



KAMPUS  
DIGITAL  
KREATIF

UNIVERSITAS BSI

# Belajar sambil Bermain: Membuat Game Interaktif dengan **SCRATCH**



Minggu, 13 Oktober 2024  
Rumah Pintar Punggur Cerdas





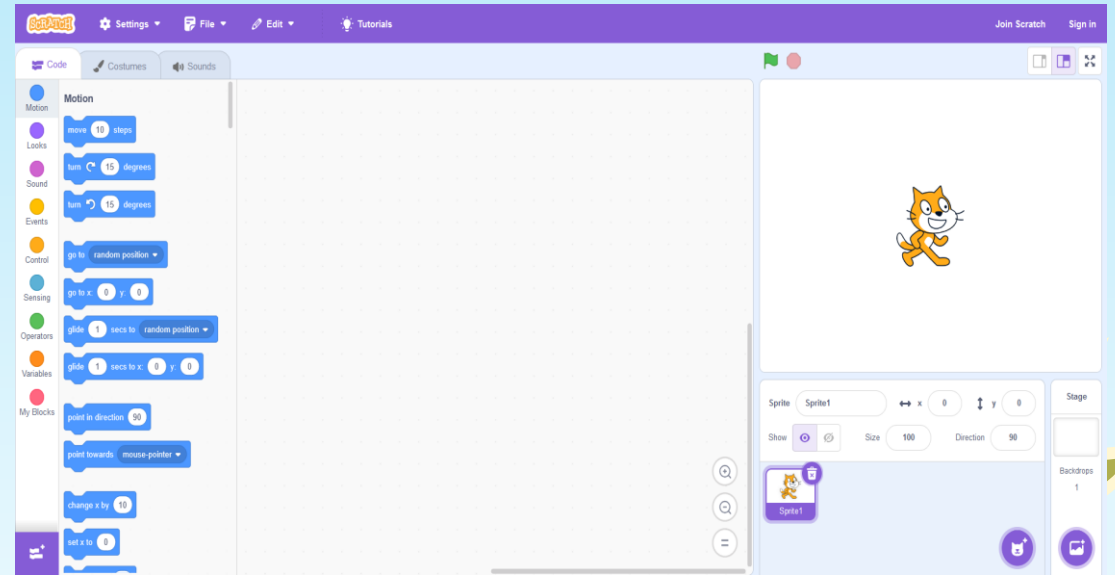
# Panduan Membuat Game Sederhana: Tendangan Penalti Kucing

SCRATCH



# Apa itu ?

- **Bahasa Pemrograman Sederhana:**  
Cocok untuk pemula belajar coding
- **Banyak Proyek Menarik:**  
Bikin game, animasi dan aplikasi
- **Komunitas yang aktif:**  
Berbagi ide dan saling membantu



# Konsep Permainan: Tendangan Penalti Kucing

SCRATCH

- **Tendangan Penalti**  
Menendang bola ke gawang dari titik penalti
- **Penjaga Gawang**  
Kucing bertindak sebagai penjaga gawang yang berusaha menangkap bola
- **Mencetak Gol**  
Pemain berusaha mencetak gol melewati penjaga gawang kucing



# Persiapan Membuat Game! Tendangan Penalti Kucing

SCRATCH

- **Akses Scratch**

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

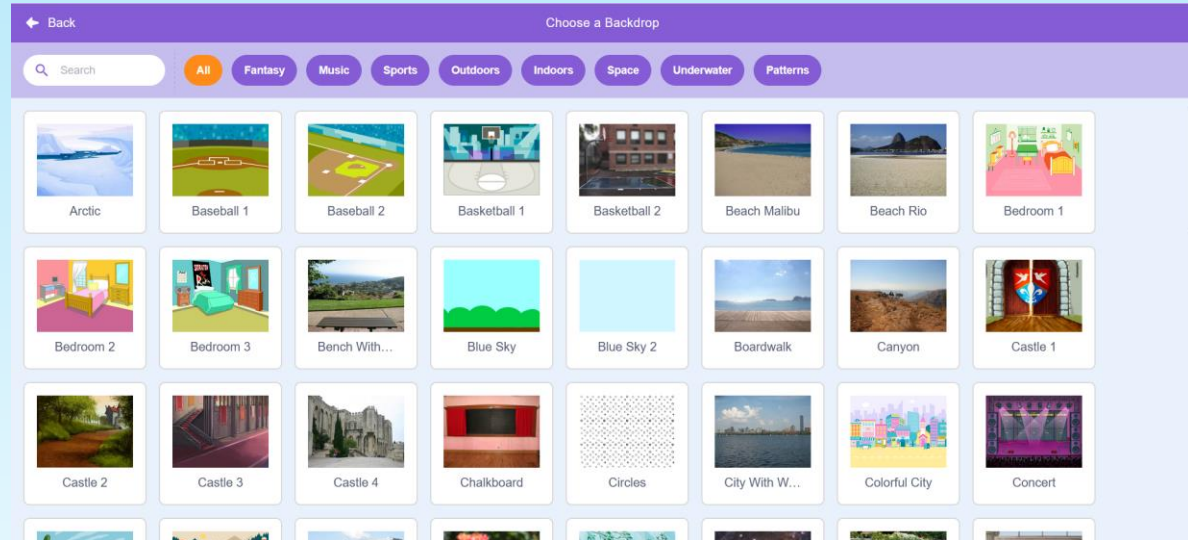
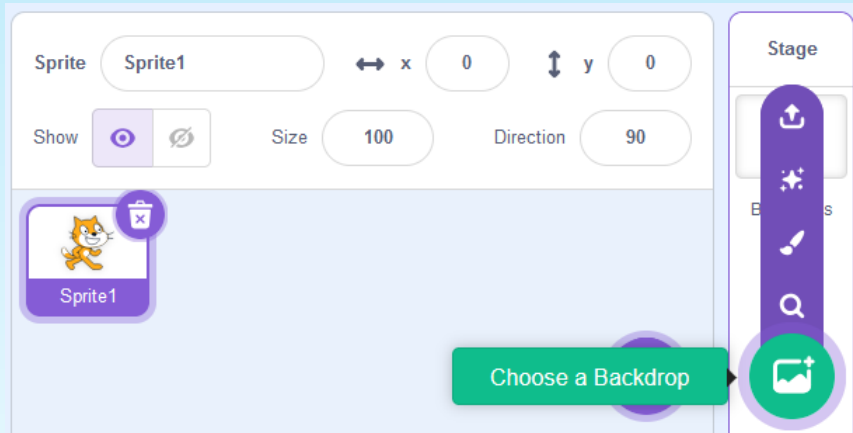
- **Klik Start Creating**

