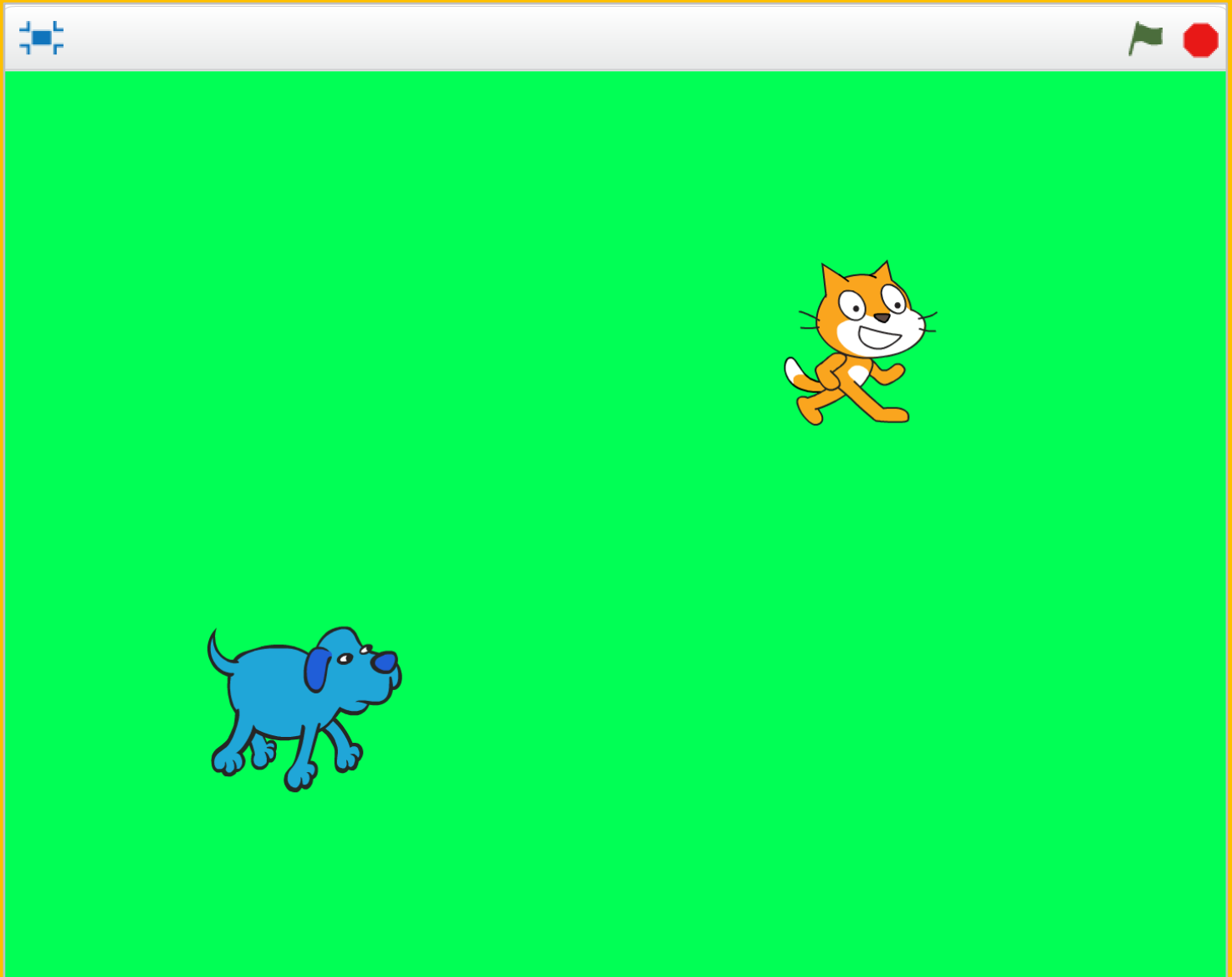


Cat and Dog Chase



Catch the cat using arrow keys to move the dog around the grassy field.

