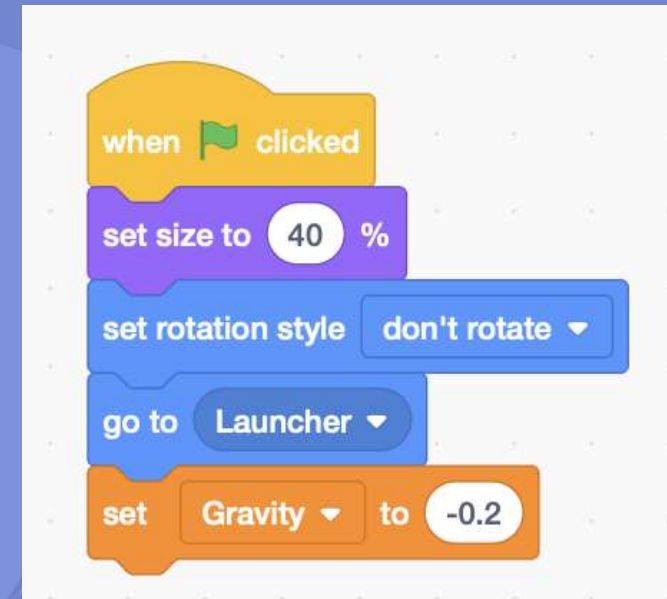


The screenshot shows a Scratch project page for 'C4Y- Super Spender code template'. The project features a cityscape background with a green flag icon in the center. The text on the screen reads: 'LAUNCH ANGLE' with left and right arrows, 'LAUNCH SPEED' with up and down arrows, and 'SPACE TO LAUNCH'. The page includes a 'See inside' button, an 'Instructions' section with the text 'Tell people how to use your project (such as which keys to press).', and a 'Notes and Credits' section with the text 'How did you make this project? Did you use ideas, scripts or artwork from other people? Thank them here.'. At the bottom, there are icons for likes (0), remixes (0), and views (1), along with the date 'Mar 28, 2022', and buttons for 'Add to Studio' and 'Copy Link'.

Step 1

Resetting the player sprite

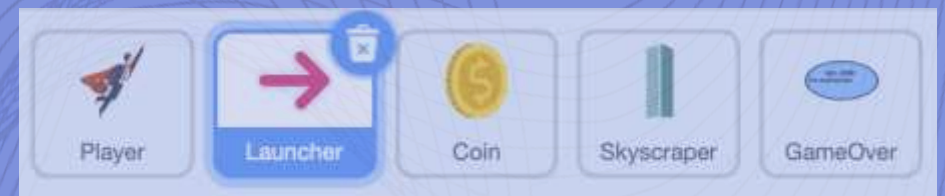
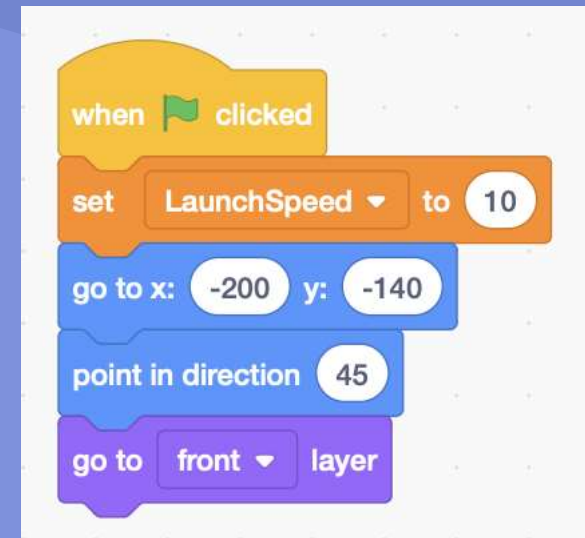
When the game starts, the size of the player should be set to 40%, should be straight up and the gravity (which will be explored later), is set to -0.2



Step 2

Default launch conditions

In the launcher sprite, we will program the launch speed variable to start at 10 and be located at the correct position on the page



