

"You're getting WARMER..."

**NUMBER
SPY**



**NUMBER SPY
USER'S GUIDE**

NUMBER SPY is based on the "Hot or Cold" children's guessing game played by millions of kids everywhere. One child is designated as the clue giver and the other child as the searcher. The clue giver picks a mystery object in the room. As the searcher moves about the room, the clue giver would give clues, saying "you're getting hotter" or "you're getting colder" depending on whether the searcher moved toward or away from the mystery object. Once the object was found, the players changed rolls and the game continued.

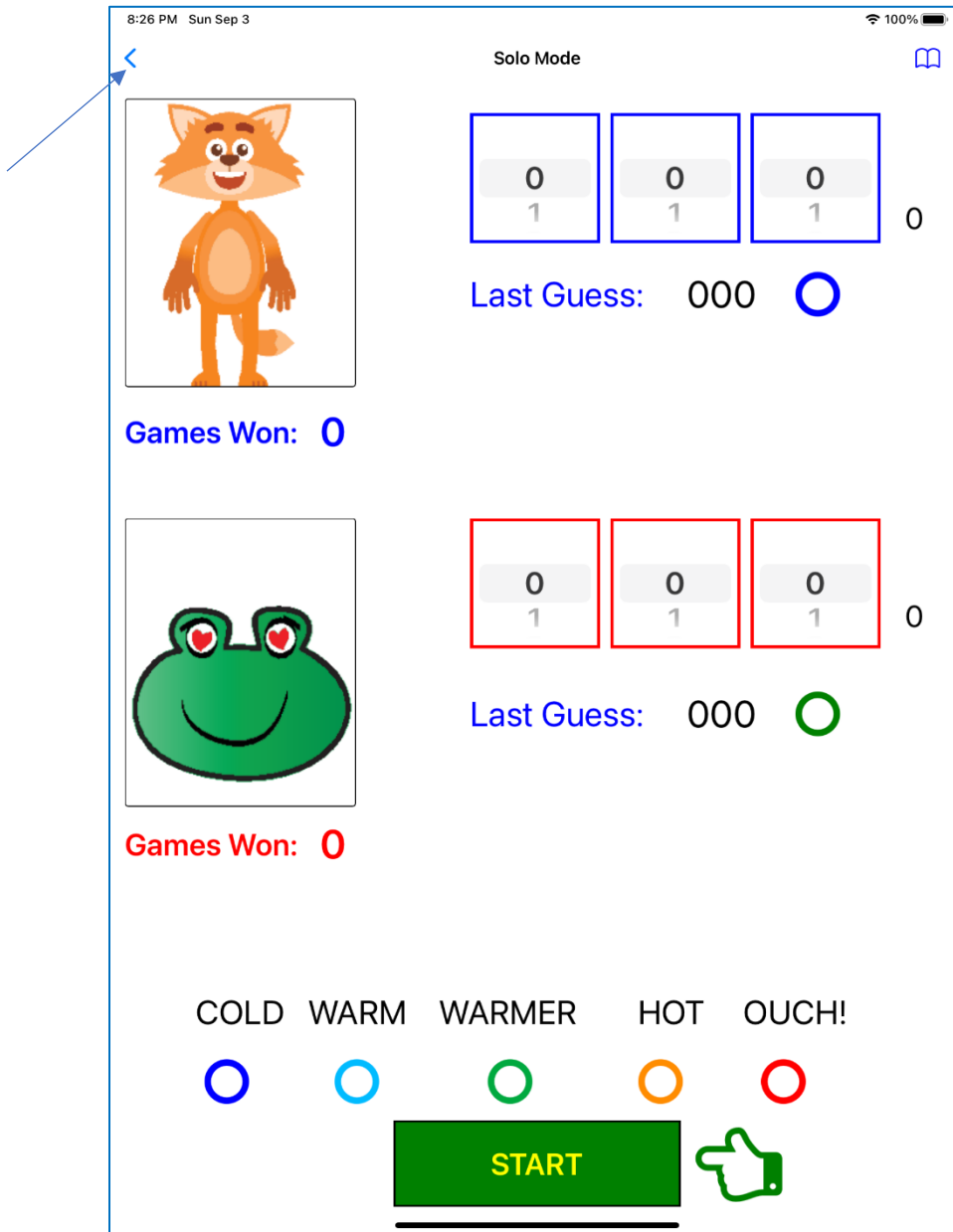
NUMBER SPY uses NUMBERS instead of objects. The object of the game is to guess a randomly generated number, between 1 - 999, before your opponent can. You can play against another player on the same WiFi network, or against a computer opponent if another player isn't available. Clues are provided (just like in the Hot or Cold game) to help you narrow the guesses.

This is the iPad opening screen.



The opening screen asks the user to choose the opponent. You can either play against a WiFi opponent or the computer (Play Solo option).

Let's walk through the Computer Opponent option first. When selected, the program automatically takes you to the main playfield, shown below

