

Meng Luo

Anthony Russo

Leigh Rountree

Antonio Vincentelli

Save Sam Final Concept Document

Title

Save Sam

Project Thumbnail

More than a third (34%) of homes with children — that's 22 million children ages 18 and under in more than 11 million homes — had at least one firearm, found researchers in a RAND/UCLA study [12]. However, only 39% of these families keep their firearms locked, unloaded, and separate from ammunition, as recommended by the American Academy of Pediatrics.

Save Sam hopes to teach parents who own guns how to safely store and care for their guns, how to properly keep them away from their children, and how to educate their children on gun safety, in and out of the home.

Target Users

Gun owning parents with young children, specifically, 3 years olds.

Narrative

Sam is a precocious 3 year old (boy/girl) who is curious about every object (he/she) encounters.

Sam is in an environment where gun safety is not the best. Your task is to follow gun safety procedures to keep Sam safe.

Problem Statement

Many parents in the United States who own guns do not know gun safety procedures, keep guns locked in a safe, or know how to teach their children gun safety and what they should do if they were to find a gun.

Needs Analysis

Learning objectives:

- follow proper gun safety procedures
- making correct decisions about gun storage
- being able to recognize unsafe gun conditions in the home
- being able to recognize the difference between real and toy guns
- establishing gun safety procedures with children

Task Analysis

Following procedures for gun safety

State the correct procedures for proper gun safety

Detailed steps:

- Pointing gun in safe direction
- Always keep finger off trigger until ready to shoot

- Always keep gun unloaded until ready to use
- Know your target and what is beyond.
- Store guns so they are not accessible to unauthorized persons

Recognize the difficulty of telling real guns from toys

- Discriminating between real guns and toys

Establish safe gun storage

State the various ways guns can be safely stored

Detailed steps:

- Take ammo out of gun when not using it
- Lock gun (in a gun safe) and keep it out of reach of kids
- Store the keys for the gun and the ammo in a different area than household keys, out of reach of kids
- Lock up gun cleaning supplies, which are poisonous

Recognize unsafe gun conditions in the home

- When handling or cleaning a gun, never leave it unattended

Clearly communicate gun safety procedures with children

Demonstrate the ability to clearly communicate the

- Stop, Don't Touch, Leave the Area, Tell an Adult rule

Delivery Platforms and Justifications

The game will be developed as a 2D web browser-based game using HTML5. A web browser game does not take user's time to download the game client in order to play the game and it can be played everywhere as long as there are computers/mobile devices and an Internet connection.

Unlike flash games, the users do not need to install the plug-in in web browser when playing a HTML5 web game. Additionally, more and more mobile device systems (e.g. IOS, Android 4.1 and above) stopped supporting flash player in their web browsers while they all support HTML5 technology. In this way, we can make our game accessible to as many target users as possible.

Key Features

- Series of point-and-click minigames, mostly simulations.
- Puzzle Games
- Timed Games
- Avatar of Sam (customizable) to interact with player
- Scripting with parents to teach Stop, Don't touch, Leave the Area, and Tell an Adult
- Multiple choice game show quizzes (gauging knowledge of gun safety pre/post game)

User Interface and Environment

Since the game will be browser based, we can use the mouse to point and click for the action on the computer, or touch and swipe for the action on some mobile devices. The UI will include the player's score, Sam's avatar, and current level.

Scoring System

To create an emotional impact on the player, who is a parent, performance will affect the child avatar Sam, in the bottom right corner of the game. The avatar can range inclusively between two extreme states, crying and smiling. The different states are as follows:

- 1 Crying: Player has gotten almost all questions incorrect (0-9% correct)

- 2 Whimpering: Player has gotten a lot of questions incorrect (10-29% correct)
- 3 Frowning: Player has gotten some (more) questions incorrect (30-49% correct)
- 4 Indifferent: Player has gotten some (more) questions correct (50-69% correct)
- 5 Grinning: Player had gotten most questions correct (70-89% correct)
- 6 Beaming Smile: Player has gotten almost all questions correct (90-100% correct)

Sam's mood will reset to neutral at the start of each new quiz-style minigame.