Step 3

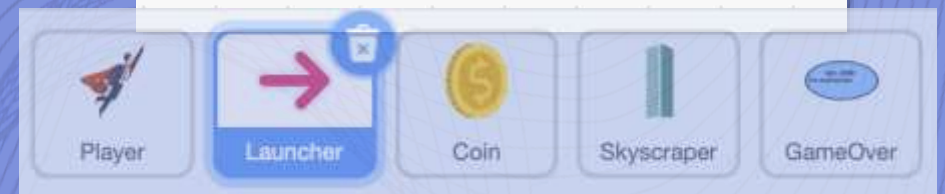
Changing the launch speed

The launch speed is changed by 0.1, depending on if the up or down arrow is clicked. The maximum speed is 20 and the minimum is 1 (remember that the default speed is 10)

```

when up arrow key pressed
if LaunchSpeed < 20 then
change LaunchSpeed by 0.1

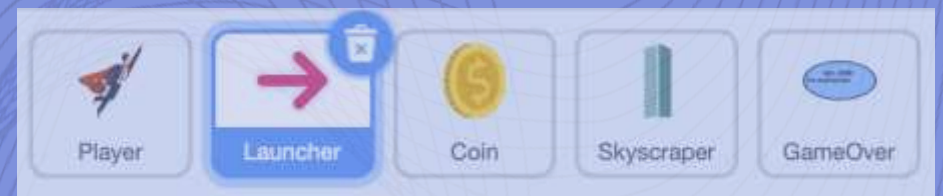
when down arrow key pressed
if LaunchSpeed > 1 then
change LaunchSpeed by -0.1
  
```



Step 4

Changing the launch direction

The left and the right arrows will be used to change the direction that the player will be launched in.



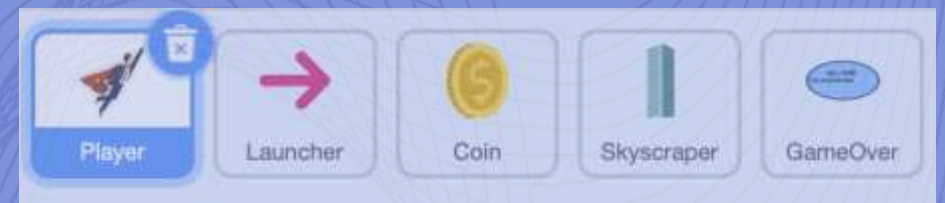
Step 5

Launching the player

This code will be in the plater sprite. When the space is pressed, the code in the launcher sprite will be run. Depending on where the launcher arrow is facing and the speed selected by the user, depends on the direction and speed at which the player is launched with. The fall speed is also set to 0 which will reduce the speed at which the player will fall after reaching the peak launch position.

```

when space key pressed
go to Launcher
point in direction direction of Launcher
set FallSpeed to 0
  
```



Step 6

Repeating the launch

Until the player is
screen, or the sk
move at the spe
direct

The fall speed will
the "gravity" varia
This will just mea

than float in the air.

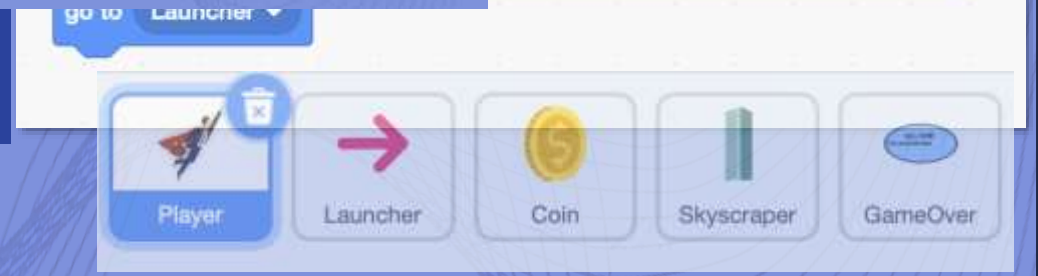
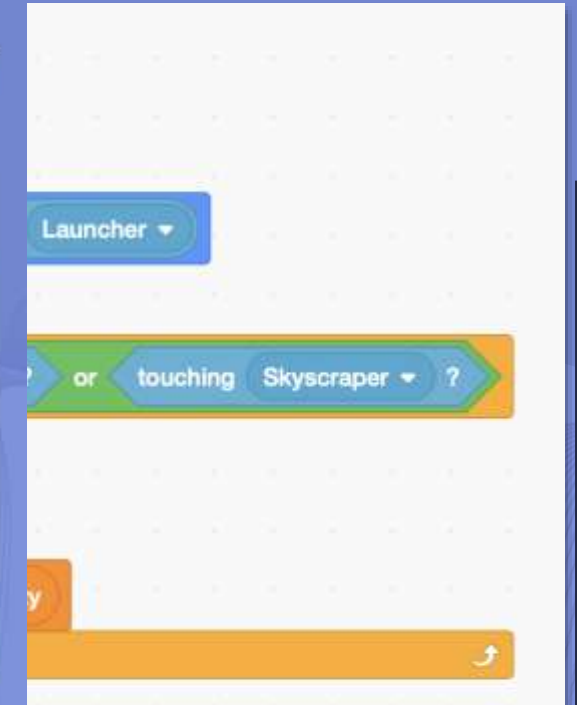
Step 6

Repeating the launch

Until the player is either touching the edge of the screen, or the skyscraper itself, the player will move at the speed specified by the user in the direction specified earlier.