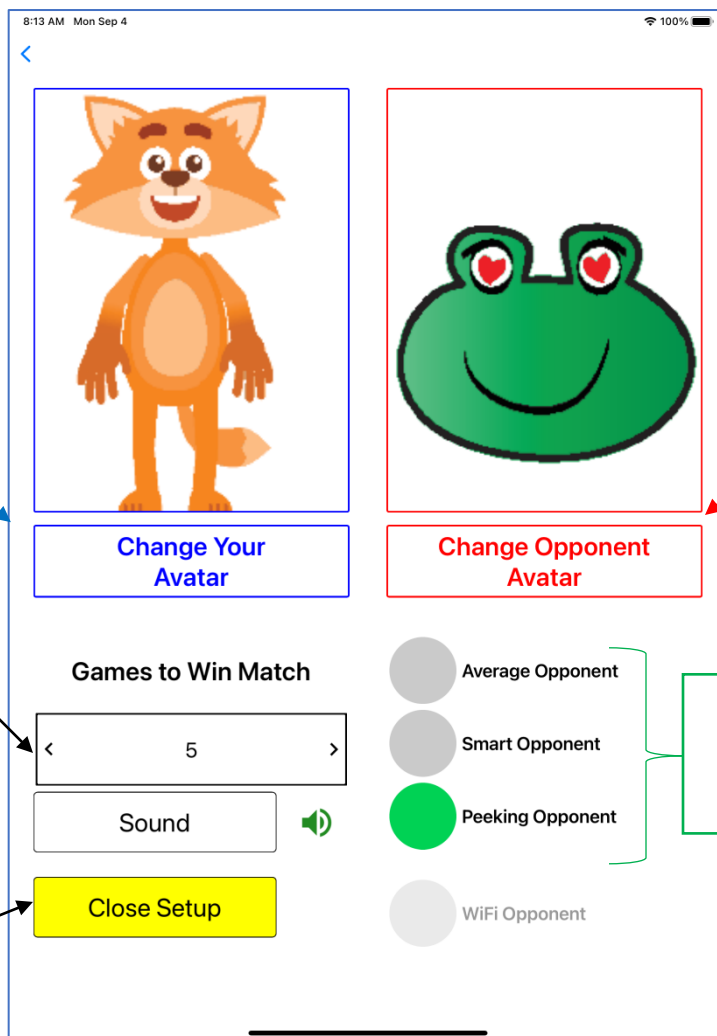


One of the very first things to do is set up the game. You do this by opening the Setup Page. It's there that you choose your favorite avatar, select the Computer opponent's skill level, decide how many games it will take to win the match and select the sound mode.

You reach this page by tapping the left carat symbol ("<") in the upper left of the screen. This re-opens the starting screen. Tap the "Setup" option from the top menu to open the Setup page.



Press Setup to open the Setup Page



The Setup Page (Solo Mode)

Press to Change Your Avatar

Press to Change Opponent Avatar

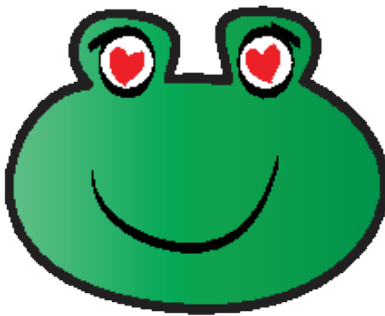
Use Left/Right selector to set the number of games needed to win a match

Select Computer opponent

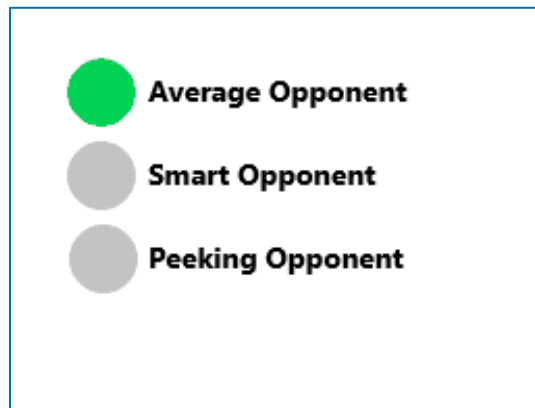
Sound ON/OFF

Avatar Choices

Use the Setup menu option to select from these avatars. Once selected, they are saved unless changed again.



There are three levels of search strategy that you can choose for your computer opponent, chosen via the radio buttons on the Setup page.



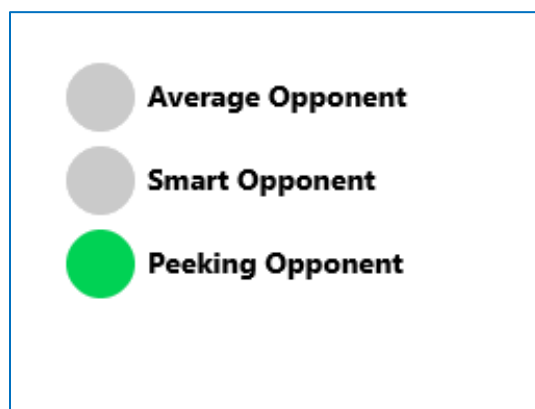
The Average Opponent's search strategy is purely random within a continually narrowing range. Opponent knows the high limit of 999 and low limit of 1 at the beginning of the contest. After each guess, a new high or low is learned and adjusted. The next guess is a random number between the new limits.