Code It

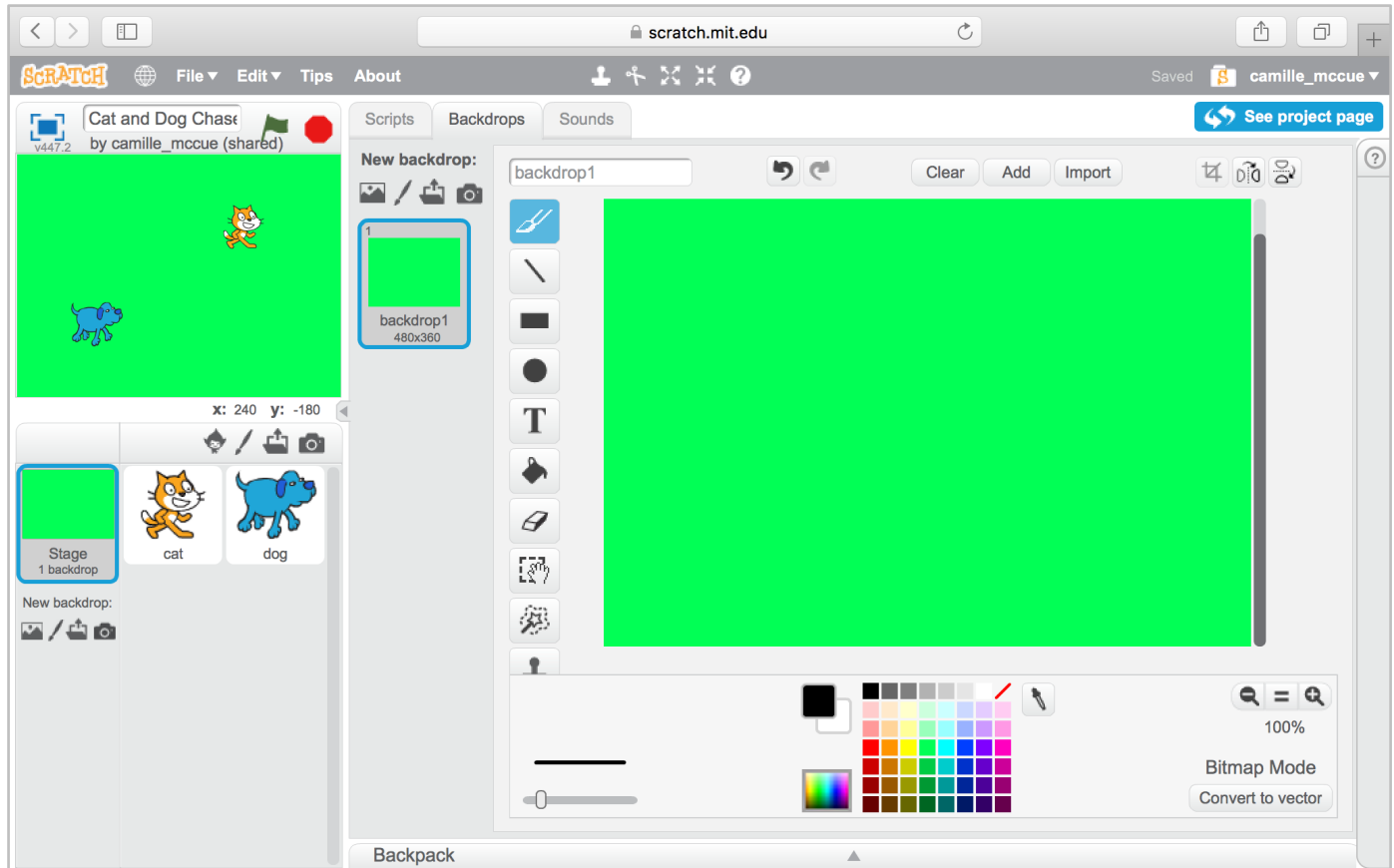
Add a dog sprite and then write scripts to control the direction and motion of the dog with the up, right, down, and left arrow keys. Write scripts for the existing Scratch cat sprite to cause it to leap around the screen to random positions. Finally, add an *if-then* conditional to check whether the cat is touching the dog... if it is, the collision results in a cat *meow* sound.

