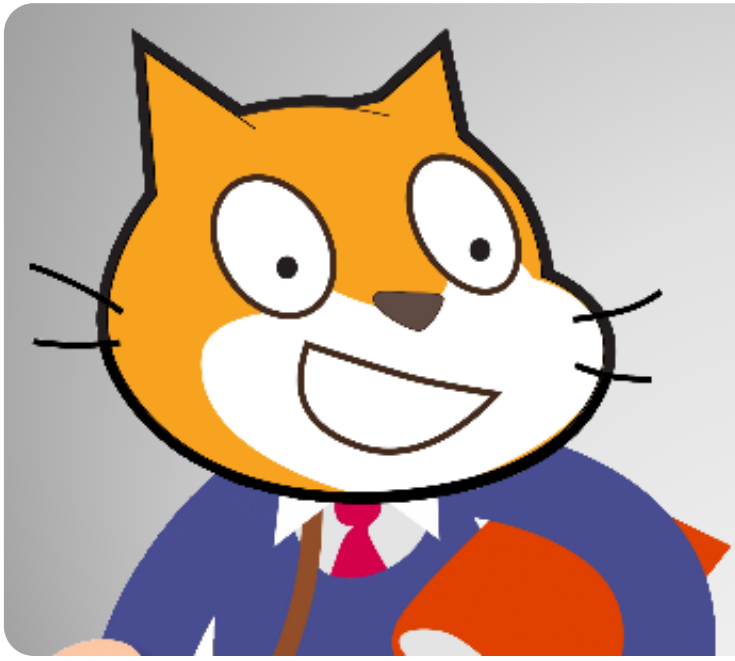


刮住學

初中編程體驗比賽

Scratch 編程工作坊(I)