A match with an "average" opponent slightly favors you



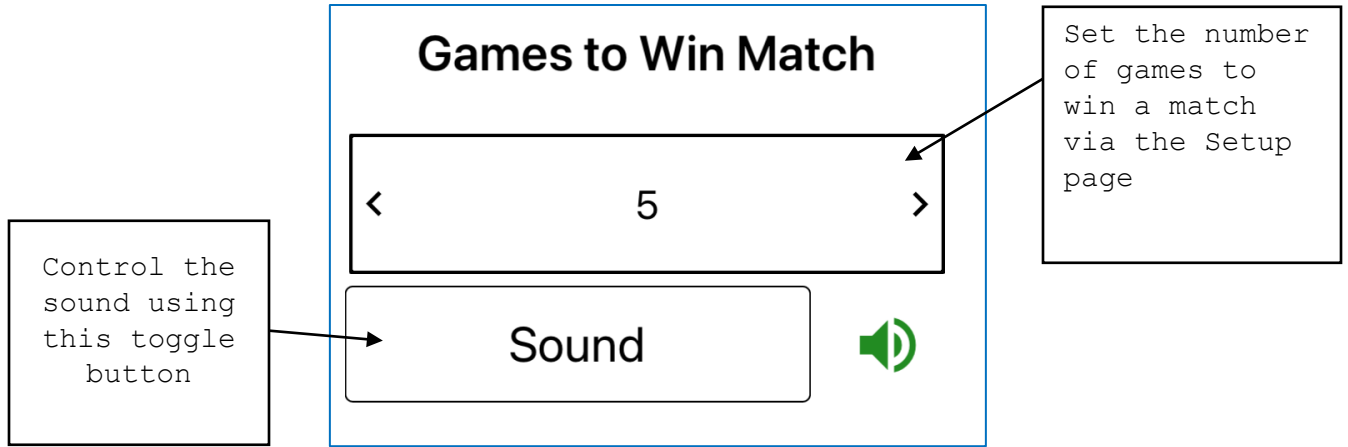
The Smart Opponent's search strategy is an arithmetic average of a continually narrowing range. As with the Average Opponent, after each guess, a new high or low is determined. The next guess is the average between the new limits. This usually results in a faster convergence.

A match with an "smart" opponent is a more even match

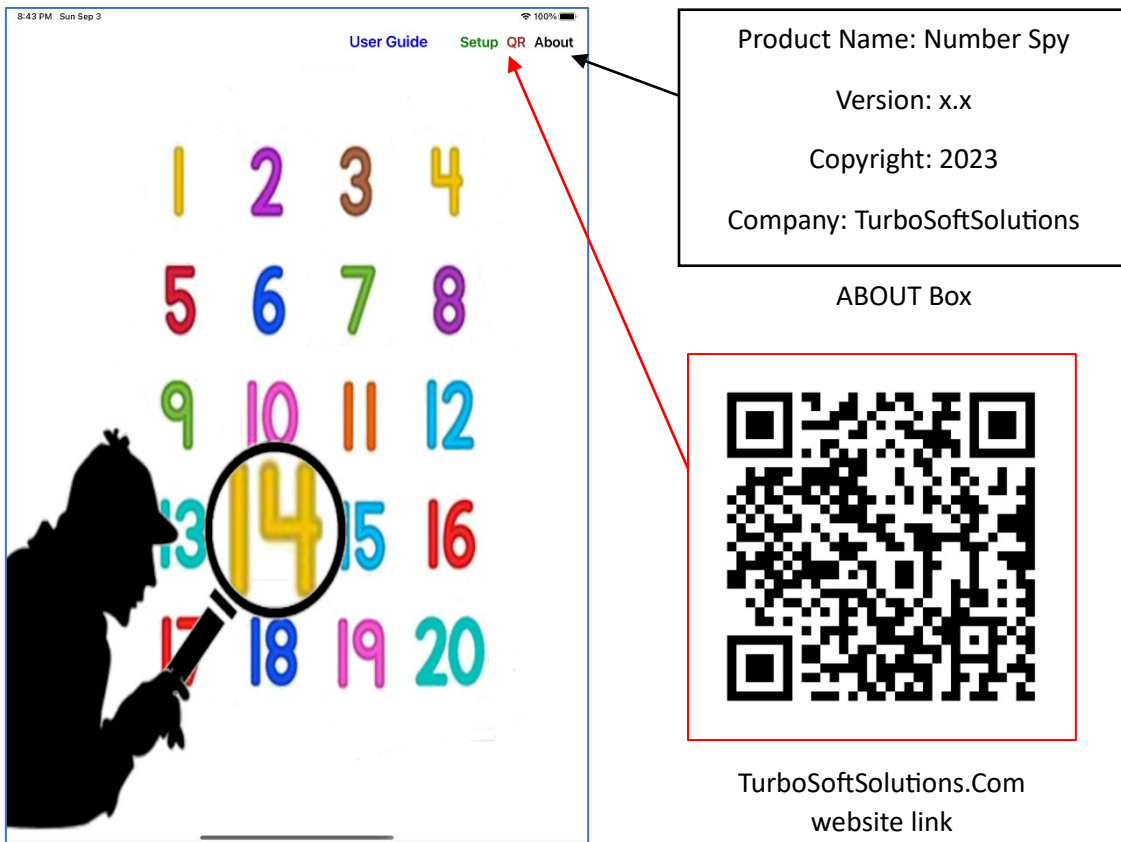


The Peeking Opponent reduces the range by taking the low/high average as before, but this time it peeks at your guesses too and adjusts its low/high range limits. This results in the fastest convergence possible.

A match with an "peeking" opponent is a competitive match

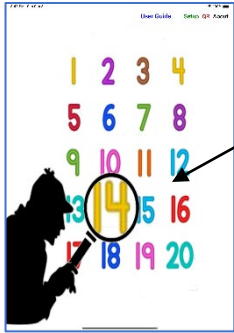


Game Parameters (via Setup menu)



Other Top Menu items

After setting up your avatars and selecting game parameters, close the Setup Page ("<"). It's time to play!



Press anywhere on the opening screen to start the game



Main Playfield screen

Helping Hands appear throughout the game to guide the player to the next steps

Let's talk about the various symbols, buttons and text boxes found on the playfield

8:26 PM Sun Sep 3

Solo Mode

Games Won: 0

Games Won: 0

0 0 0
1 1 1

Last Guess: 000

0 0 0
1 1 1

Last Guess: 000

COLD WARM WARMER HOT OUCH!

START

Display the Range and Hint Table.

Your guess is entered in the blue boxes. Roll each number to your desired guess

Turn counter

Range and hint indicator from last turn

These boxes will contain your opponent's guesses which require no input from you.