Mulai membuat cerita, permainan, dan animasi

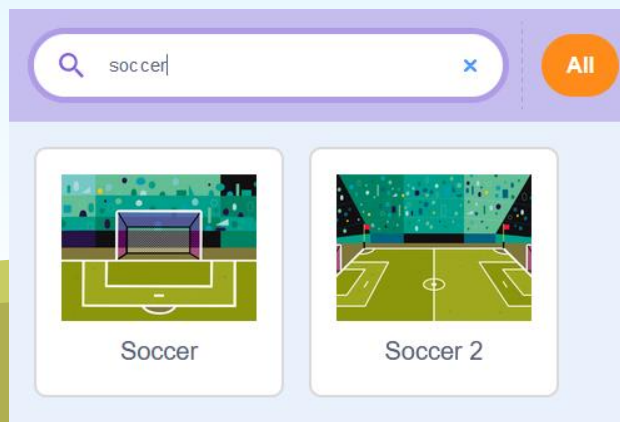


# Membuat Latar Belakang

## 1. Choose a Backdrop

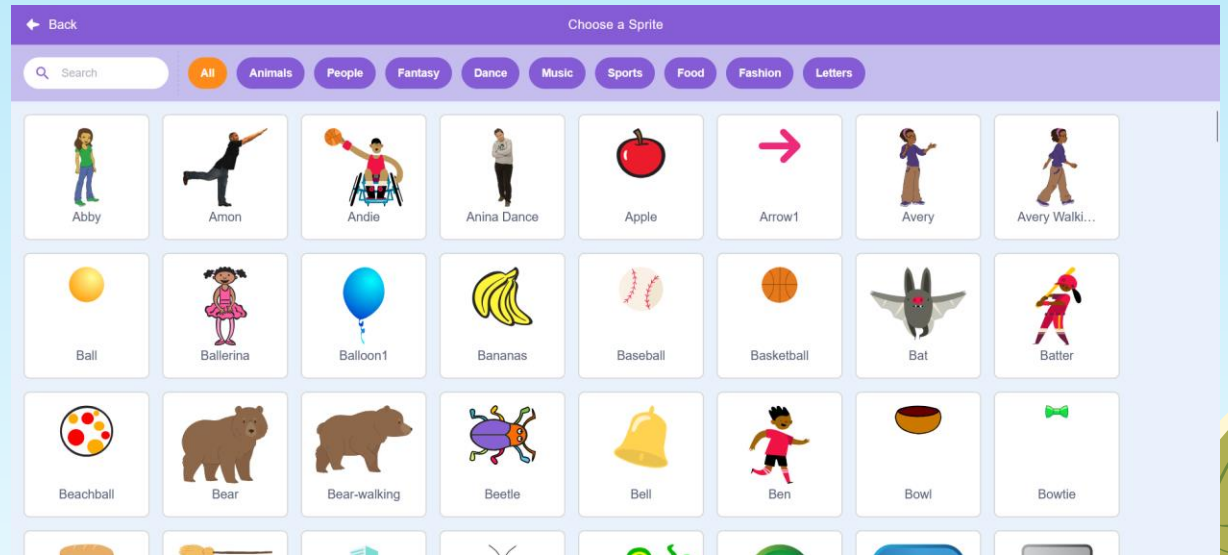
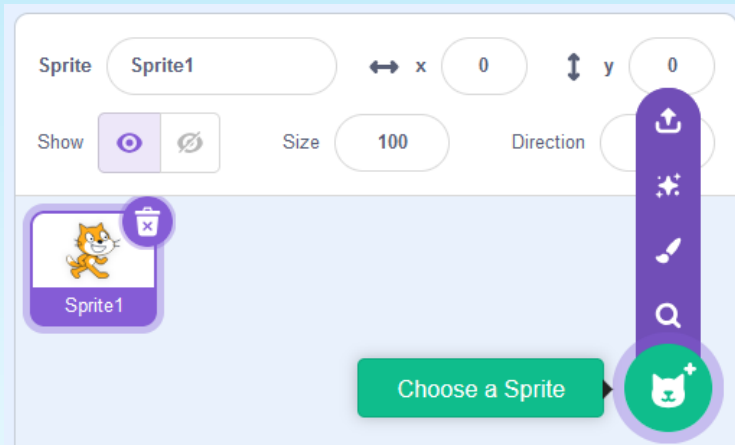


## 2. Search Backdrop Keyword: "Soccer"

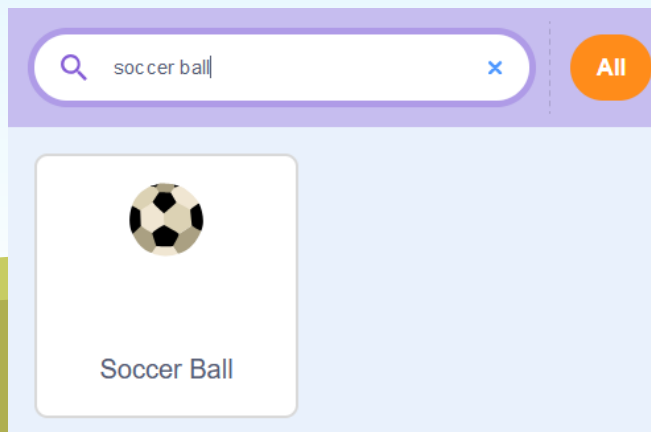


# Menambahkan Objek Bola

## 1. Choose a Sprite

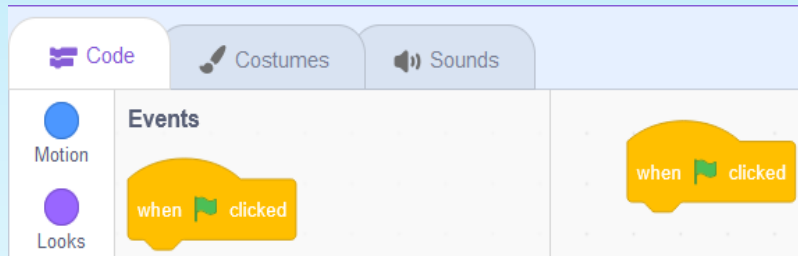


## 2. Search Backdrop Keyword: "Soccer Ball"

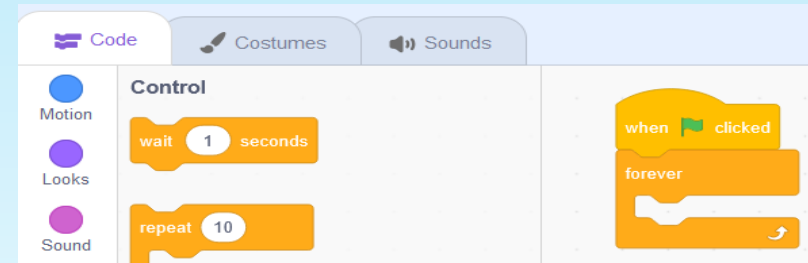


# Membuat Kode Alur Permainan Mengerakkan Bola

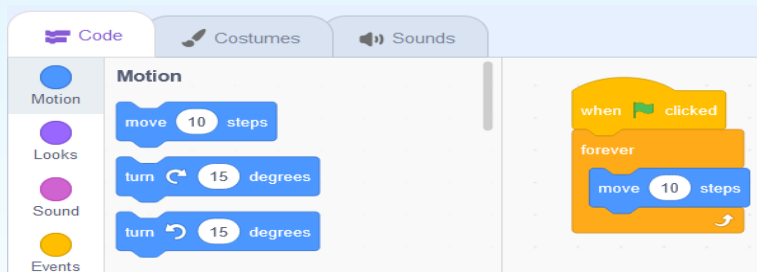
1. Drag **when Go clicked** block into the Scripts area



