Interactive Video Minigames

6.111 Design Presentation

Becca Arvanites and Cristina Domnisoru
Overview

- Inspiration for project from EffecTV and PSII Eyetoy

- Plan to implement 3 games
  - Camera video input to games
  - Process video to add effects
  - Structured with separate game and effect modules


http://effectv.sourceforge.net/burn.html
High-Level System Block Diagram

Camera

- ADV7185
- Video Signal
- Frame 1 SRAM
- Frame 2 SRAM

Game selector

- Puzzle game
- Fire game
- Shockwave game

Buffer Swapper

- Puzzle Effect
- Fire Effect
- Shk Effect

Frame Swapper

- Frame 1 SRAM
- Frame 2 SRAM

Display

- To Monitor

Switches

- Enable P
- Enable F
- Enable S

Clock (to all)

Reset (to all)
Fire Gameplay

- Player holds distinctly colored rectangle to catch on-screen falling blobs
- Catch blobs, avoid bombs
- When hit by bombs fire effect added to player
Other Games

- Puzzle Game
  - Sliding puzzle using squares of camera video

http://effectv.sourceforge.net/puzzle.html
Shockwave Game

- 2-player “fighting” game
- Shock waves added to players motion
- Shock waves “melt” other person’s image
Projected Timeline

- Week 11/21: Finish Puzzle Game, start Shockwave Game
- Week 11/28: Finish Shockwave Game
- Week 12/5: Implement Fire Game
- Week 12/12: Project Demos and Videotape