Range and hint indicator from last turn

Range and hint indicators for current turn

RANGE AND HINT INDICATORS

An incorrect guess results in a colored Miss Circle being displayed, showing how far the guess was to the MYSTERY number. They are filled in with an UP or DOWN arrow. An UP arrow means your next guess should be HIGHER than the last (and vice versa).

COLD	WARM	WARMER	HOT	OUCH!

Range and Hint Table.

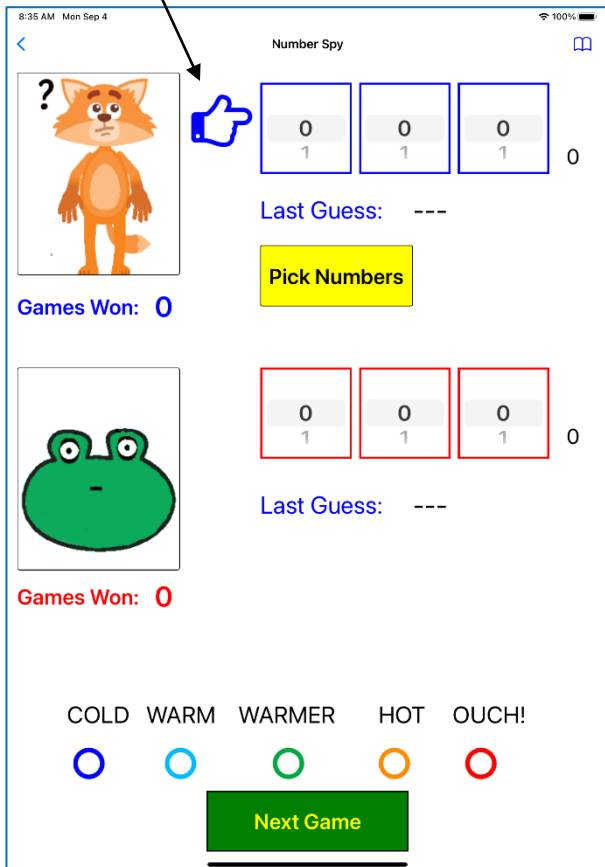
COLOR (temp)	MISS DISTANCE
Purple (Cold):	500+
Cyan (Warm):	250 - 499
Green (Warmer):	125 - 249
Orange (Hot):	25 - 124
Red (Ouch!):	24 or less

A step-by-step example game is presented below.

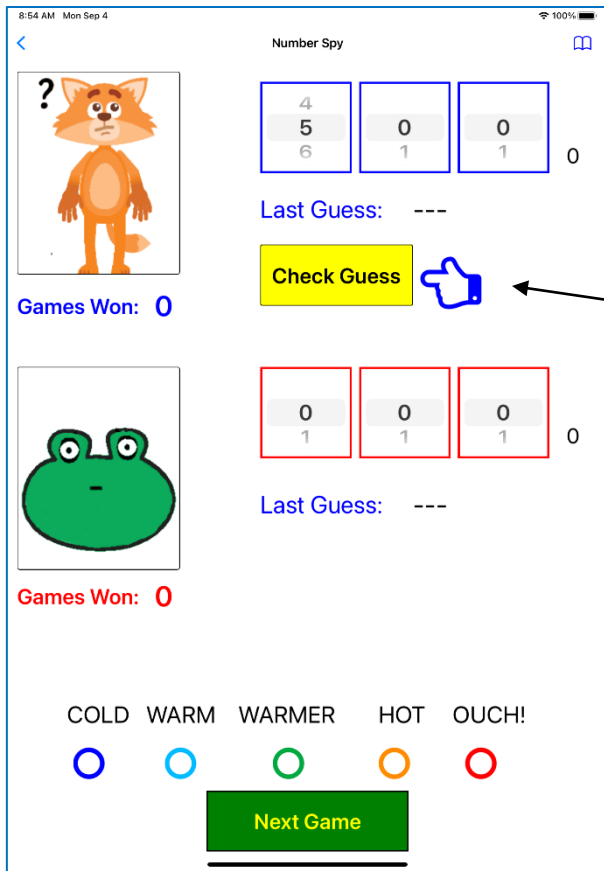


Step 1. Press START

(Helping Hand)



Step 2. Roll the blue boxes until your desired guess is displayed.



Step 3. Check your guess. In the previous step, "500" was entered into the blue boxes. After the first blue box is rolled, the helping hand moved to the Check Guess box.

(Helping Hand)

Press the Check Guess box.



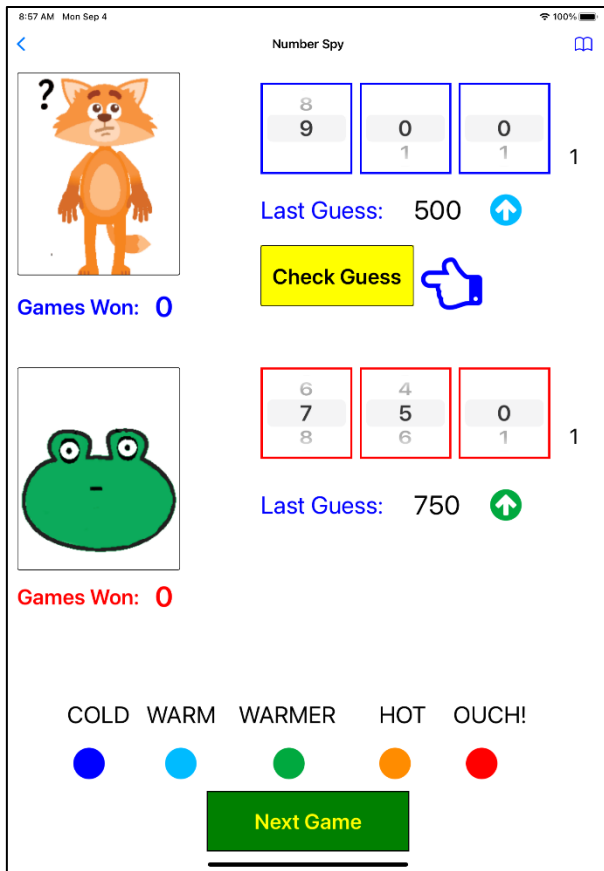
Step 4. Unless you guessed the correct answer, the computer spins the red boxes and shows its guess automatically.