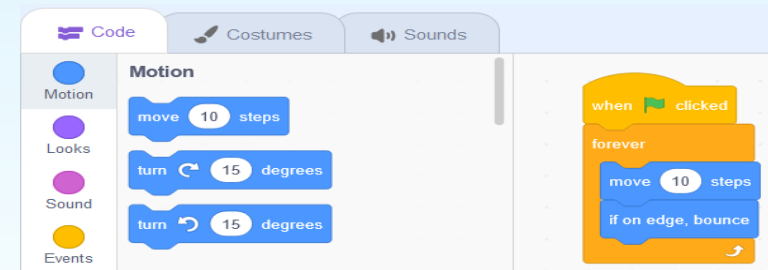
2. Drag a **forever** block into the Scripts area



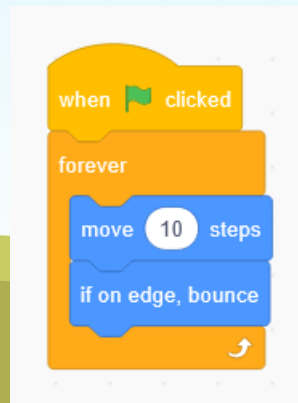
3. Drag a **move 10 steps** block into the Scripts area



4. Drag a **if on edge, bounce** block into the Scripts area

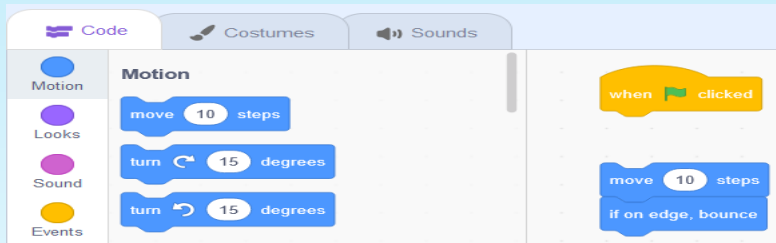


5. Code Results

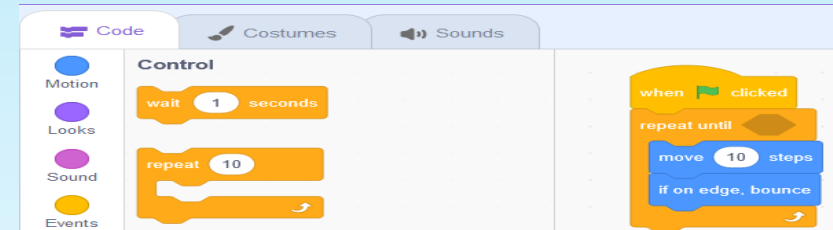


# Membuat Kode Alur Permainan Gerakkan Bola Ke Gawang (Kondisi)

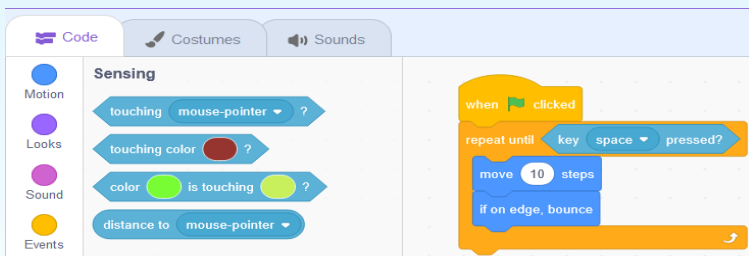
1. Delete **forever** block into the Scripts area



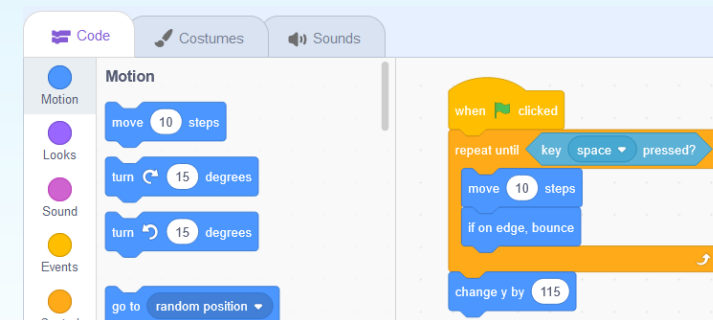
2. Drag a **repeat until** block into the Scripts area



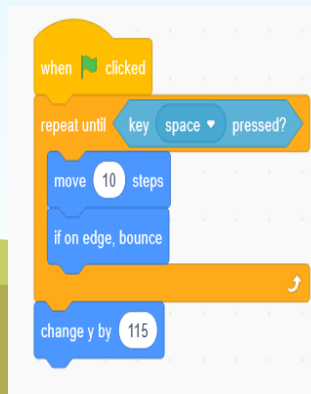
3. Drag a **key space pressed?** block into the Scripts area



