User Interface
Software Project

Assoc. Professor Donald J. Patterson
INF 134 Winter 2012
Sketching Scenarios
Design Process

What is wanted? → Analysis → Design → Prototyping → Evaluation

Implement and Deploy
Tool for novice animators

Designed for pen-based interaction

Designed for informal sketches

Sketched is not just about drawing, it’s also an attitude

rough but useful
K-Sketch: A "Kinetic" Sketch Pad for Novice Animators

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ABSTRACT
Because many interaction tools are complex and dif-
cult to use, they are often not used or used well, even when they are available. To make novices more effective and to make them more productive, we have developed a group project, called K-Sketch, which combines a sketching tool with an animation system. K-Sketch allows users to sketch and draw using a set of tools that are commonly available. It then converts these drawings into animations, which can be used to create multimedia presentations. K-Sketch is designed to be easy to use and to facilitate the creation of animations for novice animators. It is also designed to be flexible and adaptable to different needs and applications.

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Tuesday, February 17, 2001

ICSE 2001 Proceedings: Hardware, Software, and Systems

1. INTRODUCTION

The goal of this project has been to create a tool that enables novice animators to create animations quickly and easily. The tool should be easy to use and should enable novice animators to create animations that are visually appealing and engaging. The tool should also be flexible and adaptable to different needs and applications.

Focussed on feature selection not a
new interface concept

• Evaluated with novice animators
  • They must describe animations they wish to create in sufficient detail for us to create them.
  • There must be a plausible reason why they do not already produce the animations they describe.
  • The animations must support a specific task.
  • There must be a plausible reason why the animation is necessary to accomplish that task.

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Figure 3: K-Sketch User Interface. (a) New, Open, Save, Export Flash, and Cut/Copy/Paste buttons, (b) Undo/Redo and Pen/Eraser buttons, (c) Repeat Playback, Record Drawings, Show Motion Paths, and Speed buttons, (d) Options, Help, and Full Screen buttons, (e) Object Manipulator, (f) Context Menu button, (g) Motion Path, (h) Go/Stop button, (i) Time slider bar, (j) Nudge Forward/Go to End buttons.
(a) Select left particle by circling it while holding Alt. button.

(b) After the object manipulator appears, hold the Alt. button and prepare to drag.

(c) Alt-drag makes animation “go”. Manipulator hidden. Motion path shown.

(d) Drag stops and manipulator appears. Tap outside manipulator to de-select.

(e) Rewind, draw & select right particle, hold Alt. button, & prepare to drag.

(f) Positron moves as electron is dragged. Time collision by hand.

(g) Erasing hides particles. Objects that disappear are shown as ghosts.

(h) Draw an explosion where the particles disappeared.
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<tr>
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<th>K-Sketch</th>
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<td>2. Practice Time (min.)</td>
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Richard C. Davis – U.C. Berkeley
Brien Colwell – University of Washington
James A. Landay – University of Washington

www.k-sketch.org
Assignment 04

**Goals:**
- To practice rapid storyboarding animation for communicating high level use case scenarios to clients.
  - Using informal animation to illustrate an idea or a concept is a powerful technique that is especially useful in the early prototyping phases of application development. While a commercial tool, such as Adobe Flash and Microsoft PowerPoint, may enable its users to create relatively sophisticated animations, their animation interface can be quite cumbersome for a designer who wishes to quickly sketch out an initial prototype version of an animation.
- To reflect on storyboarding methods and what their relative strengths are.
  - This assignment is meant to inspire your creativity, flex your design muscles, and give you a chance to share your own designs in class. The assignments are meant to be lightweight and fun.

**Assignment**
- K-Sketch, an open source animation program created by Richard Davis enablies novices to easily create informal animations from sketches.
  - For background you can read the K-Sketch CHI paper available here: [http://portal.acm.org/клаtion.cfm?id=1357122](http://portal.acm.org/клаtion.cfm?id=1357122)
  - Watch the 6 demonstration videos available here to see how to use it: [http://www.youtube.com/ивiew_play_list?list=1728A305949137953](http://www.youtube.com/ивiew_play_list?list=1728A305949137953)
  - Install a version of K Sketch
    - You will need a Windows PC to use K-Sketch. A tablet PC is ideal.
  - Prototype the storyboard for your project using K-Sketch
    - Your animation should be between 1 and 4 minutes
    - It should have minimal text
    - It should be understandable by anyone in our class who knows what your project is.
    - Do not worry too much about polishing the “look” of your sketches, especially if you feel you are not a good “artist”. Instead focus on conveying the concept through the animation.
    - Export your animation file as a flash file

**Lead a discussion of your idea**
- Present your animation
  - It should be a .flv file from K-Sketch
  - Digital documents can be carried in on a flash drive.
  - Each person in the audience will fill out an anonymous questionnaire like this:
    - How prepared was this group? 1 2 3 4 5
    - The animation effectively conveyed the concept of the intervention (not a question about artistic ability)?
      1 2 3 4 5

**Grading**
- 75 points effectiveness of flash animation
- 25 points presentation
- 15 bonus points if you create a second story board using a different technology and compare and contrast the two at the end of your presentation.