Notice that your opponent guessed "750" on its first try.

Your first guess (500) was "WARM" (greater than 250 but less than 500 away from the mystery number).

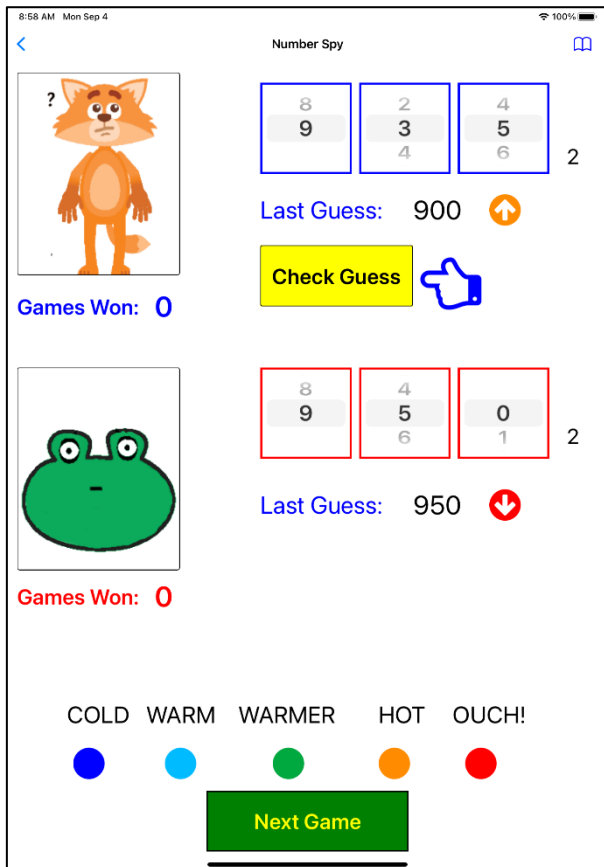
The computer's guess was "WARMER" (greater than 125 but less than 250 away from the mystery number).

The up arrows indicate that both guesses are low.



Step 5. Your second guess (900) has been entered.

Press the Check Guess box.



Step 6. Notice that your opponent guessed "950" on its next try.

Your second guess (900) was HOT (greater than 25 but less than 125 away from the mystery number). The up arrow indicates that your guess was still low.

The opponent's guess has reached the OUCH level (less than 25 from the Mystery Number) and the down arrow indicate that the guess was high.

Both you and your opponent are converging on the mystery number. Who will get there first?

Your fourth guess (935) has been entered.

Press the Check Guess box



Step 7. Your opponent guessed "942" on its next try.

Your last guess (935) was OUCH! Level (less than 25 away from the mystery number). The up arrow indicates that your guess was still low.

The opponent's guess is still OUCH level and the down arrow indicate that its guess was high.

Your fifth guess (940) has been entered.

Press the Check Guess box

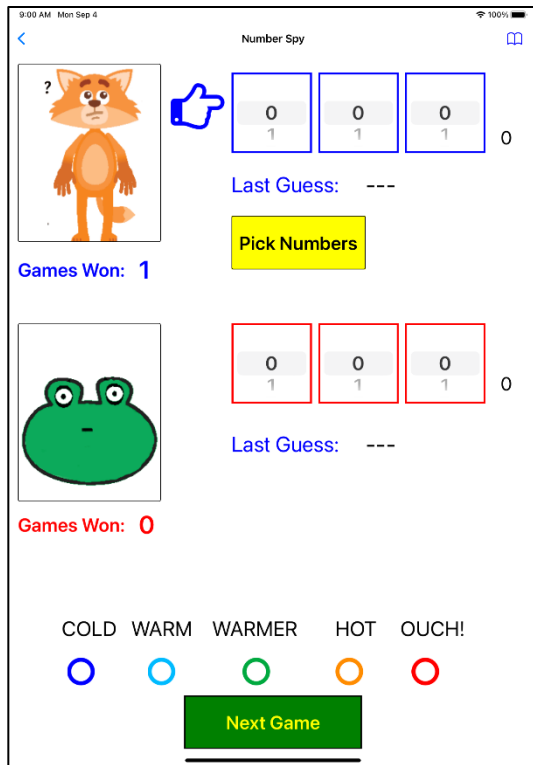


Step 8. YOU DID IT!! Your guess of 940 was the mystery number.

