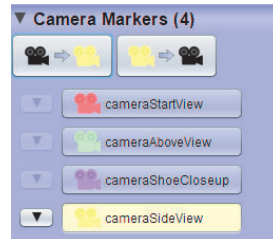


CompSci 94

Camera Controls

September 9, 2021



Prof. Susan Rodger

Announcements

- Assignment 2 due on Tuesday, Sept 14
 - Storyboard
 - Alice program
 - Make a Video – talk about code, run
- How to Submit Assignment 2
 - Storyboard, Alice program, video → Sakai
 - URL for Video → Reflect form
- Coming– procedures for classes of objects, and properties.
- QZ06 due Tuesday by class time

Review – Parameters/Arguments

Write the **tortoise kick** procedure

- It has three parameters
 - **itemKicked** of type **Prop** – the item to kick
 - **direction** of type **moveDirection** – the direction for the **itemKicked** object to move
 - **howFar** of type **DecimalNumber** – the distance for the item kicked to move



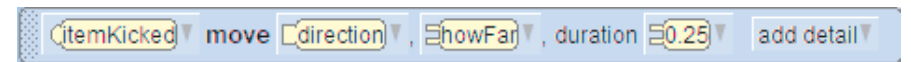
Review

Defining instruction, using parameters

- Defining the instruction



- Using the parameters in the kick code



Review

Defining instruction, using parameters

- Defining the instruction

```
declare procedure kick with parameters: Prop ItemKicked, MoveDirection direction, DecimalNumber howFar
```

- Using the parameters in the kick code

```
kick itemKicked: this.skull, direction: FORWARD, howFar: 5.0
```

Review

Defining instruction, Calling instruction

- Defining the instruction

```
declare procedure kick with parameters: Prop ItemKicked, MoveDirection direction, DecimalNumber howFar
```

- Calling the instruction in myFirstMethod pass arguments to parameters

```
kick itemKicked: this.skull, direction: FORWARD, howFar: 5.0  
kick itemKicked: this.bowlingPin, direction: RIGHT, howFar: 10.0
```

Review

Defining instruction, Calling instruction

- Defining the instruction

```
declare procedure kick with parameters: Prop ItemKicked, MoveDirection direction, DecimalNumber howFar
```

- Calling the instruction in myFirstMethod, pass arguments to parameters

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Review

Defining instruction, Calling instruction

- Defining the instruction

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declare procedure kick with parameters: Prop ItemKicked, MoveDirection direction, DecimalNumber howFar
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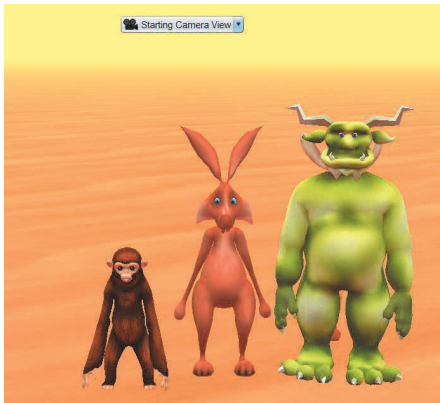
- Calling the instruction in myFirstMethod, pass arguments to parameters

```
kick itemKicked: this.skull, direction: FORWARD, howFar: 5.0  
kick itemKicked: this.bowlingPin, direction: RIGHT, howFar: 10.0
```

Call second time with different arguments!

Q1. Camera Views

- How do you line up the animals in the front in a line?
- How do I make sure the animal behind the ogre is directly behind it?

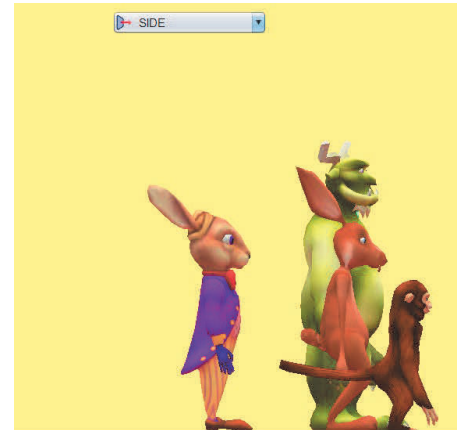


9/9/2021

9

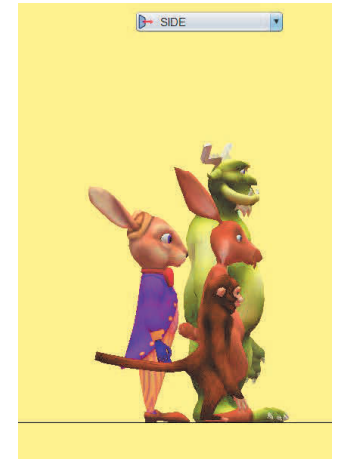
Use 2D sideview for both

- Line up animals
- Move marchHare close to Ogre



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Q2. Setup Scene

- What other views can you use beside Starting Camera View?

