CompSci 94
Undetermined Repetition with While loop
October 1, 2020
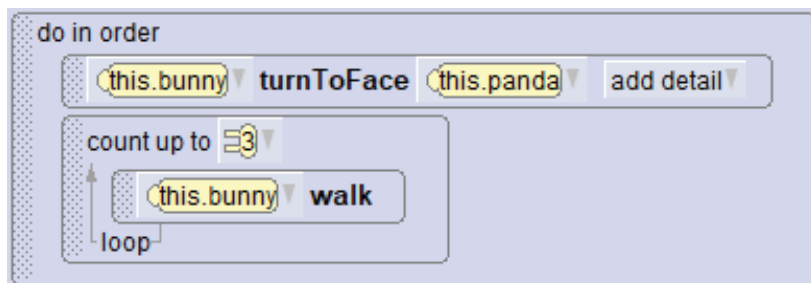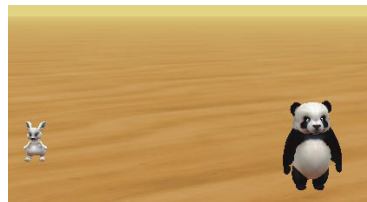
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Announcements

- QZ12 and videos for next time

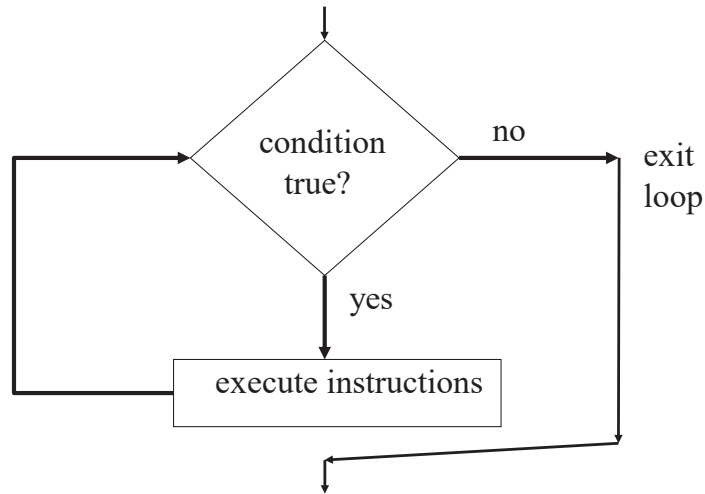
Looping – exact number of times

- Count loop

```
do in order
    this.bunny  turnToFace  this.panda   add detail
    count up to ≡3
        this.bunny  walk
    loop
```

- How many steps to get to the panda?
– 3, 6, 8?

Repetition

- Sometimes don't know exactly how many times a set of instructions are repeated.

- Stopping is based on a condition

- Example:
  - Game of Chess, how many moves until win
  - Stop: when markers are in check mate position

- Indefinite Repetition
  - Where number of repetitions not known in advance
  - Use **while** statement

While statement

- While some condition is true execute instructions
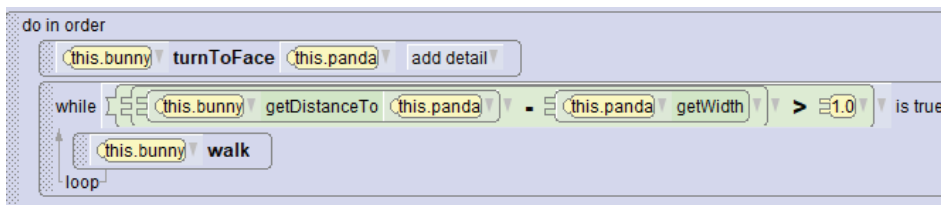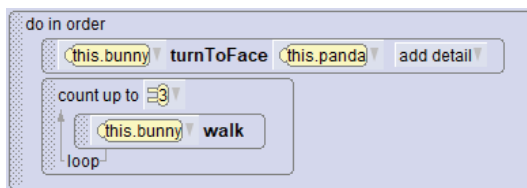
General "Rule of Thumb"

- As a general rule, a While loop should be written so the loop will eventually end
  - Requires statements inside the loop change the conditions of the world such that condition for While eventually becomes false
- If While loop never ends
  - Infinite while loop

Compare – What is difference?

WOTO While loop
http://bit.ly/94f20-1001-1

Class Today

- Catching dinner