The fall speed will be changed each time by using the "gravity" variable declared at the beginning. This will just mean that the player will fall rather than float in the air.

```
when space key pressed
go to Launcher
point in direction direction of Launcher
set FallSpeed to 0
repeat until touching edge? or touching Skyscraper?
move LaunchSpeed steps
change y by FallSpeed
change FallSpeed by Gravity
go to Launcher
```

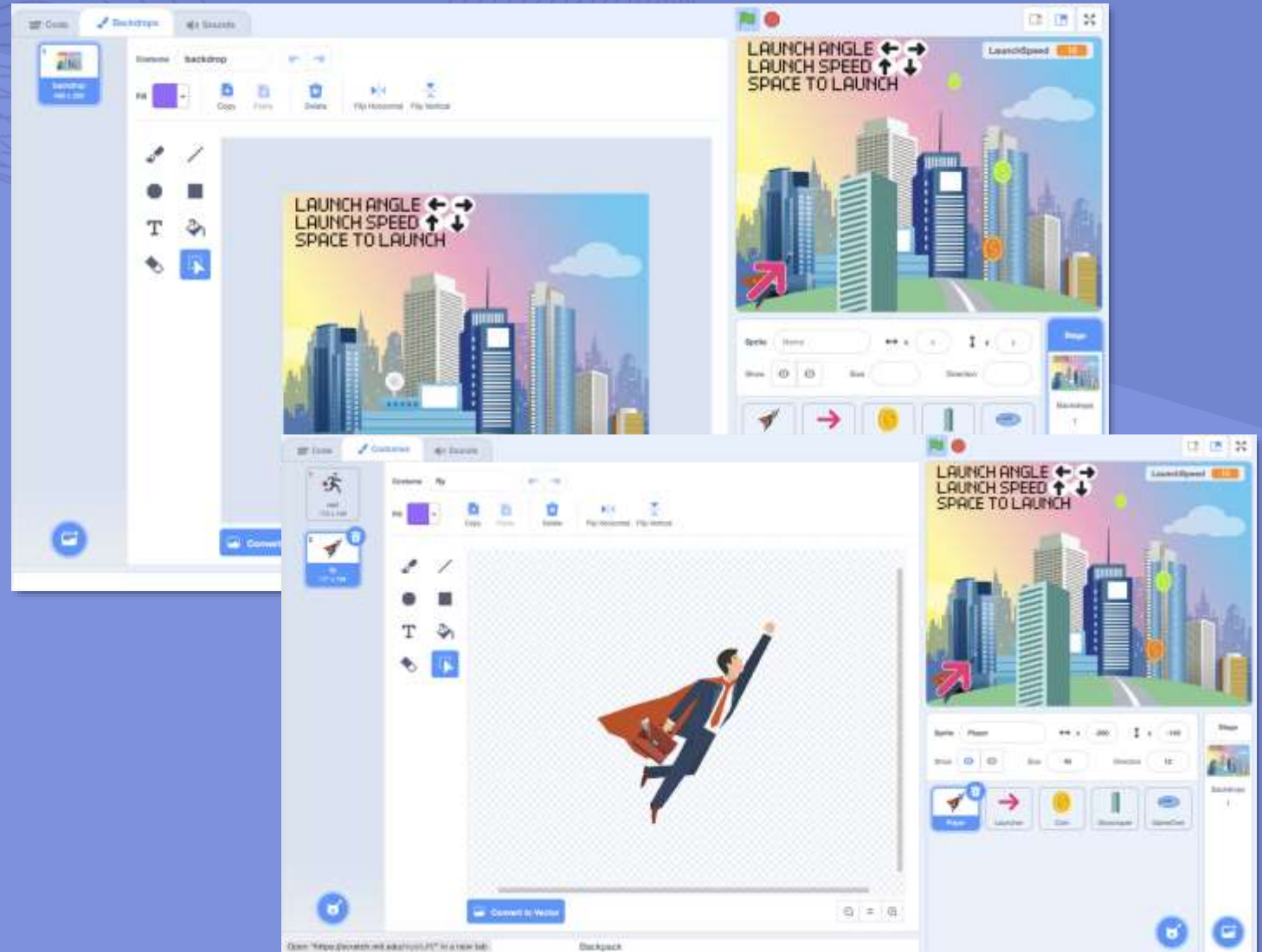


Step 7

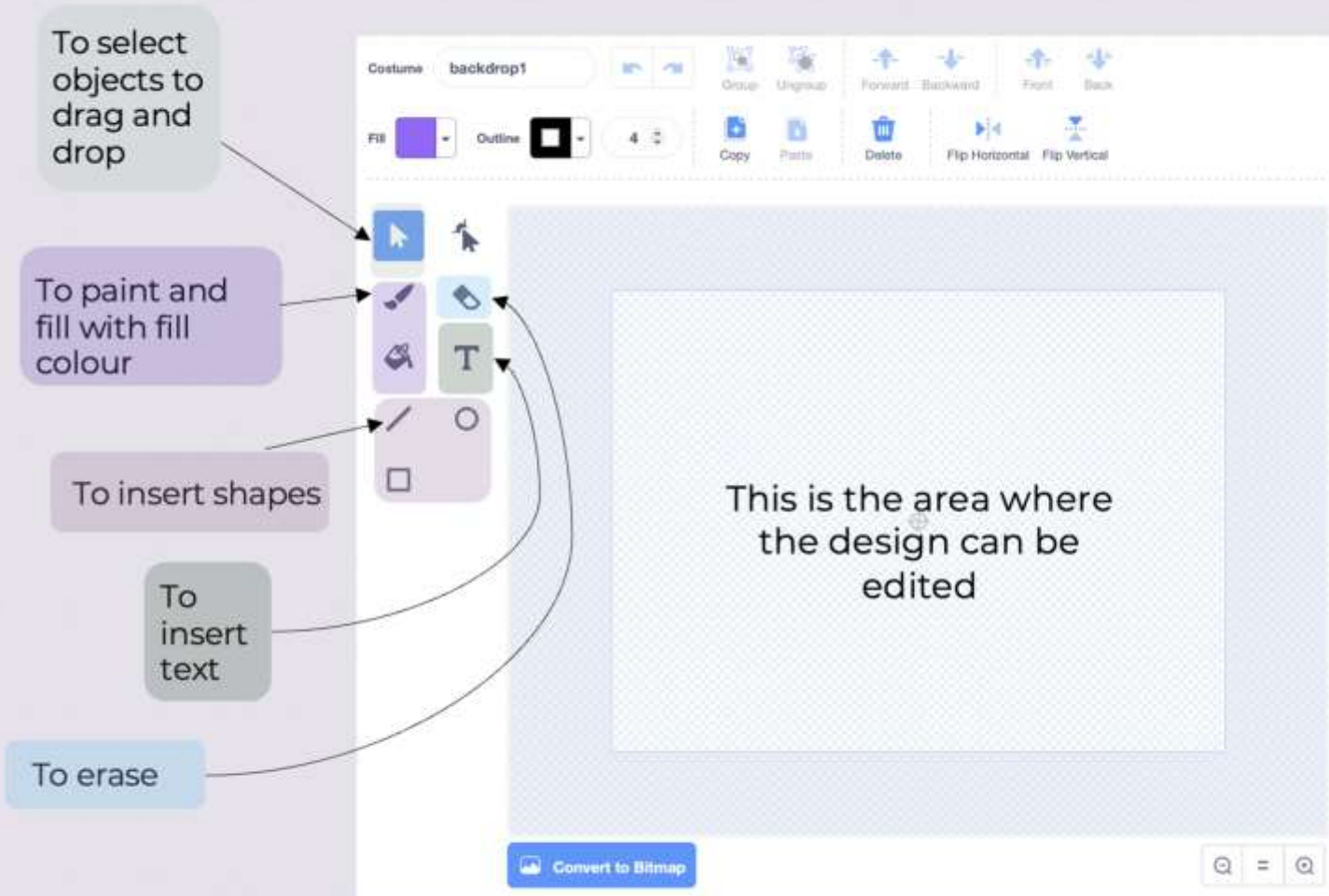
Adapt the game

Using the backdrops and costumes sections, your job is to change the appearance of the backgrounds to make an original game

This should be done without affecting the functionality of the game, and without compromising the user's ability to play. Once finished make sure you test the game to ensure that it works properly.



Designing a background in Scratch



This icon allows you to import your own background or pictures that you want to use on your background, after saving them to your computer

