

Scratch Project – Beetle Maze

Start by make the beetle move up, down left and right.

1. Download beetle sprite
2. Use the code below to make the beetle move down the stage

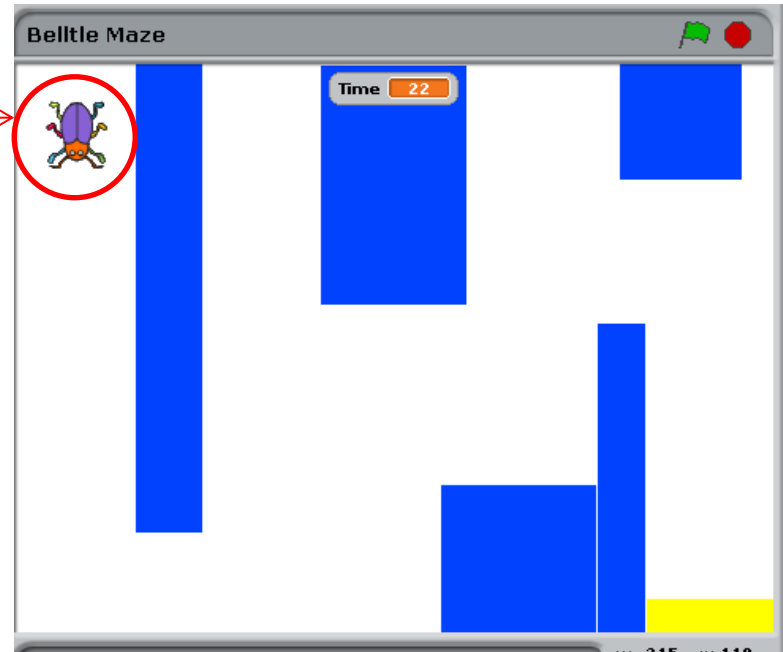
```
when down arrow key pressed
point in direction 180
move 10 steps
```

3. Duplicate the code and modify to make the beetle move up, to the left and right

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

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

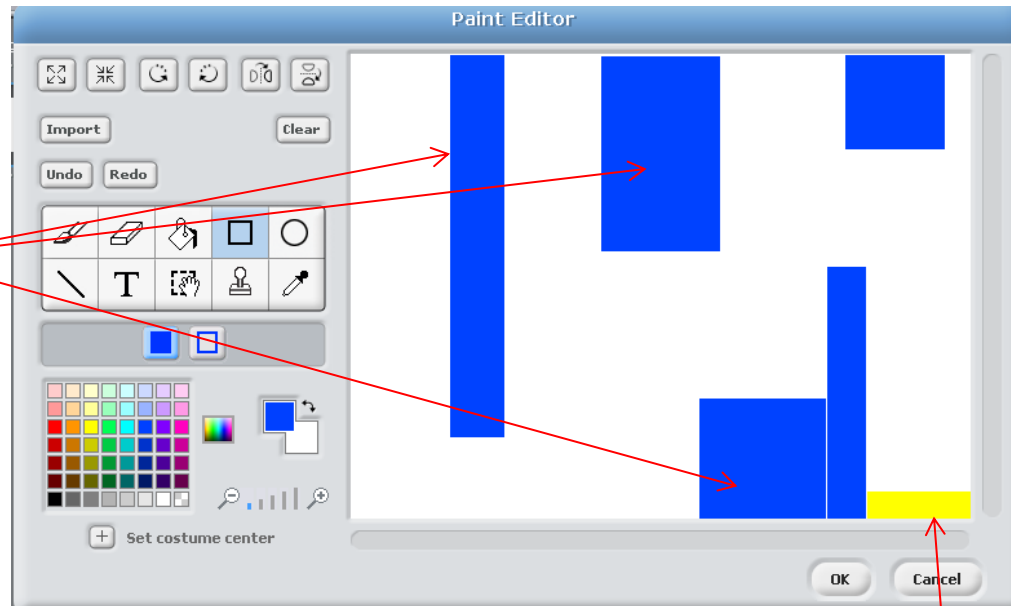
when left arrow key pressed
point in direction -90
move 10 steps
```



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Drawing the Stage

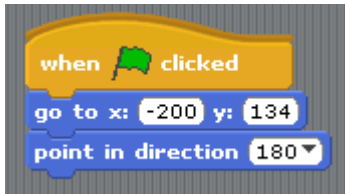
Draw the stage using blue boxes



Make the finish line yellow

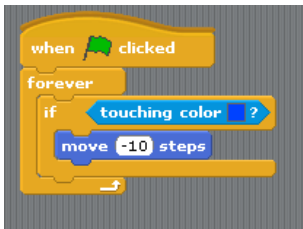
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1. Move the beetle to the start position and make him face downwards (180°)



