Announcements

• Checkoffs from Chap 1
• Read Chap 2, Sec 2 for next time
• Reading Quiz due
Top 10 List – Surviving CompSci 4

10. Ask Questions
9. Read the Book
8. Visit your professor in her office
7. Learn how to spell Rodger
6. Keep working until it is correct
5. Read the Compsci 4 bulletin board
4. Attend class – Be on time!
3. Start Alice assignments early
2. Seek help when stuck (1 hour rule)
1. Keep number for Randy’s Pizza handy
Animation Programs: Scenarios and Storyboards

- 2-step process for creating animations
  - Step 1: Design (today)
  - Step 2: Implementation (next time)
Step 1: Design

• Decide on problem to be solved
  – Often problem is given to you, by instructor or boss
  – Other times, you make it up!
  – We will do both

• Design a solution
  – Use a storyboard design
Example Problem (scenario)

• The scenario is:
  A robot has landed on the moon and is out looking around. Suddenly an alien peeks out. The robot turns his head to look and walks over and the alien hides. The robot turns to look at the camera and says, “Houston, we have a problem!”

• The problem is:
  How can we create this animation?
Designing a Solution

• First decide on objects for the scene
• Then, create a storyboard
  – A list of actions
• A storyboard can take two forms
  – Sketches
  – Textual “to do” list
Objects in the scene

• Objects: robot, alien, lunar lander, rocks
• Opening scene: a moon scene
• A quick sketch:

• Don’t have to be an artist!
Storyboard Template

- Scene number
- Scene sketch (picture)
- Description
- Sound
- Text
A Storyboard

Initial scene

Robot turns and moves forward

Alien appears

List of objects:
Space ship, robot, rock, alien
Storyboard in Text form

• Animation artists (Disney or Pixar) sketch their storyboards
• You may not have such expertise, so can also use a textual form

Alien pops up and makes noise.
Robot turns head and moves toward alien.
Alien drops back behind rock.
Robot faces camera, turns red and says "Houston we have a problem!"

Like a “to do” list
How does Pixar make movies?

**THE PIXAR PROCESS**

There is a scene in *Toy Story 2* when the old man repairing Woody tells the impatient toy collector AI, “You can’t rush art.” This is especially true at Pixar, where films go through four stages: development, creating the storyline; pre-production, addressing technical challenges; production, making the film; and post-production, “polishing” the final product. Use the lever to the left to learn about the specific steps of each stage.

**1. A STORY IDEA IS PITCHED**

A Pixar employee pitches his or her idea to other members of the development team in a way that’s reminiscent of a sales pitch. The real challenge is to get the audience to believe in the idea and see the possibilities in it.
How does Pixar make movies? (cont)

2. The text treatment is written

A treatment is a short document that summarizes the main idea of the story. Sometimes, many treatments of the same idea will be developed in order to find the right balance between solid ideas and open possibilities, which will be filled in later by development and storyboard artists.

3. Storyboards are drawn

Storyboards are like a hand-drawn comic book version of the movie and serve as the blueprint for the action and dialogue. Each storyboard artist receives script pages and/or a “beat outline,” a map of the characters’ emotional changes that need to be seen through actions. Using these as guidelines, the artists envision their assigned sequences, draw them out and then “pitch” their work to the director.
Storyboard example
Princess and Knight story

The princess and Knight face each other and are 10 m apart.

The princess curteys, the princess jumps up and does a forward flip and lands back down.

The Knight bows.

The Knight jumps up and shakes his sword forward 5 m.

Princess moves forward 5 m.

The Knight lands back down.
Storyboard – princess/knight (cont)

- Then knight jumps over princess
- The knight lands in princess original position
- Knight & princess turn to camera
- Princess curtsies & knight bows at same time.

- Also list all objects in story in a list format
Example 2 – Storyboard, artist

- You don’t have to be an artist, stick people okay
Camera Control

• Remembering a Camera Position
  – May move the camera, then want to move it back
  – May want to remember a good camera position

• Use a Dummy Camera Marker
  – ALWAYS save original camera position
  – See handout
Today’s class and assignment

• Write two storyboards and camera control exercise
  – Use storyboard sheets
  – Get checked off
  – MUST FINISH AS HOMEWORK if don’t complete in class

• For next time
  – Read Chapter 2, section 2, and tips and tech 2
  – Reading quiz before next class