Play It

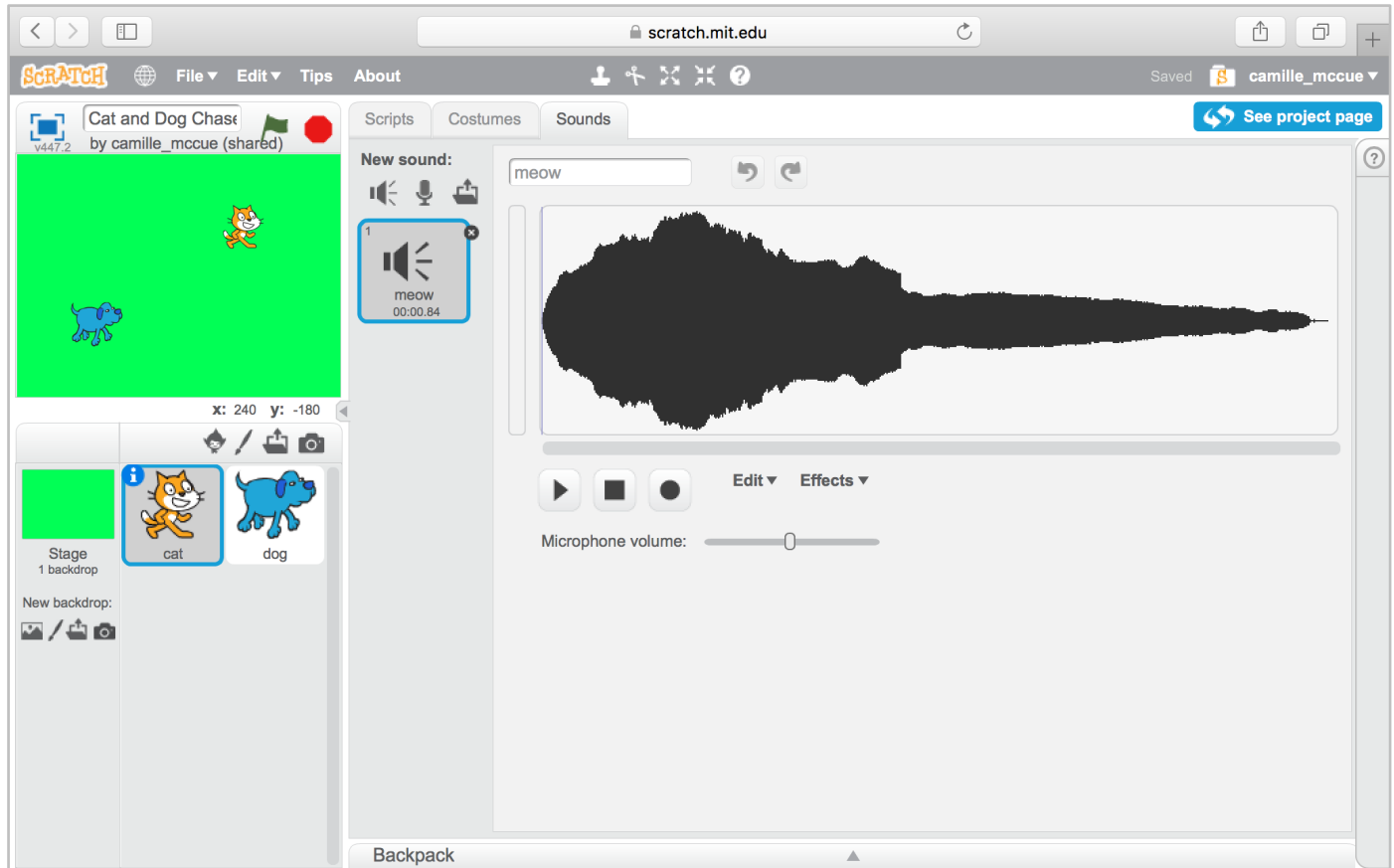
Start the action by clicking the green flag.