Gameflow:

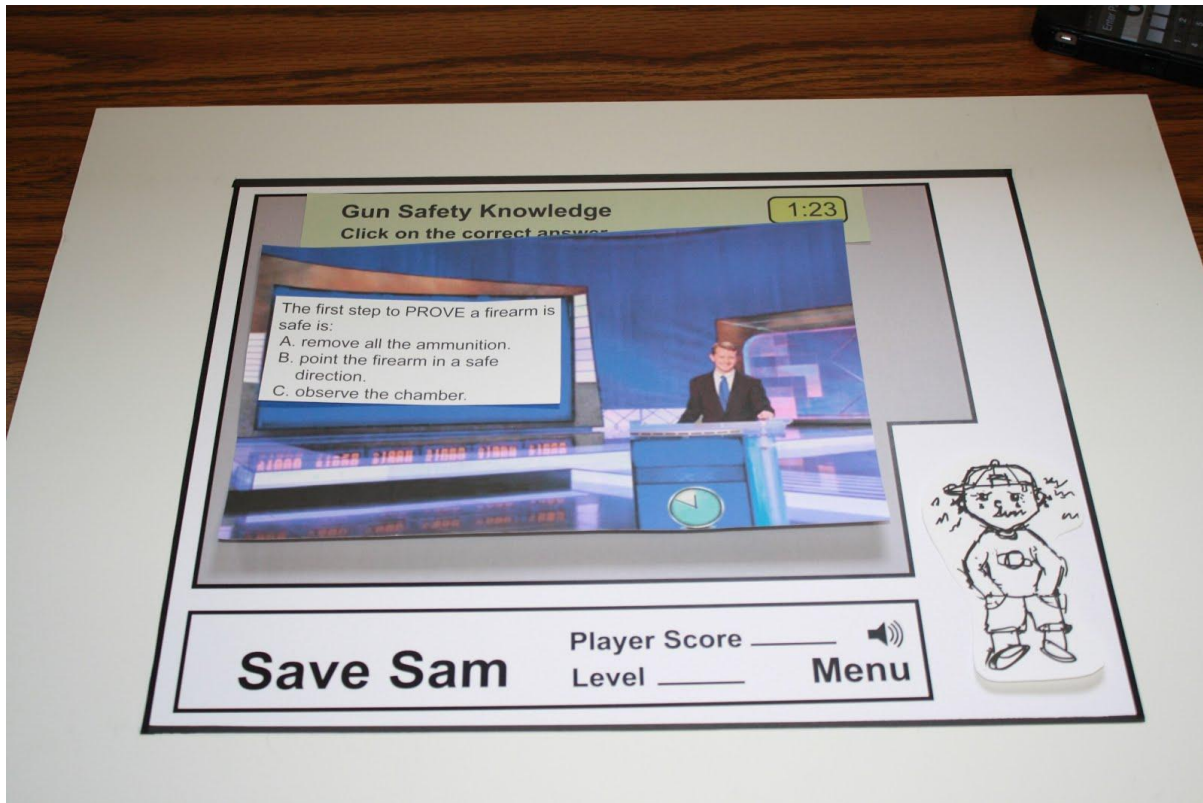
Game Start Screen

Splash Screen with player introduction to Sam

- Sam is a wide eyed child who identifies you as their parent. It is abundantly clear that Sam looks up to you.

Pre-test: Gun Safety (Game show quiz)

- Jeopardy clone is on television. Questions are asked about fundamental gun safety to gauge player's initial knowledge. Score is on bottom, evaluating correct answers.



Cut Scene with Sam

- Sam comments on initial knowledge
 - “You got a lot of those wrong...”
 - “You got some of those right...”
 - “You got a lot of those right!”

Tutorial Level: Gun parts and safety lesson and test

- Part 1: A disassembled handgun and all the appropriate labels are strewn about on the screen. The player must match the labels with the pieces.



- Part 2: The player must assemble the gun in the correct order (drag-n-drop). Incorrect guesses reset that piece and, as with all wrong answers, reduce Sam's happiness level.
- Part 3: Quick tutorial explains the proper gun safety procedures, done through images that outline the process that the player can click through at their own speed.
- Part 4 (quiz): The player is given the seven steps to safe gun storage in an misordered list. The player must match the correct step number to the action. Incorrect guesses reset the attempted number and reduce Sam's mood. There is no time limit, and the player must sort all the steps correctly to proceed.