4. Drag a **change y by** block into the Scripts area

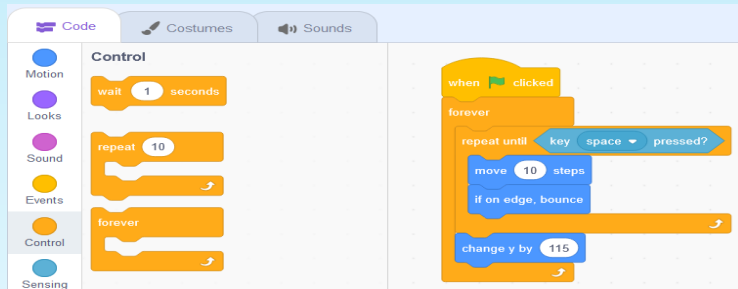


5. Code Results

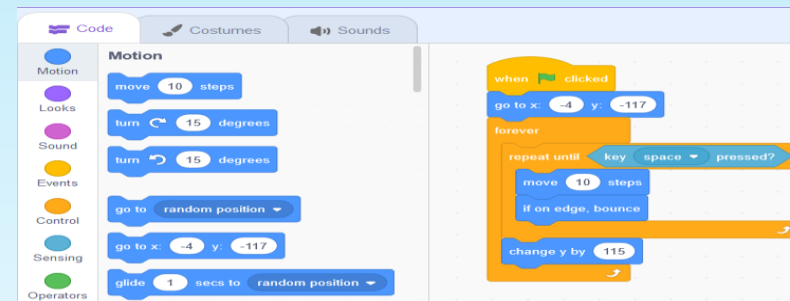


# Membuat Kode Alur Permainan Gerakkan Bola Ke Gawang (Kondisi) Lanjutan

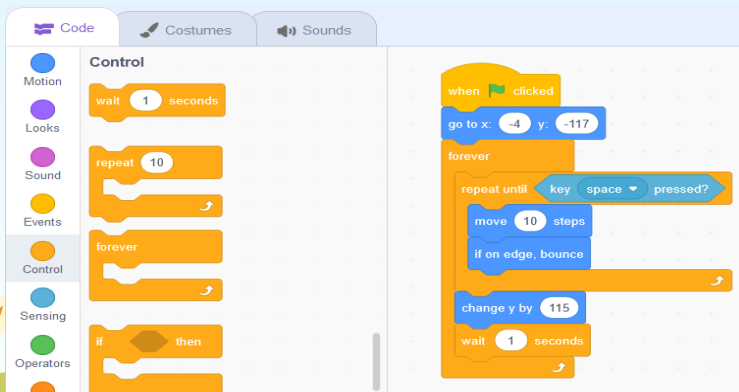
6. Drag **forever** block into the Scripts area



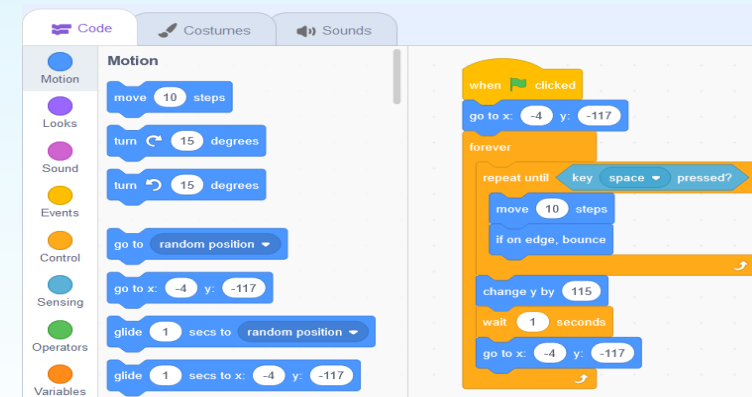
7. Drag a **go to x and y** into the Scripts area



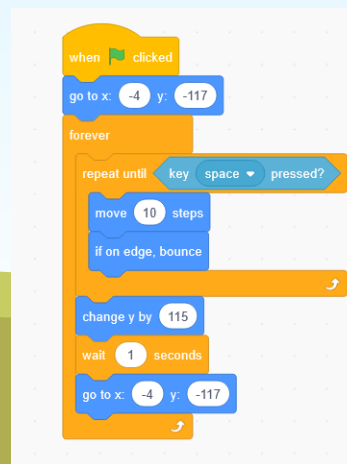
8. Drag a **wait 1 second** block into the Scripts area



9. Drag a **go to x and y again** into the Scripts area

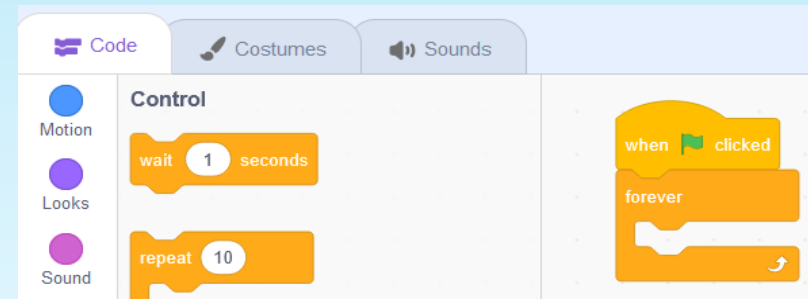
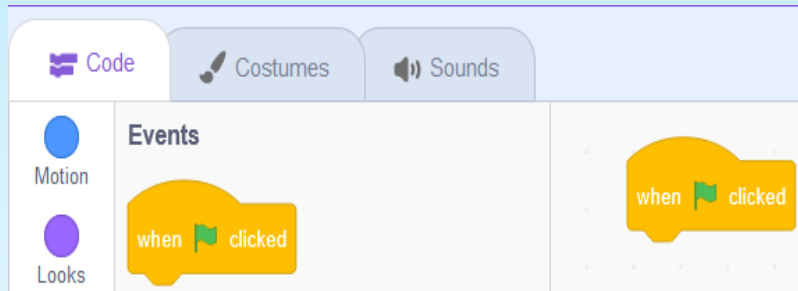


10. Code Results

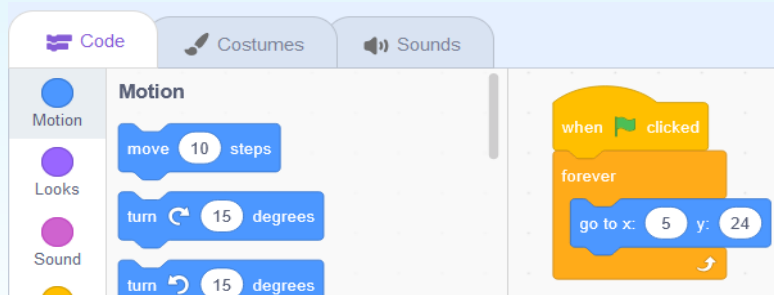


# Membuat Kode Alur Permainan Mengerakkan Kiper Kucing

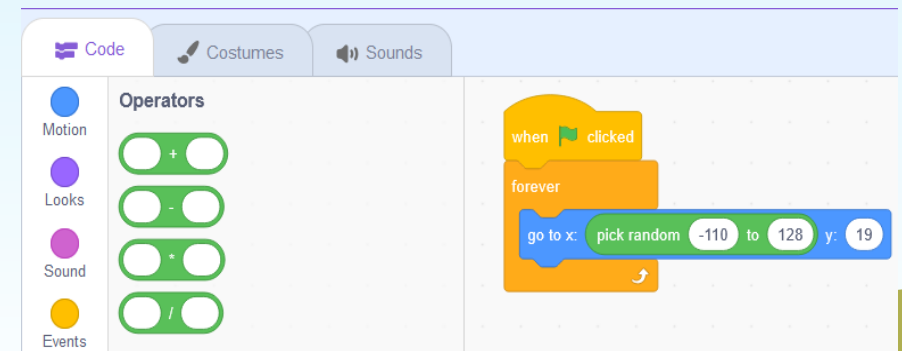
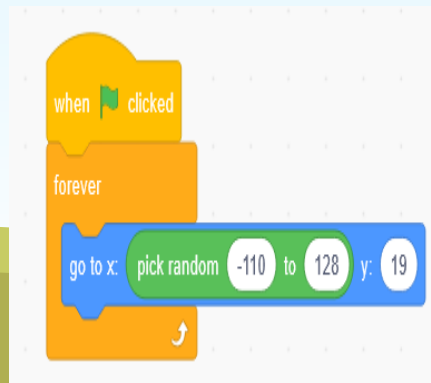
1. Drag **when Go clicked** block into the Scripts area
2. Drag a **forever** block into the Scripts area