```
when green flag clicked
  go to x: -200 y: 134
  point in direction 180
```

2. If the beetle touches the blue barrier make it bounce off

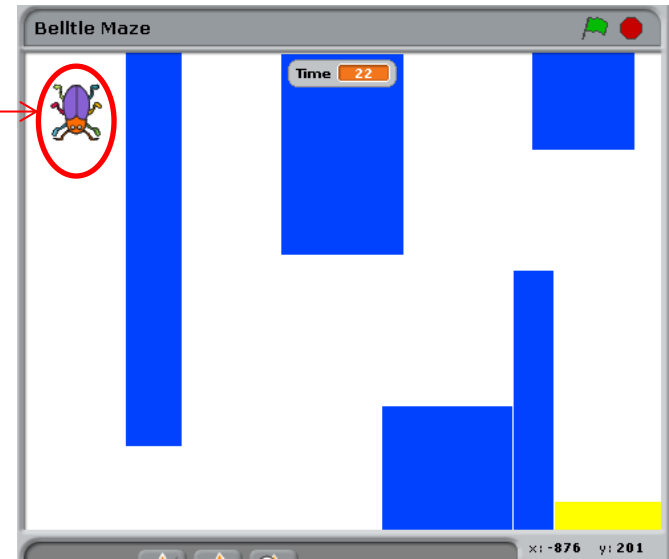


```
when green flag clicked
  forever loop
    if touching color blue
      move -10 steps
```

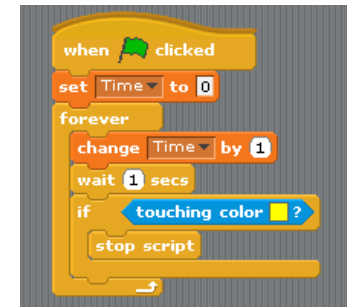
3. When the beetle touches the yellow finish line make say "Well done" and stop the game



```
when green flag clicked
  forever loop
    if touching color yellow
      say Finished! Well done for 4 secs
      stop all
```



4. If you want to make the game more interesting add the code below to time how long the beetle take to make it around the maze



```
when green flag clicked
  set Time to 0
  forever loop
    change Time by 1
    wait 1 secs
    if touching color yellow
      stop script
```

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The complete code for the game

The screenshot displays the Scratch IDE with the following code blocks:

Scripts Panel (Left Column):

- when green flag clicked:** go to x: -200 y: 134, point in direction 180.
- when down arrow key pressed:** point in direction 180, move 10 steps.
- when up arrow key pressed:** point in direction 0, move 10 steps.
- when right arrow key pressed:** point in direction 90, move 10 steps.
- when left arrow key pressed:** point in direction -90, move 10 steps.

Scripts Panel (Right Column):

- when green flag clicked:** forever loop containing: if touching color blue? then move -10 steps.
- when green flag clicked:** forever loop containing: if touching color yellow? then say Finished! Well done for 4 secs, then stop all.
- when green flag clicked:** set Time to 0, forever loop containing: change Time by 1, wait 1 secs, if touching color yellow? then stop script.

Stage Panel (Right Window):

- Stage title: Beetle Maze.
- Sprite: Beetle (Sprite2).
- Time counter: 22.
- Stage coordinates: x: -791 y: 103.
- New sprite buttons: star, folder, question mark.
- Stage background: A maze with blue walls and a yellow exit.