Notice that your opponent was never offered another guess (still shows 942) since your correct answer ended the game

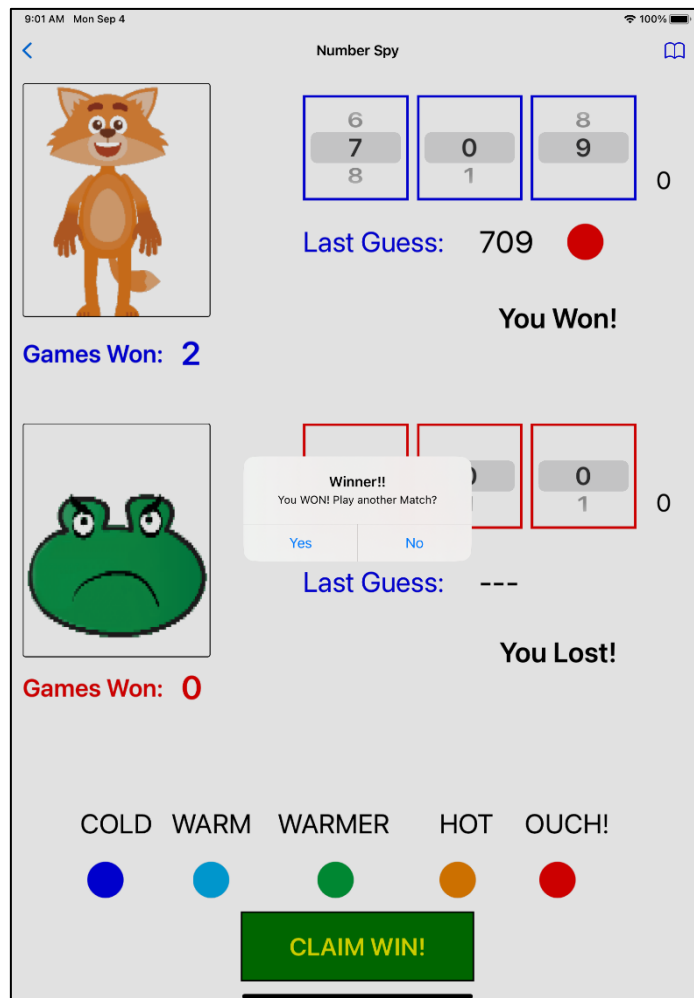
The Games Won indicator was updated.

Press the Claim Win box.



With the previous game complete, the program initializes to start the next game.

Let's assume that you declared the number of games needed to win a match as two. After winning two games, the Match Complete notification is displayed, inviting you to play another match or quit.

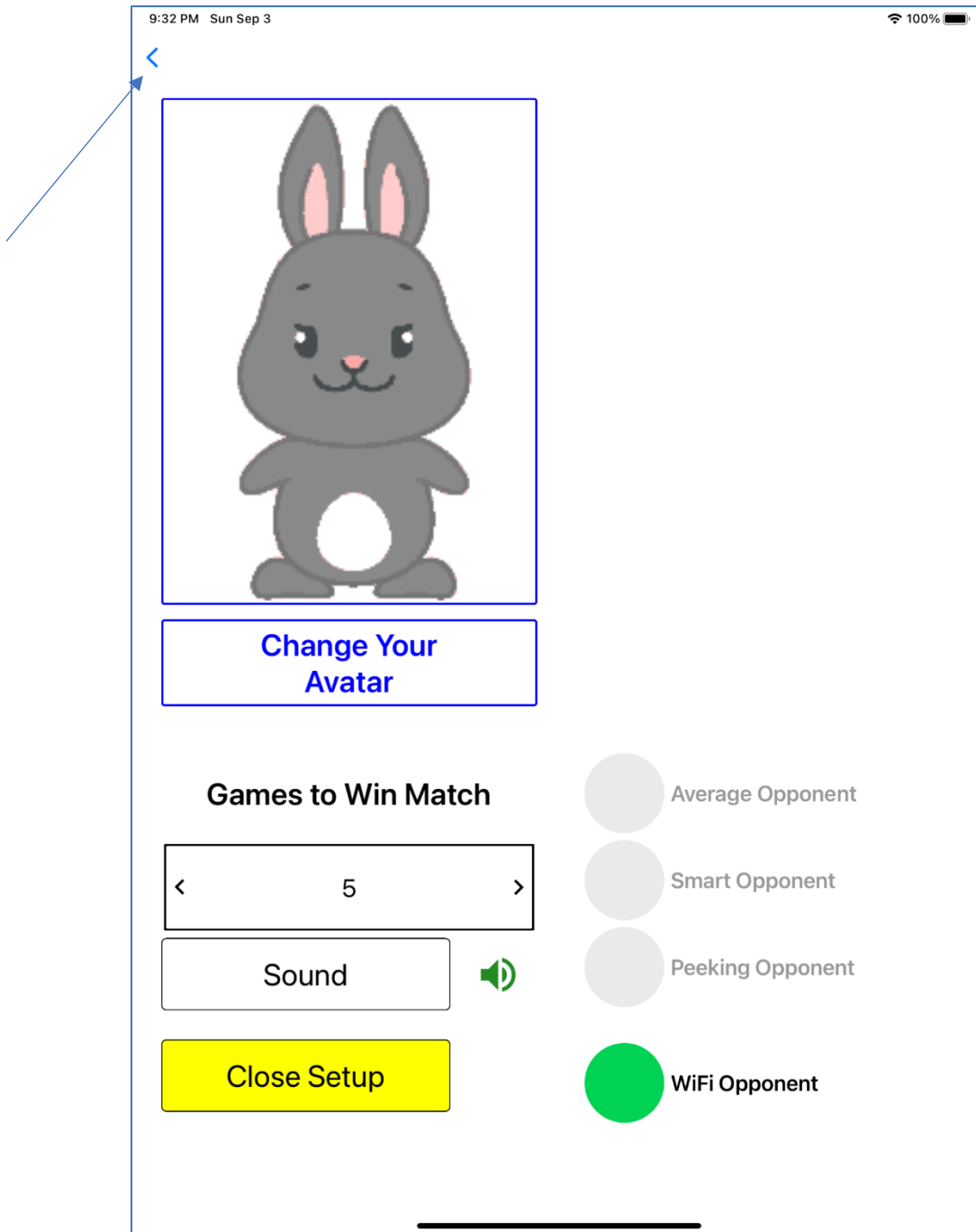


Now let's discuss how to play interactively with a WiFi connected opponent.