Basic Action Game

基本動作遊戲

宣道會鄭榮之中學
Christian Alliance
Cheng Wing Gee College

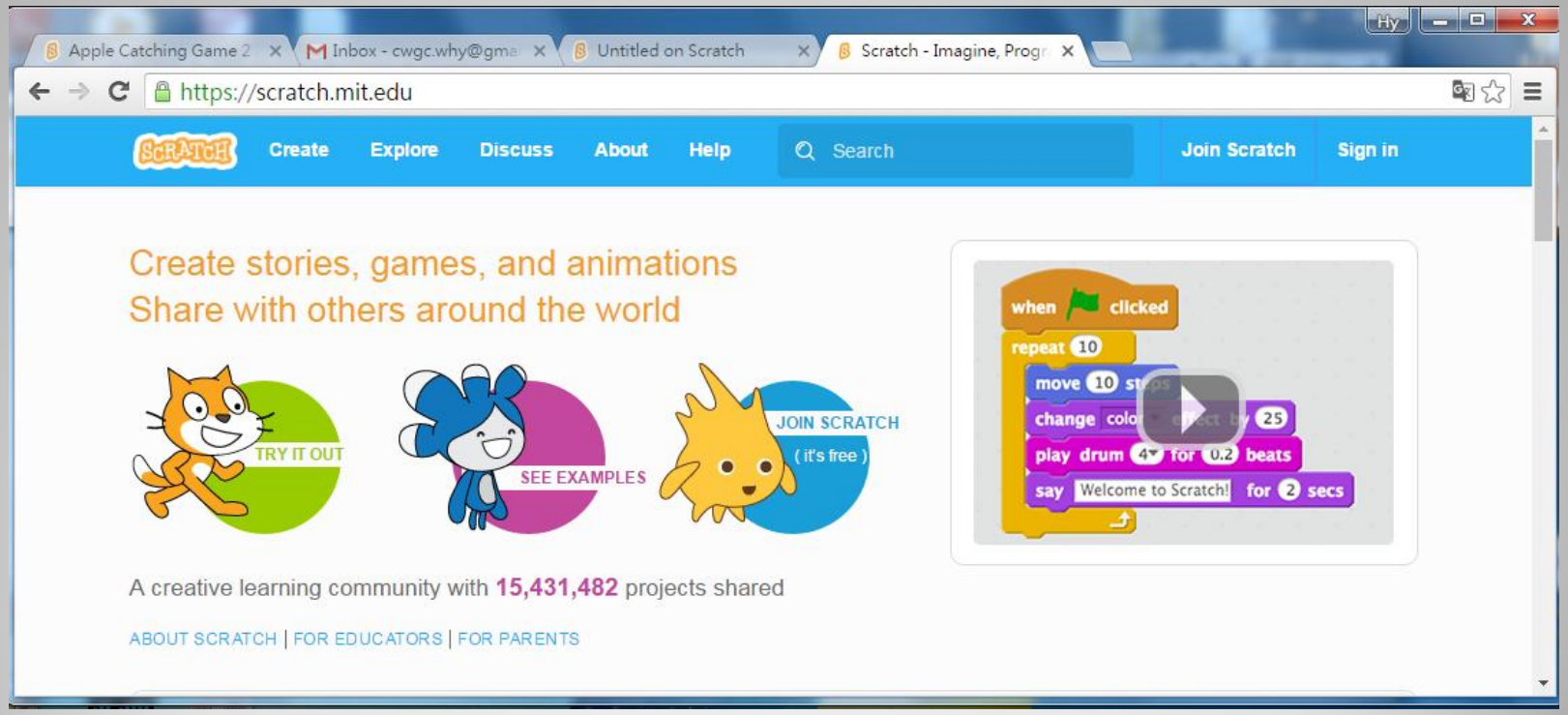
A. Introduction

About Scratch

- https://vimeo.com/65583694

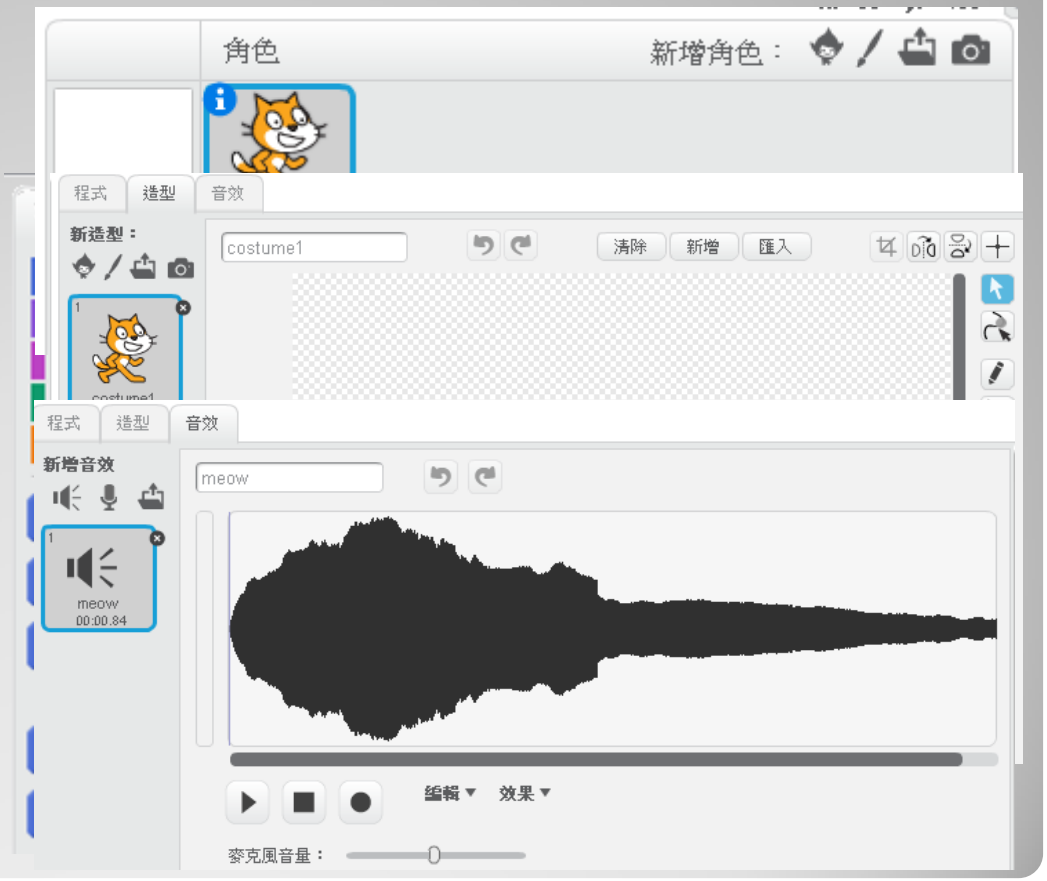
B. Registration & Login

- https://scratch.mit.edu/