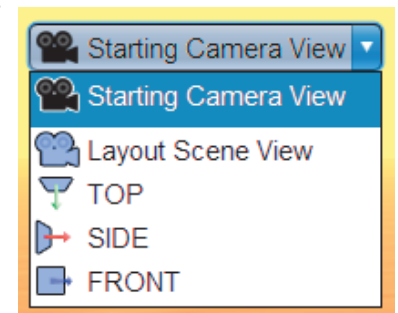
9/9/2021

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11

Q2. Setup Scene

- What other views can you use beside Starting Camera View?
 - 2D TOP view
 - 2D SIDE view
 - 2D FRONT View
 - Layout Scene View



9/9/2021

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12

Q3. Camera Markers

- How does one create a camera marker?

- How does one use a Camera Marker during animation?

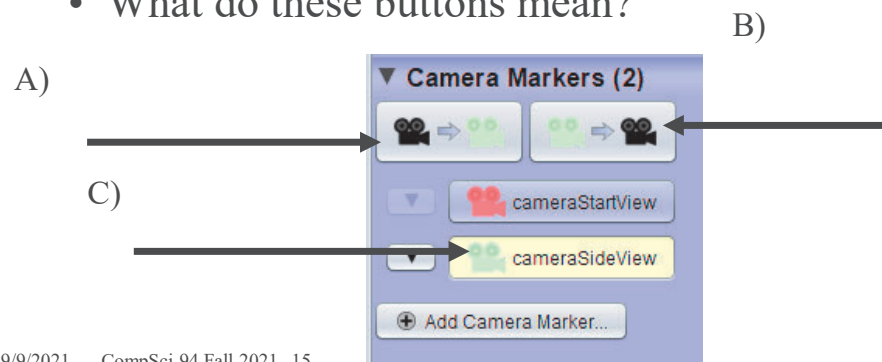
Q3. Camera Markers

- How does one create a camera marker?
 - Move camera to location.
 - Click on **add camera marker** in scene setup
 - Give camera marker a name.
- How does one use a Camera Marker during animation?
 - Use camera with **moveAndOrientTo** instruction to change a scene.

Q4. More on Camera markers

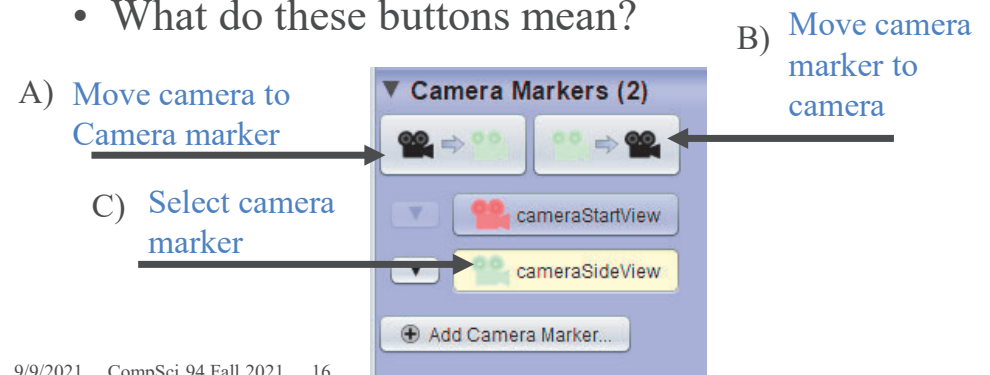
- When do you add Camera markers?

- What do these buttons mean?



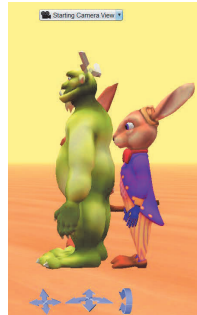
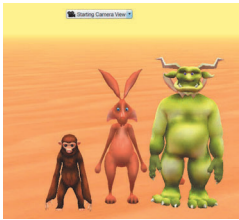
Q4. More on Camera markers

- When do you add Camera markers?
 - LAST, after the objects are placed
- What do these buttons mean?



Q5. Setting up a CameraMarker

- How does one setup camera for side view?
 - (give all the steps you would do)



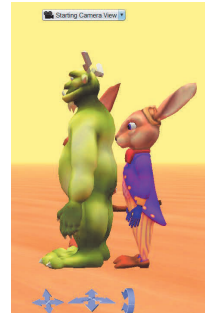
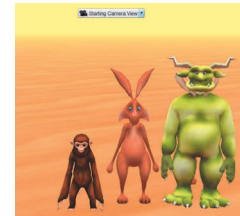
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17

Q5. Setting up a CameraMarker

- How does one setup camera for side view?
 - Using one-shots, have camera **move to here**.
 - Then camera **orientToUpright**
 - Camera move up 1.0
 - Camera move right 6.0
 - Camera turn left 0.25
 - Use purple arrows to adjust view.



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18

Class Today

- Continue writing procedures with parameters
- Moving between camera views



9/9/2021

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19