This time, select "WiFi Opponent" from the opening screen:



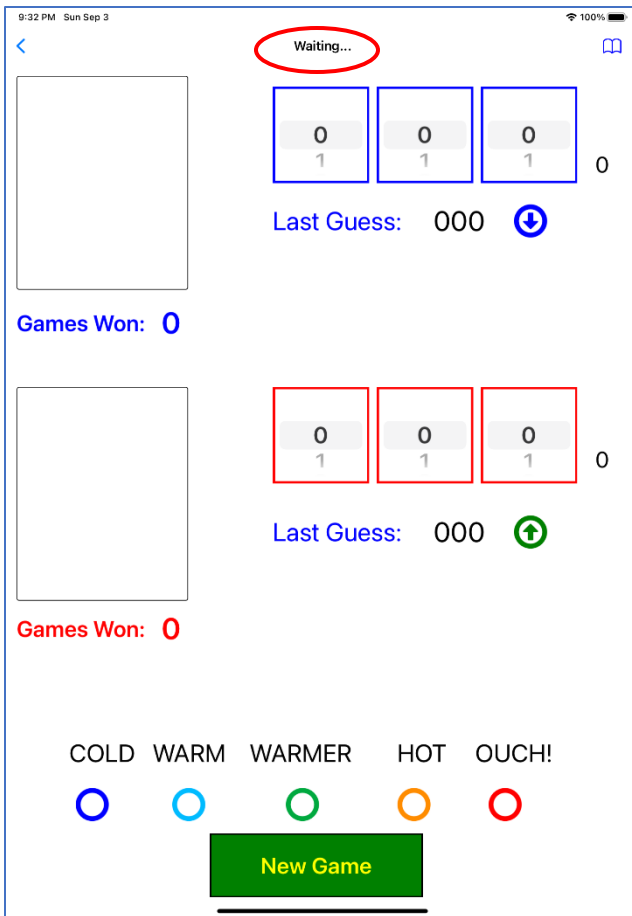
The program immediately sends you to the WiFi Setup page where you can verify YOUR avatar (or choose a new one), games in a match and sound option. Unlike the Solo Mode, there is only one avatar selection. The opponent will select an avatar on a similar Setup page.



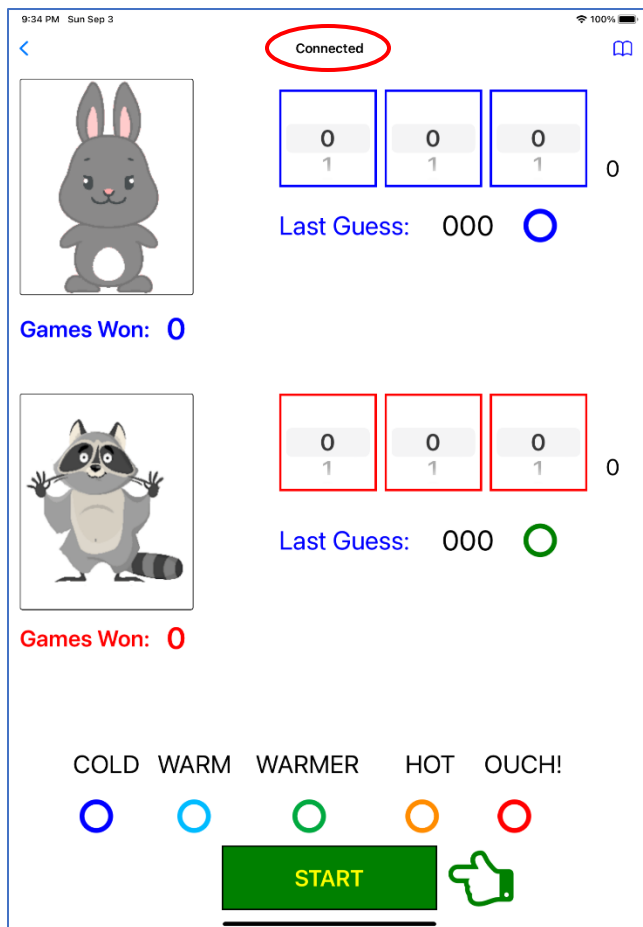
When satisfied with the setup, exit the page by tapping the left carat symbol ("<") in the upper left of the screen.

This returns you to the Opening Page again. Tap the screen to open the Main Playfield.