C. Components

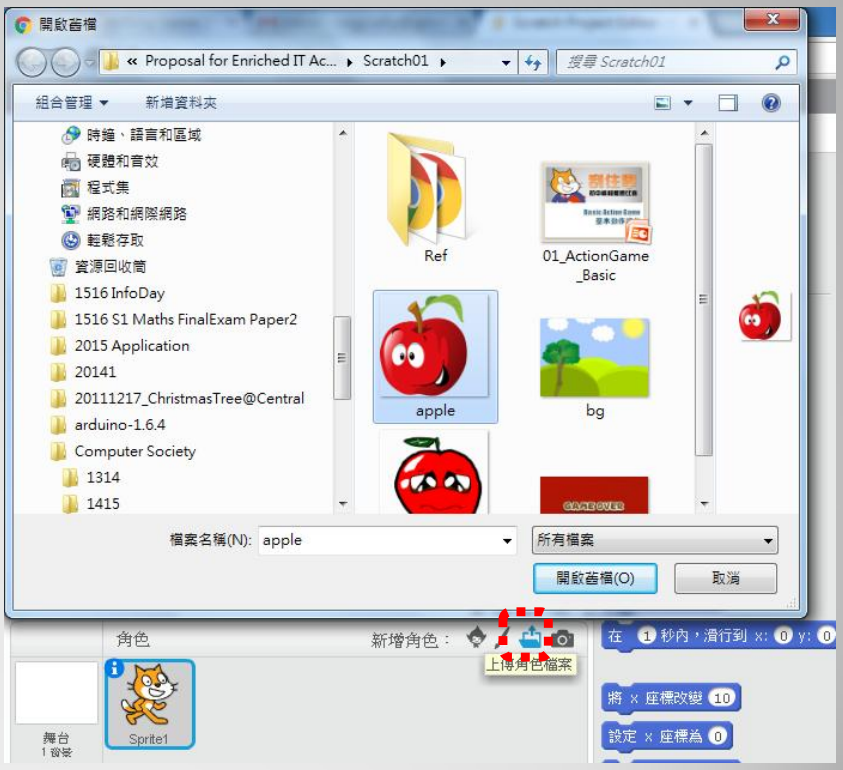
- Sprites (角色)
- Scripts (程式)
- Costumes (造型)
- Sounds (音效)



D. My First Action Game

Create a new sprite

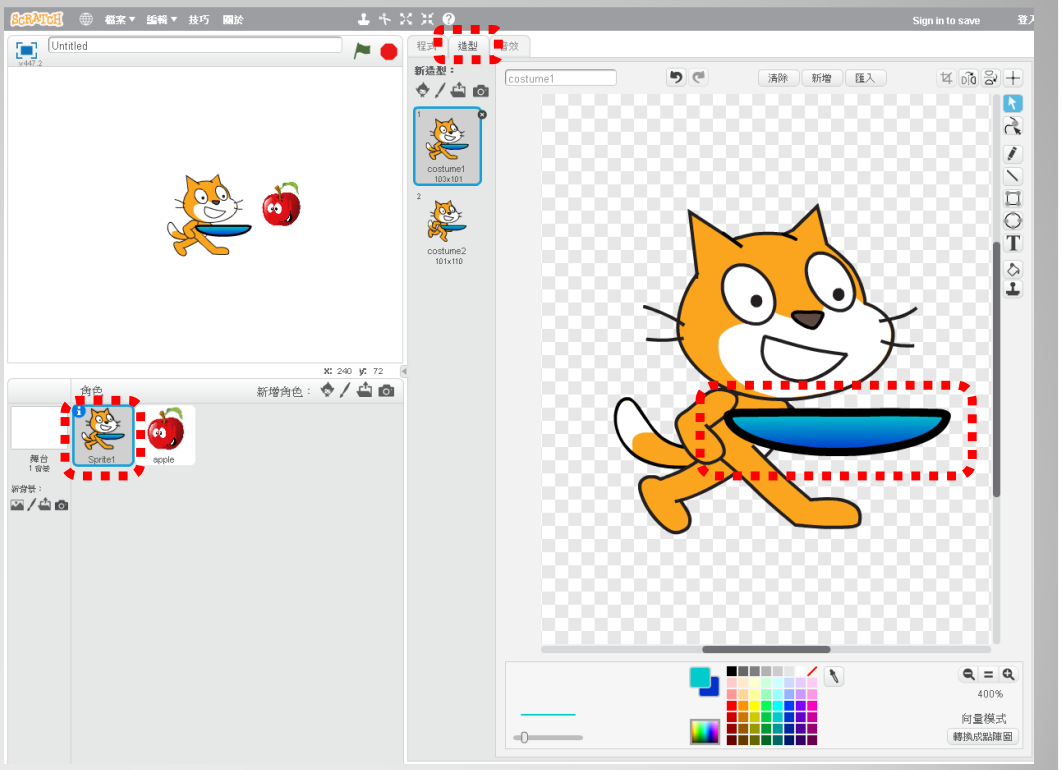
1. Click on **Upload Sprite from file**. (上傳角色檔案)