3. Drag a **go to x and y** block into the Scripts area
4. Drag a **pick random to** block into the Scripts area



## 5. Code Results



# Membuat Kode Alur Permainan Mengerakkan Kiper Kucing Lanjutan (1)

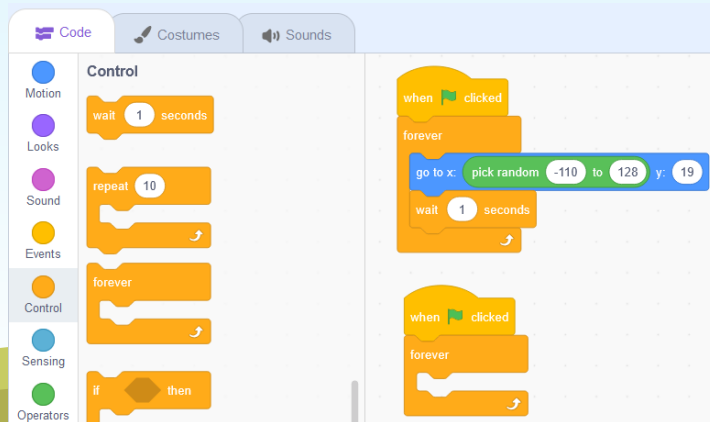
6. Drag **wait 1 second block** into the Scripts area



7. Drag **when Go clicked block** into the Scripts area

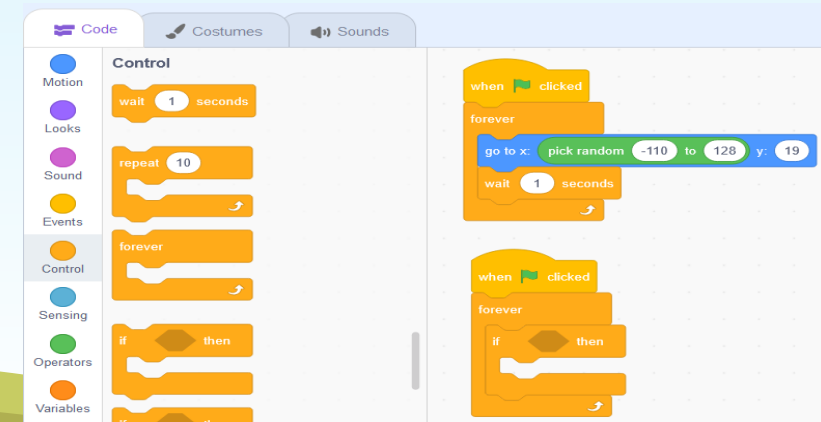
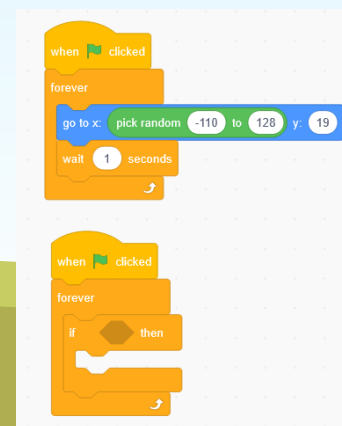


8. Drag a **forever block** into the Scripts area



9. Drag a **if then block** into the Scripts area

10. Code Results

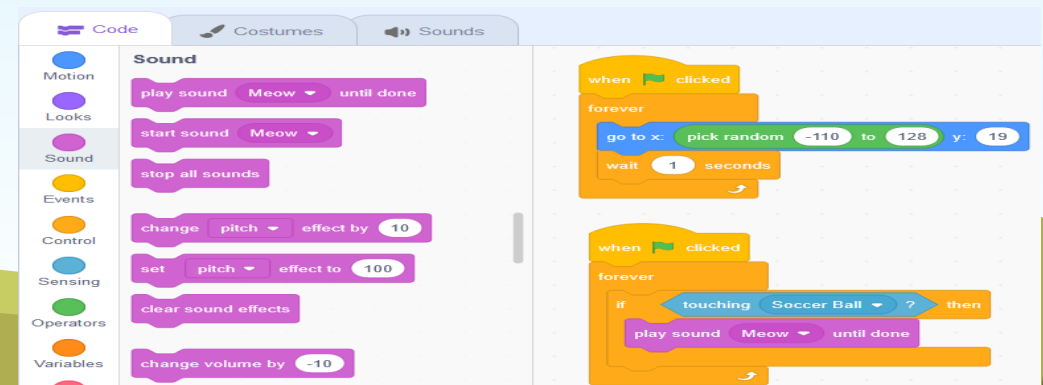


# Membuat Kode Alur Permainan Mengerakkan Kiper Kucing Lanjutan (2)

11. Drag **touching mouse pointer block** into the Scripts area

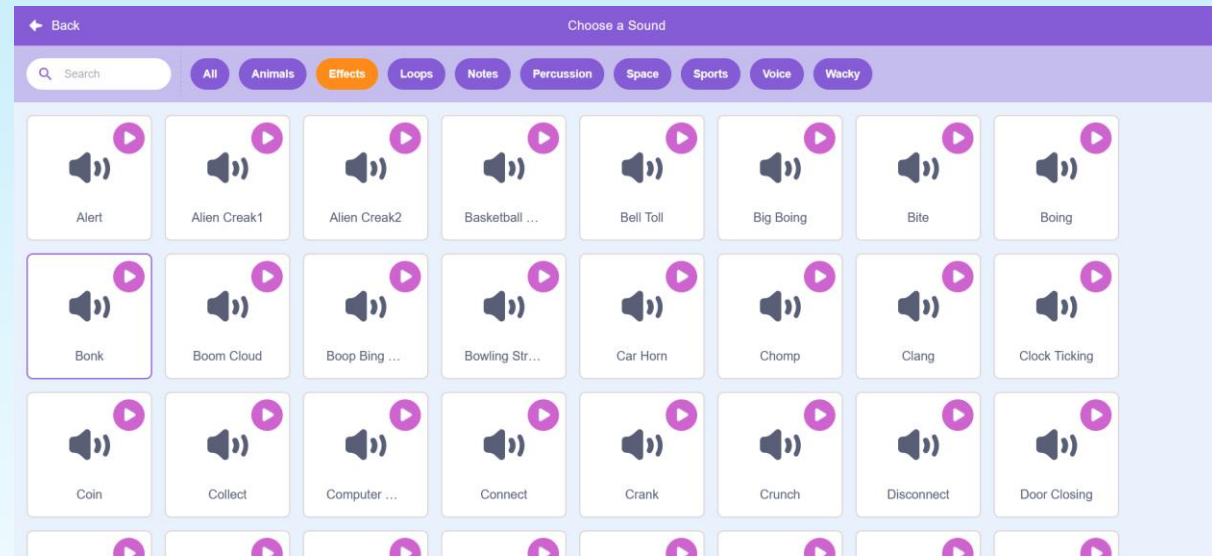
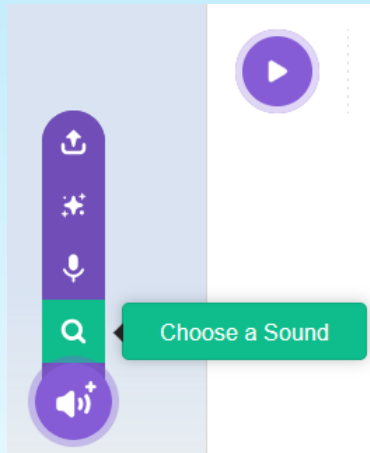