Level 1: (Mini Game) Toy Guns vs. Real Guns

- Parent is asked to sort pictures of toy and real guns into their proper containers (toy chest or gun safe)
- 45 second time limit

- Correct answers improve Sam's attitude, while an incorrect answers will be a detriment towards it. The pieces do *not* reset if incorrect, though.
- Failing (less than 75%) restarts the exercise. It is expected for the player to fail at least once, if not a few times. The idea in this is for the player to realize how life-like the toy guns are and how difficult it can be for an adult, let alone a child (or a cop), to judge what it really is.



Cut Scene with Sam

- Sam comments on the sorting of guns
 - "You did that slowly"
 - "You're pretty fast"
 - "You're like a superhero!"

Level 2: (Mini Game) Teach Sam "Stop, Don't Touch, Leave the Area, and Tell an Adult"

- Sam is running towards a gun. Player clicks on the flashing [Stop] button to say the word and get Sam to stop.
 - “Aw, man.”
- Sam slowly reaches for the gun, prompting [Don’t Touch].
 - “Why?”
 - [Guns are not toys.]
 - [You could get hurt.]
 - Both answers are valid and represent possible actual responses.
 - “What do I do now?”
- [Leave the Area], immediately followed by [Tell an Adult].
 - Sam exits scene.

Cut Scene with Sam

- “Now I know to Stop, Don’t Touch, Leave the Area and Tell an Adult”

Level 3: Mini Game Unsafe Environment (timed game)

- Multiple environments where guns and ammo are laying around. Player clicks on unlocked guns and ammo to pick them up and store them in their respective safes.
 - Placing a gun or some ammo in the wrong safe resets that piece and reduces Sam’s mood.
- As players correctly put guns and ammo in the correct safe, Sam’s mood improves (opposite also true).
- If timer runs out, player must restart level.

Cut Scene with Sam

- “You can do better next time.”

- “Wow, that was great!”

Post-test: Retake Quiz

- Same setting as the pre-test.
- Sam comments on gun safety knowledge, shows comparison to the initial test
 - “In the beginning you got X out of Y, but this time you got Z out of Y.”
 - “You got some of those right”
 - “You got a lot of those right!”
 - “You’re a safety genius!” (all correct)

Final Cut Scene with Sam

- Sam thanks the player for everything Sam has learned about gun safety.

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.

The game has pre- and post-tests built-in. The first tests for prior knowledge, and the second tests for teaching efficacy. A large positive change in the pre-to-post test comparison should signify a greater understanding of gun safety than before playing the game.

A follow-up quiz months after the control and game tests should give some indication as to actual retention.

Conclusion

We believe this game will increase basic gun safety knowledge, reducing or, ideally, ending gun-related accidents in the home. Hopefully, our use of Sam will encourage those who would take the game less seriously to become emotionally invested, projecting their own child onto our on-screen avatar.

Appendix

Playtesting notes:

Pre-test

- enjoy Sam feedback
- take several seconds (20, +/- 10) per question

Gun Parts

- Gun Assembly -

- easy enough to deduce part names
- player assembled gun correctly on first try. Note: was surprised by correct guess.
- player really enjoys Sam's spoken feedback

- Safe Storage Steps -

- player voiced concerns regarding "Pull the trigger" as a step at all (not so much on placement)
- player can eventually deduce all correct steps through elimination, but takes a long time

Toy/Real

- Player only made five guesses in 45-second period. Four were correct.

- This followed the game designers prediction - players would experience great difficulty in discriminating between real guns and toy guns.

Stop, Don't Touch, Leave the Area, and Tell an Adult

- understandable interface
- player wanted to pick both secondary responses (e.g. "Guns are dangerous." and "Guns are not toys." after Sam's "Why?")

Comments

- Keep Sam simplistic (line art was appreciated) but allow more customization of Sam to increase parent's emotional connection to the in-game character (gender, clothes)
- Name can stay the same for both genders (Sam(uel/antha)).