D. My First Action Game

Edit a sprite

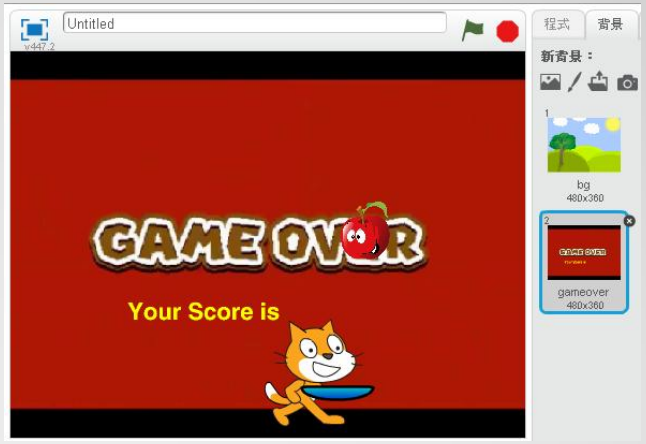
2. Click on a sprite.
3. Click on **Costumes** (造型).
4. Add a “Basket” for your sprite.



D. My First Action Game

Challenge 01

1. Can you add a background on stage (舞台)?
2. Create another screen for game-ending.



D. My First Action Game

Coding

8. Click on a sprite.

9. Add the scripts for the sprite.

D. My First Action Game

Coding

10. Create 6 variables
    - speed
    - score
    - highscore
    - finalscore
    - catched
    - missed

D. My First Action Game

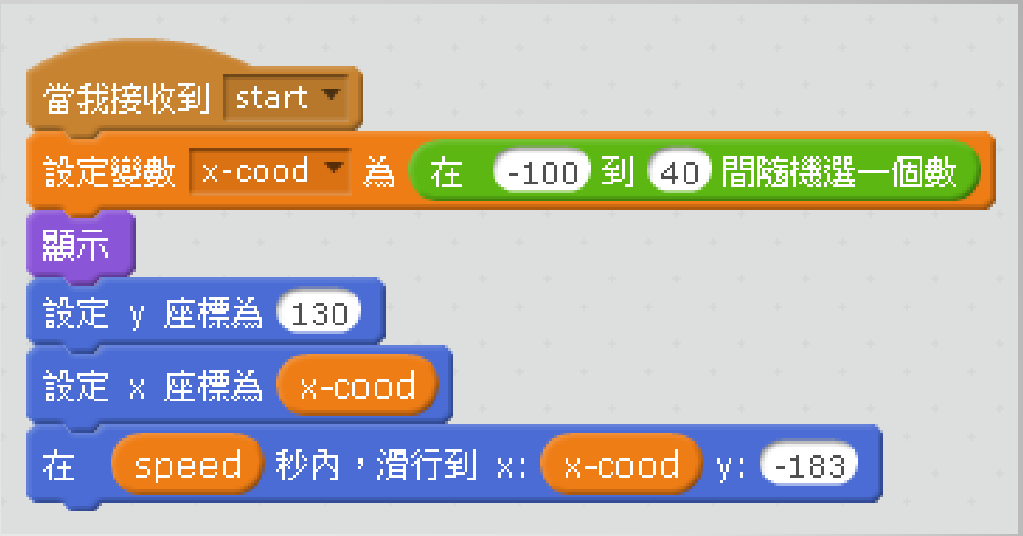
Coding

11. Adding the code for x-coordinate
12. Adding the code for y-coordinate

D. My First Action Game

Coding

13. Adding the code to create apples randomly



D. My First Action Game

Coding

14. When apple is catched,…
    - apple disappeared
    - catched = 1
    - score + 1
    - wait
    - catched = 0

D. My First Action Game

Coding

15. When an apple hits the ground & catched = 0 (Missed the apple),…
    - hide
    - broadcast “lost”
    - sound
    - y-coordinate → 130