12. Drag **play sound until done block** into the Scripts area

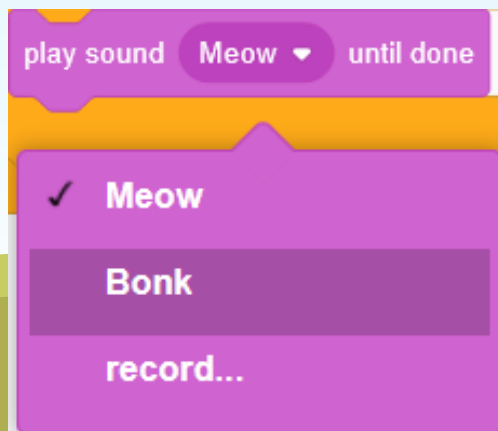


# Menambahkan Suara GAGALL!!!

## 1. Choose a Sound

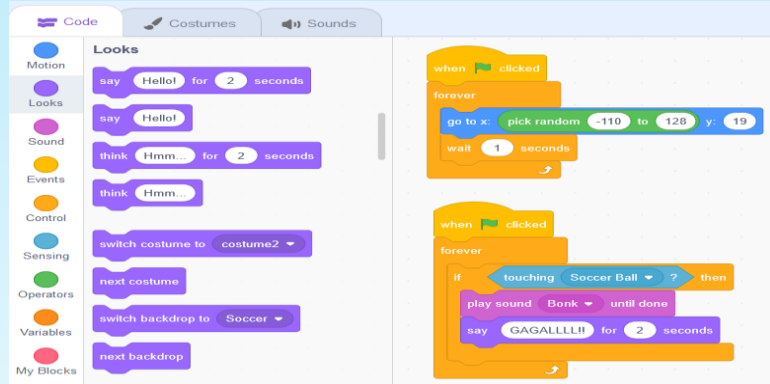


## 2. Change play sound: "Bonk"

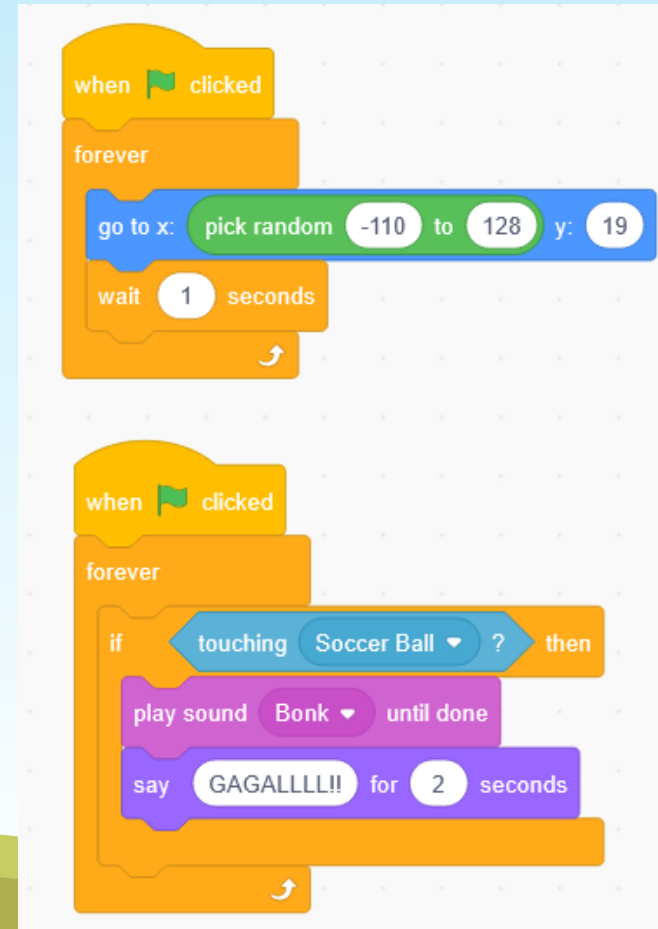


# Menambahkan Suara Kondisi (GAGAL GOL)

3. Drag **say for second block** into the Scripts area

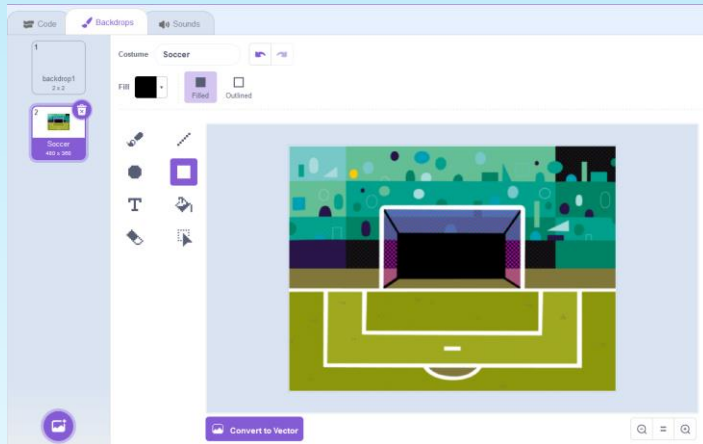


4. Code Results

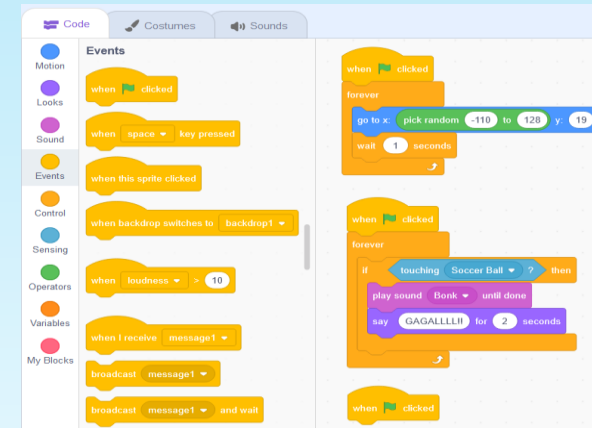


