CompSci 94
Turning and Procedures
February 1, 2018

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

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Turn in place vs Turn around

• Turn in place (spin around)
  ```
  this alice turn RIGHT 1.0 add detail
  ```

• Turn around something – use “as seen by”
  ```
  this alice turn RIGHT 1.0, asSeenBy this queenOfHearts , duration 2.0
  ```

• 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
When `flipTony` works, remove it and enable `myFirstMethod`.

- Then drag and drop `flipTony` in `myFirstMethod` where you want to see a flip.

**Procedure for the Scene**

- Write a procedure called `CameraFromAbove` that moves the camera above to look down.

**Code for CameraFromAbove**

- How to test it? Put it first in `myFirstMethod`.
- Could make it happen instantly – duration 0.

**How to get the camera to move back?**

- Create a camera marker for original scene.
- Then use camera `moveAndOrientTo` cameraMarker.
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