

# Needs Analysis

## Problem Identified

- More than 34% of homes with children had least one firearm (found by RAND/UCLA study)
- Only 39% of these families keep their firearms in a safe condition
- Over 600 children die due to guns each year, accidental or intentional.

## Behavioral objectives

- Guide the way to tasks analysis.

# Target Audience

- Parents with guns in the home
  - Children ages 7-14
- Particularly designed for handguns, but basic principles will apply for other guns in general as well

# Tasks Analysis

- Following proper gun safety procedures
- Making correct decisions about gun storage
- Establishing an open dialogue with children about gun safety
- Establishing gun safety procedures with children
- Being able to recognize unsafe gun conditions in the home
- Being able to recognize the difference between real and toy guns

# Game Mechanics

- Player uses a mouse for point and click action.
- Animation is used through all levels to increase the interactivity of the game.
- Game is browser-based (Flash) for easy compatibility and accessibility.

# Game Flow

- 1.Start screen
- 2.Splash screen w/ intro to Sam
- 3.Pre-test
- 4.Tutorial Level
- 5.Level 1: Toy Guns vs Real Guns
- 6.Level 2: Stop, Don't Touch, Leave the Area, Tell an Adult
- 7.Cut scene
- 8.Level 3: Unsafe Environment
- 9.Post-test
- 10.End scene

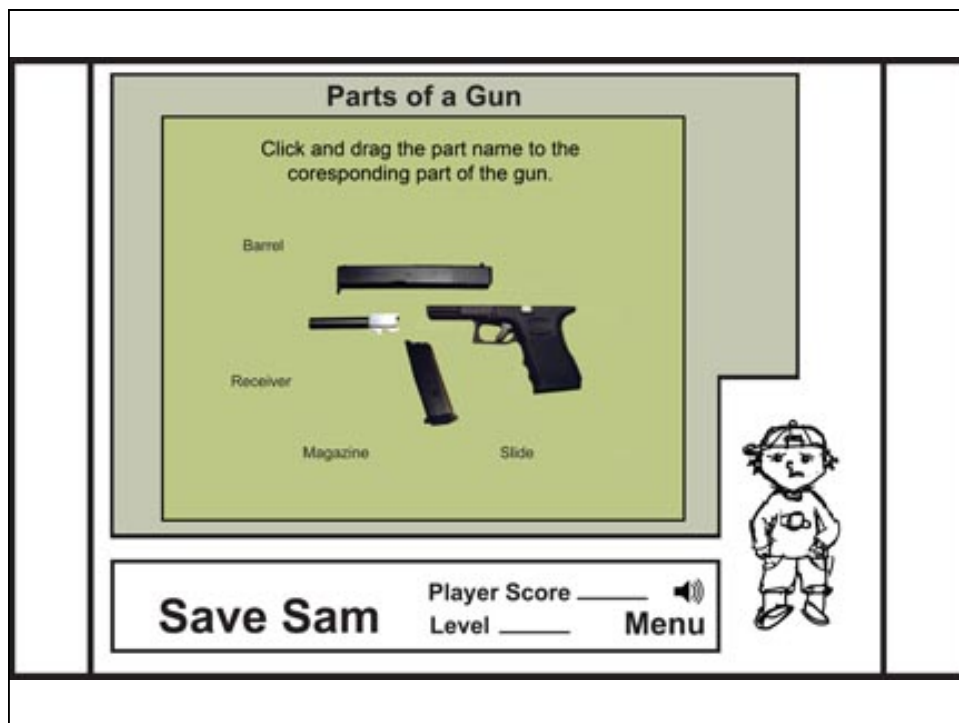
# Pre-Test on Gun Safety

- Functions like a game show
- Questions taken from a predetermined pool
- Sam acknowledges in/correct answers with appropriate expression



## TL: Gun Part Identification and Safety Procedure

- Interactive Gun Display: player is shown and can manipulate gun parts
- Teaches proper order of safe disarming and storage of handguns
- Must afterward list the steps in correct order to proceed



# L1: Toy Guns vs Real Guns

- Player asked to sort (drag-and-drop) pictures of toy and real guns into their proper containers (toy chest or gun safe)
  - All have the tip censored to hide obvious orange tips, even though not all the toy guns had them
- Time limit
- Correct results improve Sam's attitude, and conversely
- Must achieve at least 75% correct to continue



## L2: S/D/L/T

- Teaches mantra of Stop, Don't touch, Leave the area, and Tell an adult
- Sam runs for the gun (at half player's mouse speed)
- Each of the steps appear as buttons. Sam reacts and responds accordingly.
- Sam will question the player; multiple responses.
- Bad End if Sam reaches the gun
- Affirmative cutscene with Sam if completed correctly

## L3: Unsafe Environment

- Generic room with guns and ammo strewn about. Click to pick up.
- Time limit
- Guns and ammo go in different safes; Sam responds positively for correct sorting.

## Post-Test on Gun Safety

- Same mechanic as pre-test
- Uses questions not previously used from same pool
- After test, Sam comments on scores: (paraphrase)
  - “You got x out of z correct the first time, but this time you got y out of z correct!”
  - “You got some of those right.”
  - “You got a lot of those right.”
  - “You really know about gun safety!” (all correct)
- Leads to final cutscene, where Sam thanks the player for playing

## Evaluation

- Control group: 20 gun owning parents, 10 male and 10 female, who are given NRA Gun Safety brochures to read. Paper pre- and post-test.
- Game has pre- and post-tests built-in. Former tests for prior knowledge, latter tests for teaching efficacy.



# Conclusion

We hope that our game will inform players of basically gun safety, which will be indicated by higher scores in the post-test as a result of gameplay.

We hope that our use of Sam will encourage those who would take the game less seriously to really try, projecting their own child onto our on screen avatar.

We believe this game will increase basic gun knowledge, reducing or, ideally, ending gun-related accidents in the home.

# Questions?