# Menambahkan Kondisi (MASUK GOL)

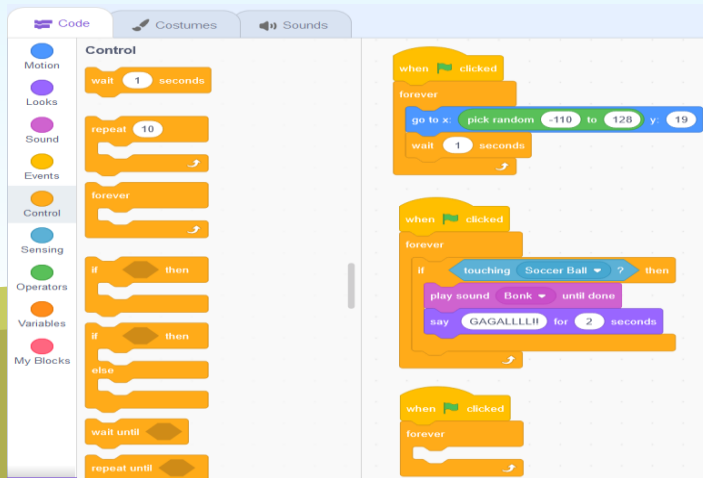
1. Add **box backdrop**



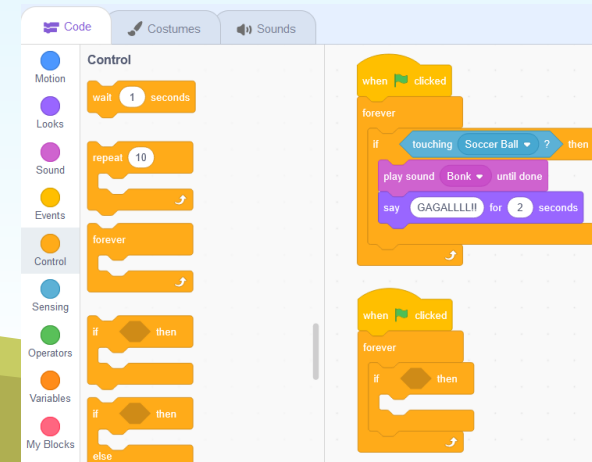
2. Drag a **when Go clicked block** into the Scripts area



3. Drag a **forever block** into the Scripts area

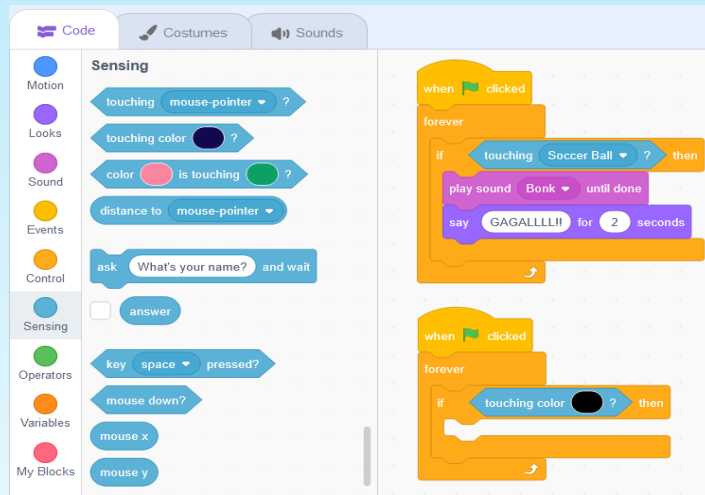


4. Drag a **if then block** into the Scripts area



# Menambahkan Kondisi (MASUK GOL) Lanjutan

5. Drag a **box touching color** into the Scripts area

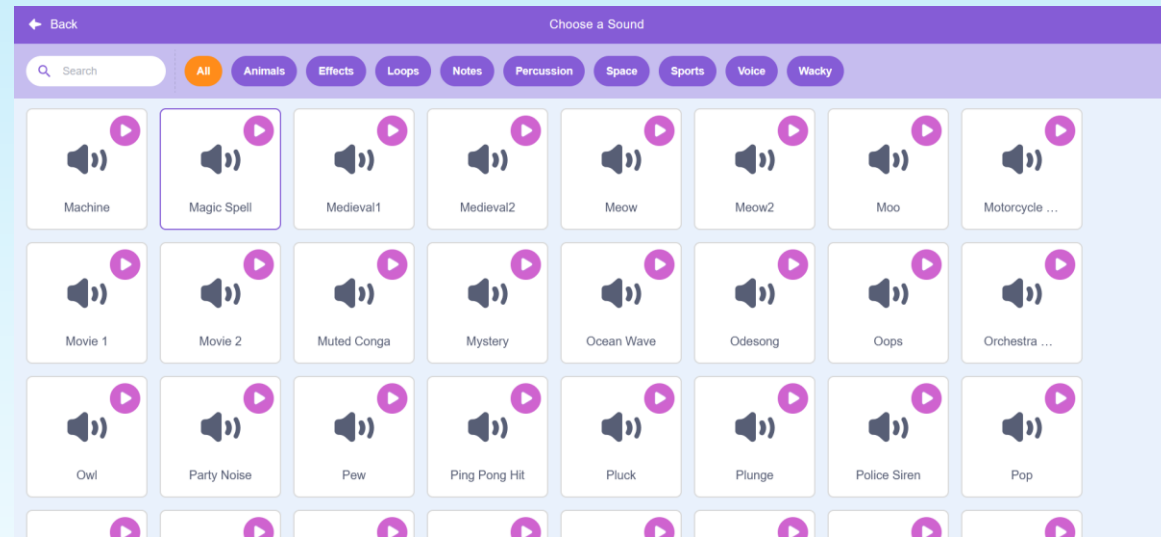
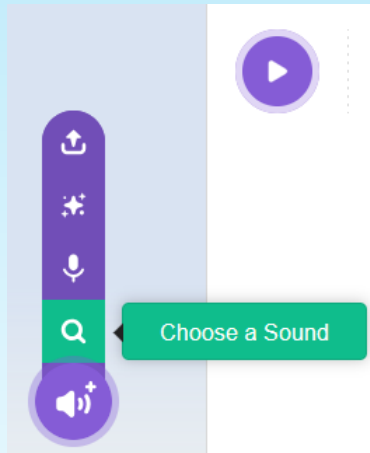


