Note to the Instructor

- This is the first lesson of a three lesson workshop. The lessons are designed to incorporate time for the participants to experiment with the software on their own. This first lesson will provide the participants with some basic skills to create their first project.
Intro to Scratch

Lesson 1
Basics

John Flynn
John Pearsall
Mike Pettiglio
Yiming Wu
What is Scratch?

- Scratch is a platform where you can “create and share your own interactive stories, games, music, and art”

- [http://scratch.mit.edu/](http://scratch.mit.edu/)

- [http://www.youtube.com/watch?v=jxDw-t3XWd0](http://www.youtube.com/watch?v=jxDw-t3XWd0)
Class Objectives

- Have Fun!
- Use Scratch to make projects
- Skills to be learned:
  - Import Sprites
  - Movement (key control)
  - Sounds
  - Speech
  - Sprite editing
Start, open new project
Key Terms

- **Sprite** – Character/object in project
- **Stage** – The window where the project and backgrounds are displayed
- **Script** – A series of blocks snapped together that form a code for the Sprite follow
- **Block Palette** – color coded area where all the blocks to write the script are located
- ***Hint – if you don’t know what a block does***
  > Right click it and select “help”
Delete/Import Sprite

- Click the **Delete** Button
- Then Click on Sprite to delete
- Click the **Import** Button
- Then Select Animals > dog2-b
Rename Sprite

- Rename Sprite1 > Dog

- Use **Motion** and **Control Blocks** to make the Dog move

- Use **Rotation Buttons** to make the dog only face one way
Hat Blocks

- Use **Hat Blocks** to begin a Script

Import New Costumes

- Click the **Costumes** Button
- Then **Import**
- Select Animals > dog2-c
Animate

- Now, with 2 Costumes the Dog can walk
- Use a **forever** and **next costume** block
- Add in a **Wait(0.1)**

Background

- Click the **Stage** Button
- Then click **Backgrounds**
- Then **Import** and select a picture
Edit Costumes

- Go back to the Dog Costumes by double clicking the dog and selecting the Costumes tab

- Select the Edit Button on Costume #2

- Use the Select tool and Highlight the Tail

- Then Use the Flip Vertically Button to rotate the tail and position back into place

- This will Animate the tail
Import Sound

- Now click the **Sound** Button
- Then the **Import** (just like a costume)
- Go to Animals > Dog1
- Use **When (space ) key pressed control Button, play sound (Dog1) until done Button, and forever Button** to make the Dog “bark”
Add Another Sprite

- Add a New Sprite > parrot1-a
- Add a New Costume > parrot1-b

Controlled Movement

- Use the **Arrow Keys** to make the Parrot move

- Use the **when () key pressed**, **point in direction ()**, and **move () steps buttons** to complete
Animate Parrot

- **Rename** the Sprite Parrot
- Add a **next costume** Block to each key command
- Fix the **rotation** of the Parrot
Change Parrot Colors

- Use a **Green Flag command, forever block**, and **change (color) effect by (25) Block**

- Add a **wait (1) Bock**

- Add a **clear graphic effect command**
Talking/Speech

- Add a `when (space) key pressed` Block
- Add a `say (Please don’t bark at me) for (2) secs` Block
- Now the Dog will “bark” and the Parrot will speak at the same time, when the space is pressed