Class Today

- Turning around an object – “as seen by”
- A procedure – organize and reuse code
- Classwork – build a scene with turning and procedures
- Be sure to check off your classwork when done

Turn in place vs Turn around

- Turn in place (spin around)
- Turn around something – use “as seen by”
- Make duration larger to slow down
- Go forward around if use “right” and object is to its right, Otherwise go backwards

Code for turn vs turn as seen by
Procedure

- Way to put a block of code together, give it a name, and then can call it
- Reuse code – write less code
- Organize code better
- Look at two types of procedures:
  - Procedure for an object
  - Procedure for the scene

MyFirstMethod – is a Procedure

- The editor where you put code is called myFirstMethod, and is a procedure

MyFirstMethod – is a Procedure

- Where does an Alice program start?

Procedure for Object

- Teach Tony to do a front flip
- Click “Scene” tab, then “playing card”, then addPlayingCardProcedure
Give the procedure a name

FlipTony has a tab for code

How do we test this code?

- Back to sceneActivated, drag in flipTony and **disable** myFirstMethod
- Now click play and only flipTony occurs
Tony flip correct?

- What does Tony flip around?
- How do we get Tony to flip around his center?

When flipTony procedure works

- Disable flipTony
- Reenable myFirstMethod

Use flipTony Procedure

- Drag and drop flipTony in myFirstMethod where you want to see a flip

Difference between object procedure and scene procedure

- Object procedure
  - Applies only to that object
- Scene procedure
  - Could have multiple objects referenced in it, or camera or ground in it
Procedure for the Scene
• Write a procedure called **CameraFromAbove** that moves the camera above to look down

How to get the camera to move back?
• Create a camera marker for original scene
• Then use camera moveAndOrientTo that cameraMarker

Final Sample Code (part 1)

Code for CameraFromAbove
• How to test it? Put it first in myFirstMethod
• Could make it happen instantly – duration 0
• Is there another way to get camera there?
This lecture covered

• Turn in place vs turn around an object with “as seen by”
• Creating a procedure to organize code
  – Scene procedure
  – Object procedure
• Can call procedure over and over and write less code