6. Drag a **play sound until done** block into the Scripts area

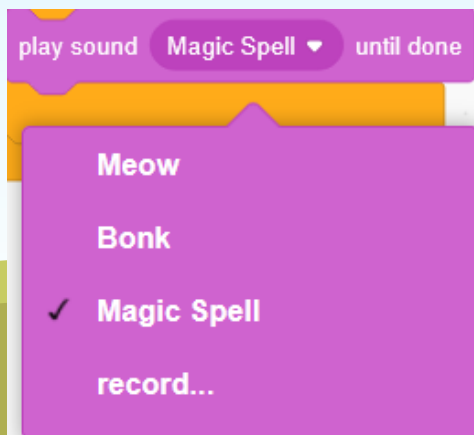


# Menambahkan Suara GOOLLL!!!

## 1. Choose a Sound

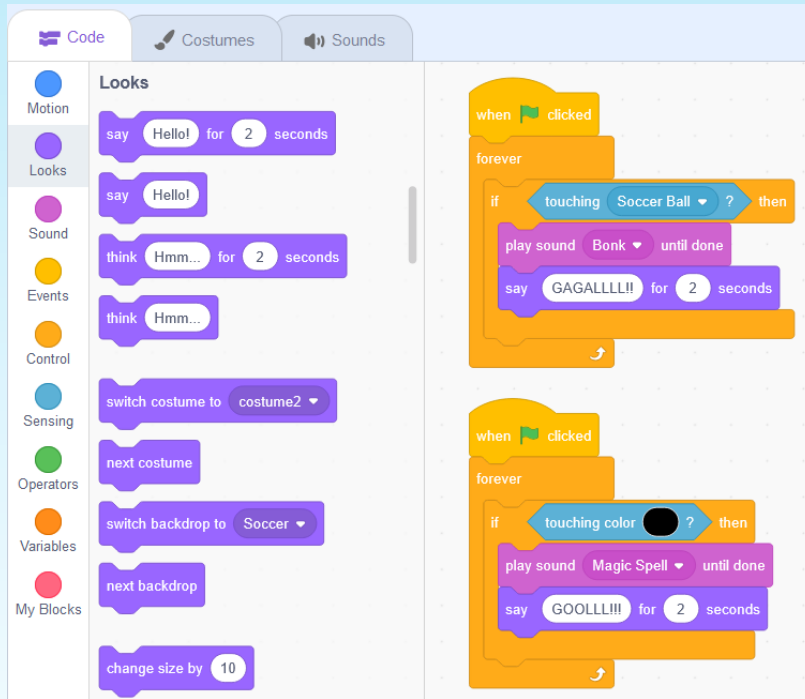


## 2. Change play sound: "Magic Spell"



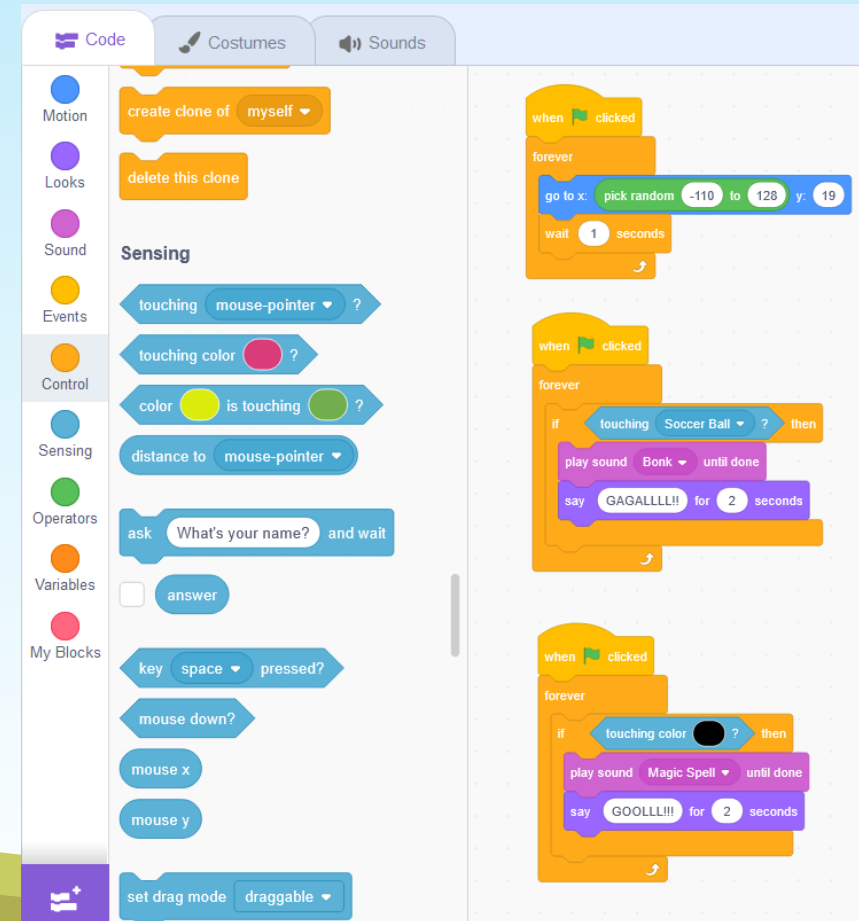
# Menambahkan Kondisi Suara GOOLLL!!! Lanjutan

3. Drag a **say for seconds** block into the Scripts area



The screenshot shows the Scratch code editor with the 'Code' tab selected. The 'Looks' category is active in the left sidebar. In the Scripts area, a 'say Hello! for 2 seconds' block is being dragged from the Looks category into the Scripts area. The existing code includes a 'when clicked' event, a 'forever' loop with an 'if touching Soccer Ball?' condition, and a 'say GAGALLL!! for 2 seconds' block.

4. Results Code



The screenshot shows the final Scratch code editor setup. The 'Code' tab is selected. The 'Sensing' category is active in the left sidebar. The Scripts area contains three event-driven code blocks: 1) 'when clicked' followed by a 'forever' loop with 'go to x: pick random -110 to 128 y: 19', 'wait 1 seconds', and 'say GAGALLL!! for 2 seconds'. 2) 'when clicked' followed by a 'forever' loop with an 'if touching Soccer Ball?' condition, 'play sound Bonk until done', and 'say GAGALLL!! for 2 seconds'. 3) 'when clicked' followed by a 'forever' loop with an 'if touching color?' condition, 'play sound Magic Spell until done', and 'say GOOLLL!!! for 2 seconds'. The Sensing category in the sidebar includes blocks like 'touching mouse-pointer?', 'touching color?', 'color is touching?', and 'distance to mouse-pointer?'.



# Hasil Akhir Permainan

The image shows the Scratch programming environment with a soccer game script and stage. The script consists of three main event-driven blocks:

- When clicked:** A 'forever' loop containing a 'go to x: pick random -110 to 128 y: 19' block and a 'wait 1 seconds' block.
- When clicked:** A 'forever' loop containing an 'if touching Soccer Ball?' block. If true, it plays the 'Bonk' sound, says 'GAGALLLL!' for 2 seconds, and then loops back.
- When clicked:** A 'forever' loop containing an 'if touching color black?' block. If true, it plays the 'Magic Spell' sound, says 'GOOLL!!!' for 2 seconds, and then loops back.

The stage shows a soccer field with a goal. The cat sprite is positioned in the goal area. The 'Sprite' panel shows 'Sprite1' at x: -8, y: 19, size 100, and direction 90. The 'Backdrops' panel shows 1 backdrop.

# Publikasi dan Bagikan Karyamu!