D. My First Action Game

Challenge 02

- If score = ? → more apples…, How?

score	#apple
>5	2
>10	3
>15	4
>20	5

D. My First Action Game

Coding

16. Cloning of an apple…

D. My First Action Game

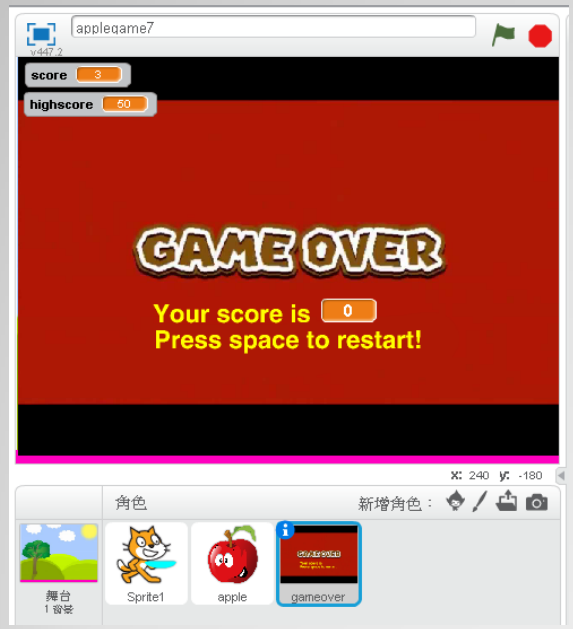
Coding

17. Cloning of an apple…

D. My First Action Game

Coding

18. End game screen…



D. My First Action Game

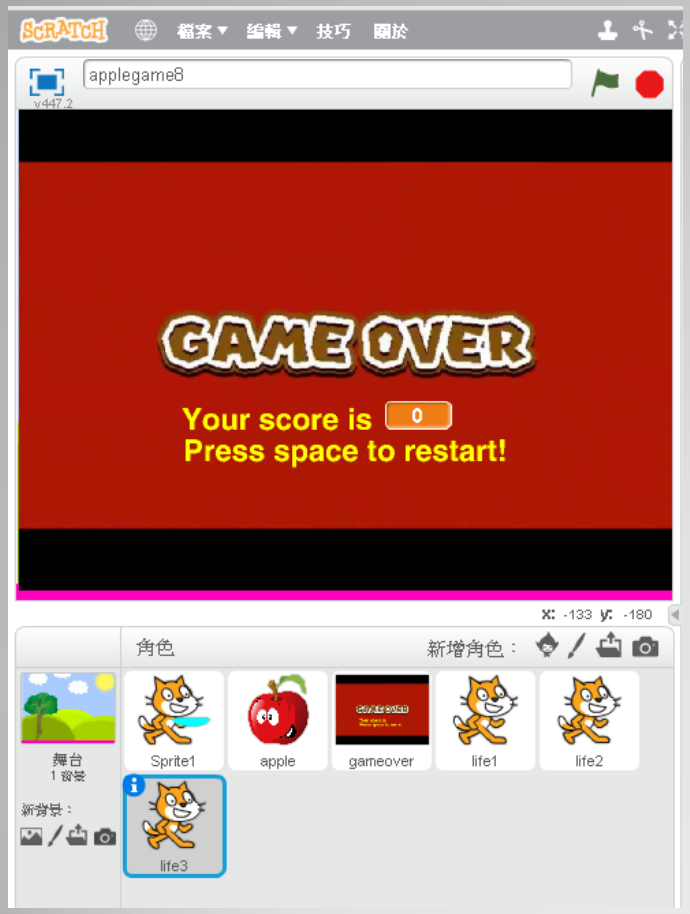
Coding

19. Tips

D. My First Action Game

Challenge 03

- Anything need to add in other sprites?
- How to let the game restart?
- How to handle the “lives” of sprite?
- How to make the game more educational?


SCRATCH
檔案
編輯
技巧
關於
applegame8
GAME OVER
Your score is 0
Press space to restart!
角色
新增角色：
舞台
1 背景
新背景：
Sprite1
apple
gameover
life1
life2
life3

當我接收到 gamestart
顯示
移到最上層
設定變數 missed 為 0
當我接收到 lost
將變數 missed 改變 1
當我接收到 gamestart
重複執行
如果 missed > 2 就
隱藏
等待 0.05 秒
廣播 gameover
停止 全部