Regis University CC&IS
CS210 Introduction to Programming
Alice Programming Assignment 1: Scene Setup and Code Editor

Program Requirements

Create an Alice program that ***minimally*** does the following:

- Start with a **Desert** blank slate.

Setting up the Scene

- Use arrows to adjust the camera view so the horizon is approximately in the middle of the scene.
- Add one **Adult person** object from the Biped class that you have ***modified to look like you***, and name it with your name (with a lowercased starting letter).
- Add another **Person** object from the Biped class that you have modified to look like someone in your family and name it **familyMember**. Place it to the ***left*** of the Adult person object, Using the objects' position properties, set both of the Person object heights to be 1.4 (be sure to press Enter after typing the new value).
- Position the two Person objects to be in line with each other in the middle of the scene, about 1/3 of the screen width apart.
- Rotate each of the Person objects, so that they are facing each other.
- Using the **Browse Gallery by Group** tab, select the **scenery** folder.
    - Add a ***scenery*** object (your choice) to the bottom left side of the scene.
        - Size it so that its height is not more than 1.5 and it does not dominate the scene.
    - Add a second ***scenery*** type object (your choice, but different than the first scenery object type) to the bottom right corner of the scene.
        - Size it so that it is small, compared to the other objects in the scene.
- Add a **Seagull** object from the Flyer class to the scene.
    - Position it so in the sky on the right side of the screen, facing left.
    - Size it to be proportional to the Person and other objects, as it would be in the real world.
- Add an object from the **Quadruped** class to the scene.
    - Place it on the ground, between the two people.
    - Rotate the Quadruped object, so that it is facing away from the camera.
    - Size it to be proportional to the Person objects, as it would be in the real world.
- If needed, further adjust the sizes and positions of the objects and/or zoom the camera out, so that all the objects fit easily into the scene and are all fully visible (but don't change the size of the Person objects).

WARNING: There is a bug in Alice that ***sometimes*** prevents you from being able to use handles after adding an object. Saving your program and re-opening it will generally fix this problem.

Therefore, you may want to add all six of the above Alice objects to the scene **first** (drop and drag to the approximate locations) before sizing or positioning any of them. To do so:

> After adding the objects to the scene, save your file to the file ***`Lastname`*`AliceAssn1.a3p`**
> Exit Alice. Restart Alice, click the **Recent Files** tab, and select your saved file.
> At this point, all the handles should work, so you can position all of your objects.

Coding the Actions

Add code to **myFirstMethod** that:

- Sends message to the **Seagull** type object, causing it to "fly" and land on the scenery object on the left side of the screen object (Hint: "move to" the scenery object and then "move" up a little so the it doesn't land ***inside*** the object).
- Sends messages to the **adultPerson** object (with your name on it), causing it to:
    - Jump (move) up and then down once.
    - Then say something about the **Seagull** object.
- Sends messages to the **familyMember** object, causing it to:
    - Move his/her arm up to point to the **Quadruped** type object(hint: turn the shoulder)
    - Say something about the **Quadruped** type object
    - Move his/her arm back down (return it to its original position).
- Sends messages to the **Quadruped** type object, causing it to:
    - Turn towards the camera.
    - Think something.
- Sends a message to the ***scenery*** type object on the **right** side of the screen, causing it to grow larger.
- Sends a message to the ***scenery*** type object on the **left** side of the screen, causing it to change color.
- Simultaneously sends messages to the **Seagull** and **Quadruped** type objects, causing them to perform the same action, at the same time as each other. The action is:
    - Turn to face the right side of the screen.
- Sends a message to either the **Seagull** or **Quadruped** type objects (or both), to say something about what just happened.
- Sends ***one or more*** message(s) to the any of the objects, causing them to do whatever you want.

Be sure to run, test, and debug your Alice program, until it works correctly.

Submission

This programming assignment is due by midnight of the date listed on the Assignments page.

Submit your program source code (the **.a3p** file) to the **Alice Prog Assn 1** submission folder (located under the **Assignments/Dropbox** tab in the online course).

> Before submitting your program file, you MUST re-name it as follows:
> **`LastnameAliceAssn1.a3p`**
> For example: **`SmithAliceAssn1.a3p`**

(*see next page for submission instructions*)

To submit your assignment completing the following steps:

1. Click on **Assignments/Dropbox** in the course Navigation bar.
2. Click on the **Alice Prog Assn 1** link in the Folder List under **Alice Programs**.
3. Click on the **Add a File** button
4. In another window on your computer, browse to the **.a3p** source code file for the program. Drag and drop the file to the area within the dotted lines.
5. Click on the **Add** button
6. Type any comments you want to add for your facilitator in the **Comments** box (none are necessary)
7. Click on the **Submit** button.
8. You will receive a **Confirmation email** for the submission.

Grading

The rubric that will be used to grade your program is linked on the same assignments page that you downloaded this file from.

WARNING:

*Programs submitted more than 5 days past the due date will **not** be accepted, and will receive a grade of 0.*