Cat and Dog Chase

Stage – Background

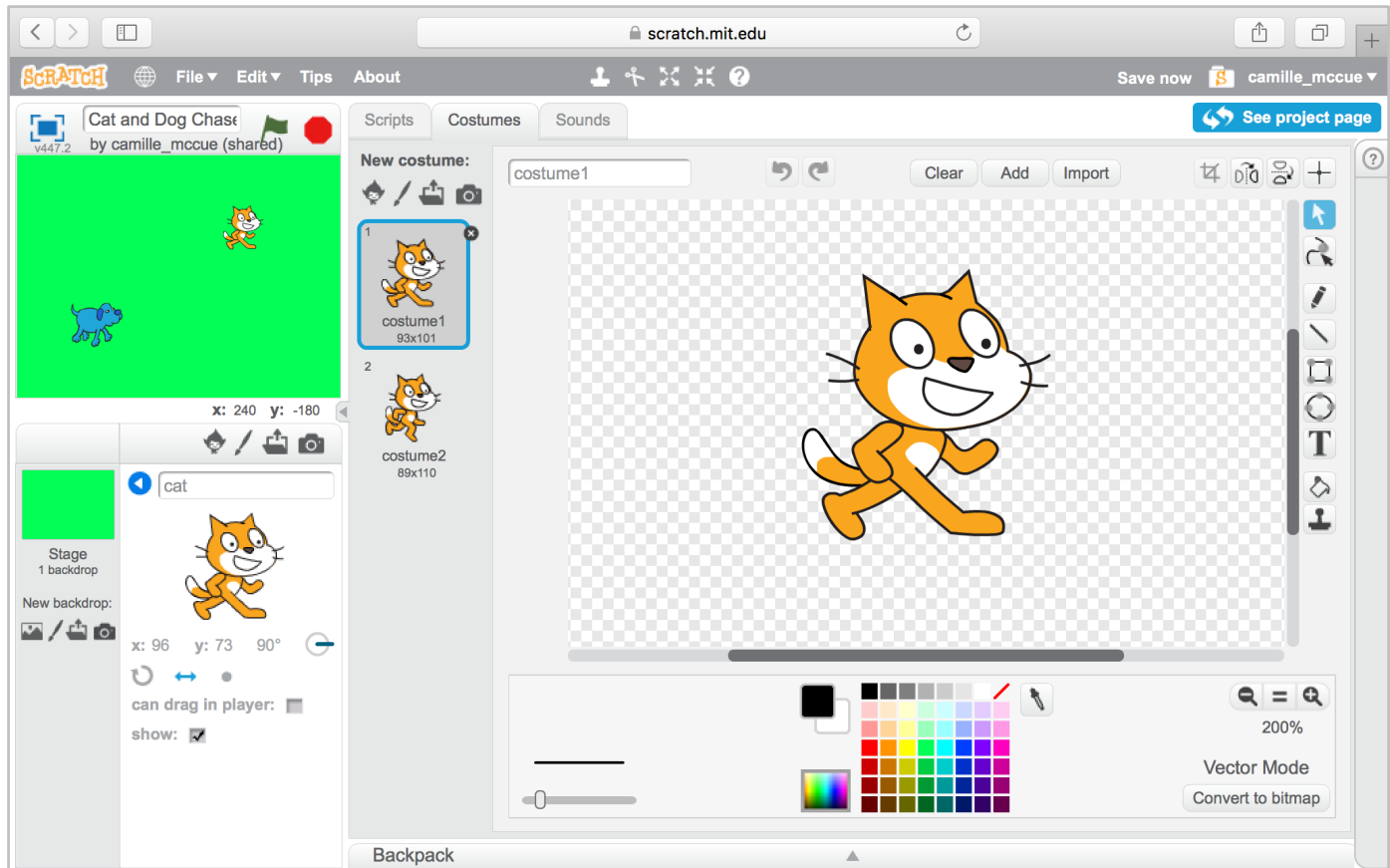


Cat Sprite – Sound



Cat and Dog Chase

Cat Sprite – Costumes



Cat Sprite – Script

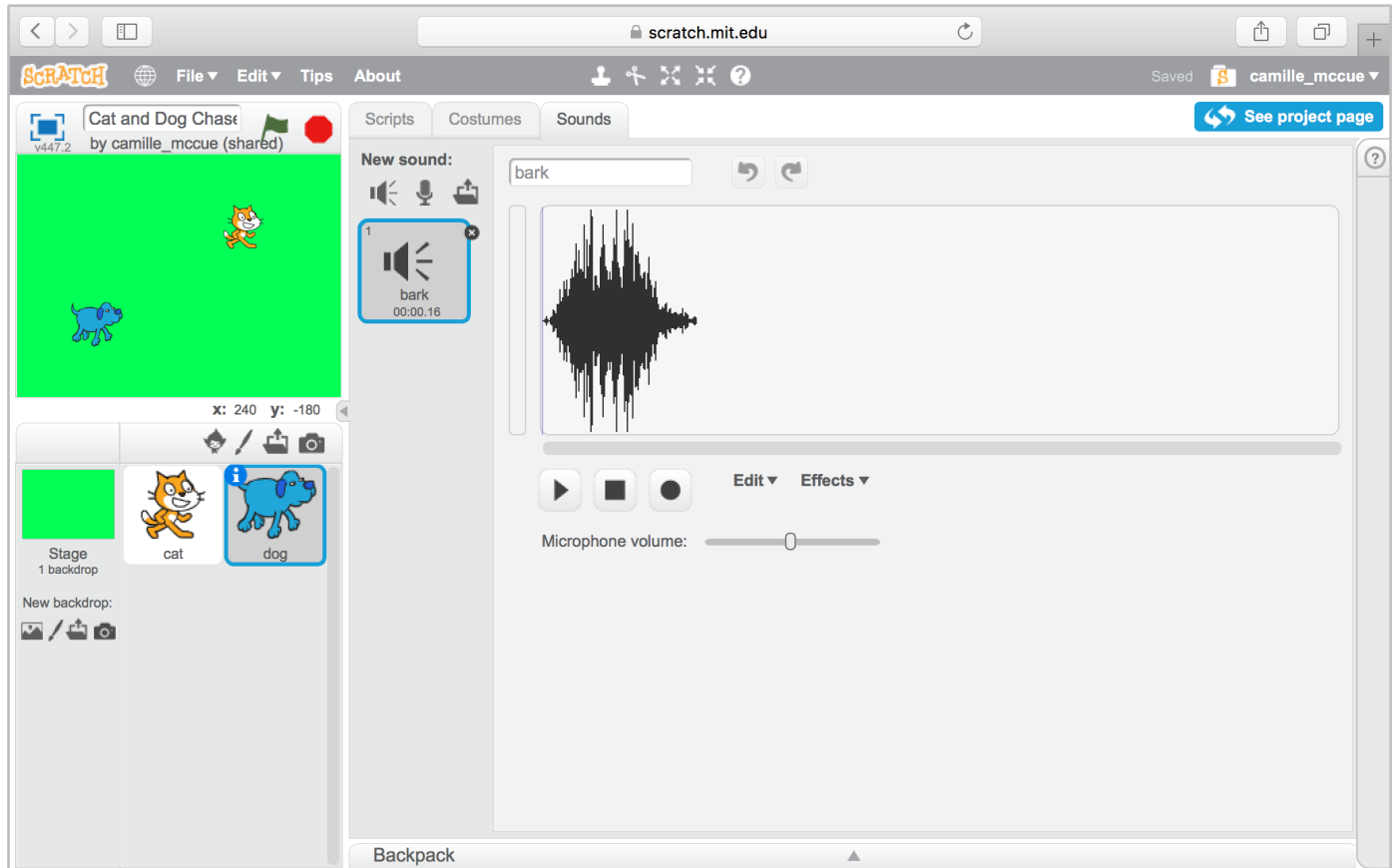
The screenshot displays the Scratch IDE interface. The main stage shows a green background with a blue dog sprite and a cat sprite. The cat sprite is currently selected, and its script area is visible. The script is as follows:

```
when clicked  
forever  
  go to random position  
  wait 1 secs  
  if touching dog ? then  
    play sound meow until done
```

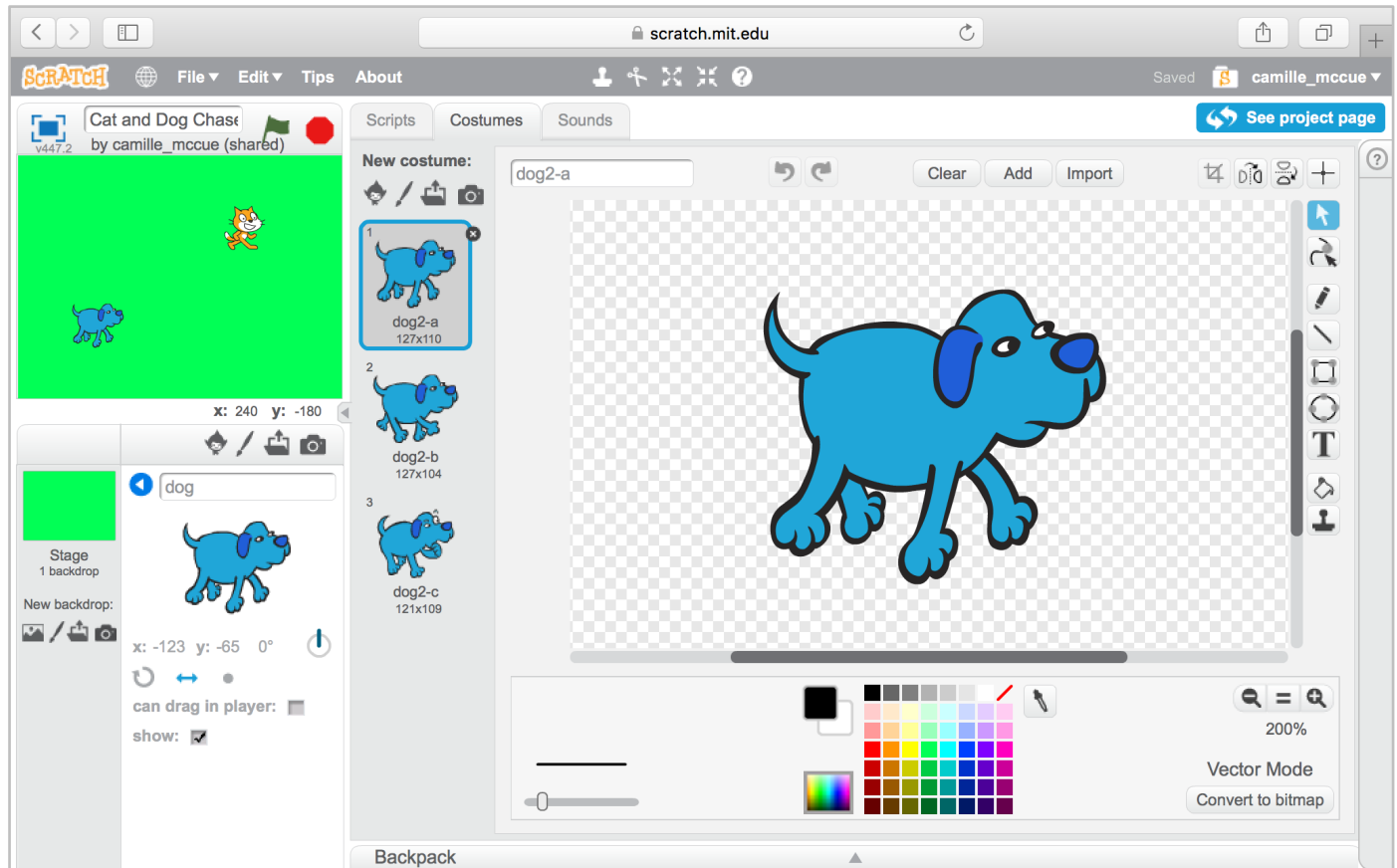
The left sidebar shows the 'Scripts' tab selected, with various block categories like Motion, Looks, Sound, Pen, Data, Events, Control, Sensing, Operators, and More Blocks. The 'Sound' block category is highlighted. The 'Scripts' block palette includes 'when clicked', 'forever', 'go to random position', 'wait 1 secs', 'if touching dog ? then', 'play sound meow until done', 'play drum 1 for 0.25 beats', 'rest for 0.25 beats', 'play note 60 for 0.5 beats', 'set instrument to 1', 'change volume by -10', 'set volume to 100 %', 'volume', 'change tempo by 20', and 'set tempo to 60 bpm'.

Cat and Dog Chase

Dog Sprite – Sound



Dog Sprite – Costumes



Cat and Dog Chase

Dog Sprite – Scripts

The screenshot displays the Scratch IDE interface for a project titled "Cat and Dog Chase" by camille_mccue. The main workspace shows a green stage with a blue dog sprite at coordinates (240, -180) and a cat sprite. The left sidebar shows the "Scripts" menu with categories: Motion, Looks, Sound, Pen, Data, Events, Control, Sensing, Operators, and More Blocks. The "dog" sprite is selected in the "Sprites" area.

The script for the dog sprite is as follows:

- when clicked
play sound bark until done
- when up arrow key pressed
point in direction 0
move 10 steps
next costume
- when left arrow key pressed
point in direction -90
move 10 steps
next costume
- when right arrow key pressed
point in direction 90
move 10 steps
next costume
- when down arrow key pressed
point in direction 180
move 10 steps
next costume

Dog Sprite – Scripts Closeup



```
when clicked
  play sound bark until done
```

```
when up arrow key pressed
  point in direction 0
  move 10 steps
  next costume
```

```
when left arrow key pressed
  point in direction -90
  move 10 steps
  next costume
```

```
when right arrow key pressed
  point in direction 90
  move 10 steps
  next costume
```

```
when down arrow key pressed
  point in direction 180
  move 10 steps
  next costume
```

Extend It

Make Cat and Dog Chase a two-player game! Instead of coding the cat to move randomly, cod the W-A-S-D keys to control its motion. Then, one play can control the dog while a second player controls the cat!