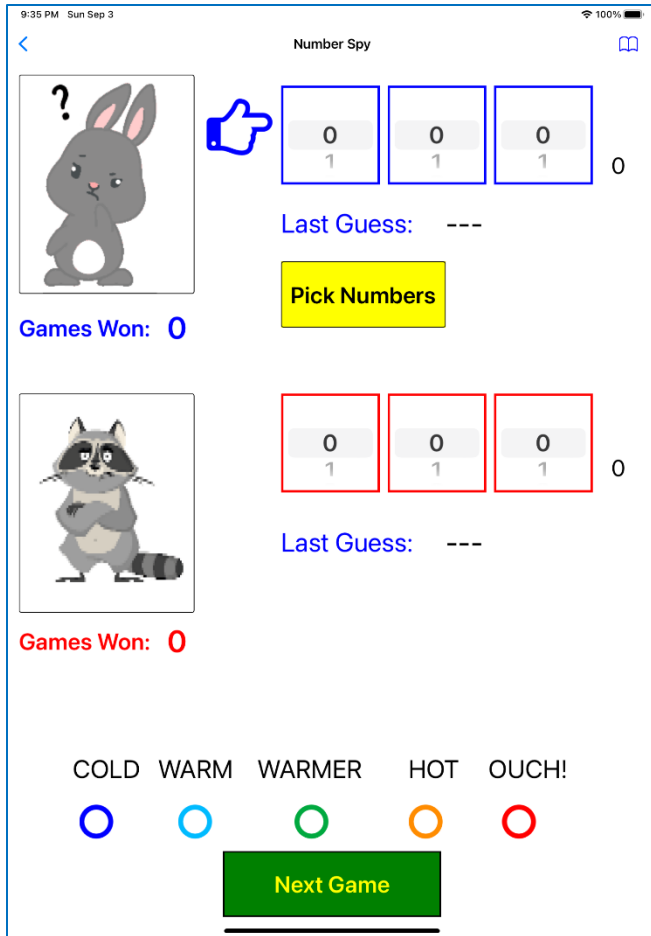


If your opponent hasn't completed his/her setup, the page will indicate **"Waiting..."** at the top. The avatars will automatically sync when both players have finished setting up their games.



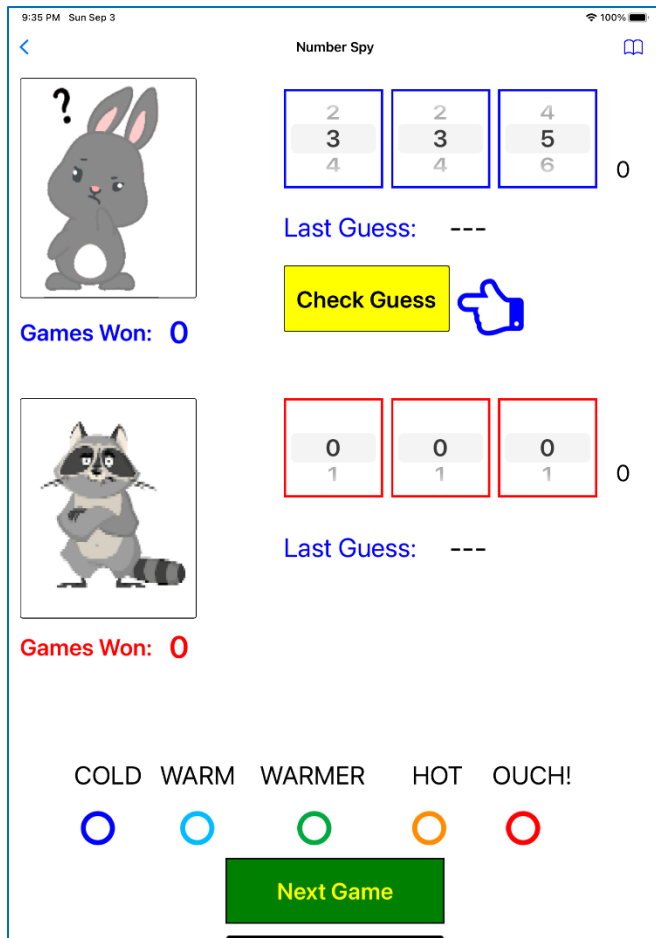
When your opponent finishes setup, the indicator changes to **"Connected"** and both selected avatars are shown.

To start the game, either player can press their green "Start" button. It becomes that player's turn to go first. Play alternates between players after that.

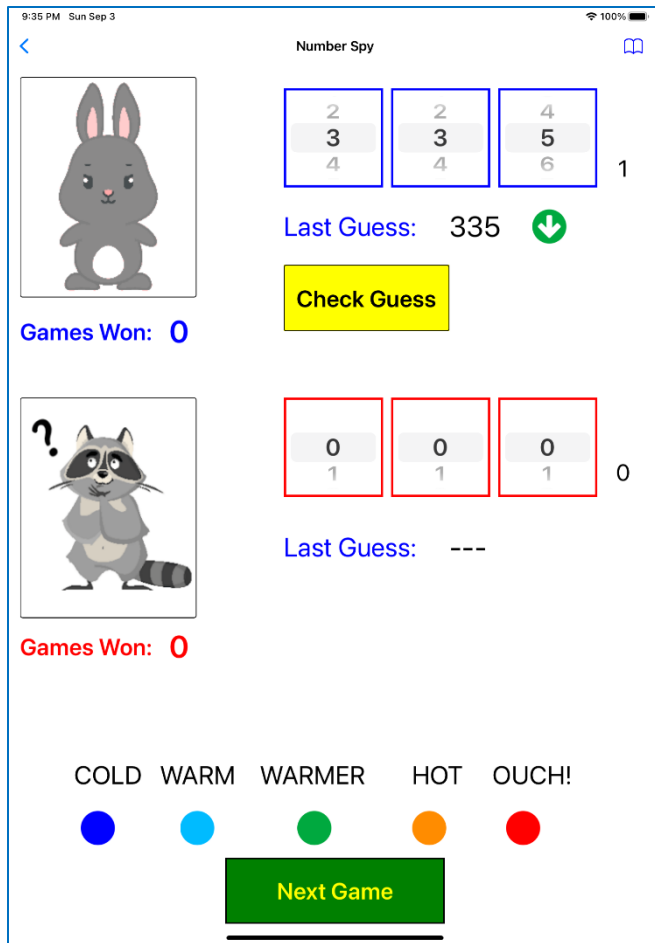


As was the case with the Solo Mode, Helping Hands direct the player to the proper sequence of play.

After "Start", the Helping Hand indicates that a guess should be entered.



In this example, 335 was entered as your first guess. The Helping Hand then directs you to press the "Check Guess" button. This will cause the program to check and see if there was a Mystery Number match. If not, the program automatically cues the opponent's device, providing it with your last guess.



Now it is your opponent's turn. It's avatar is thinking about its next guess

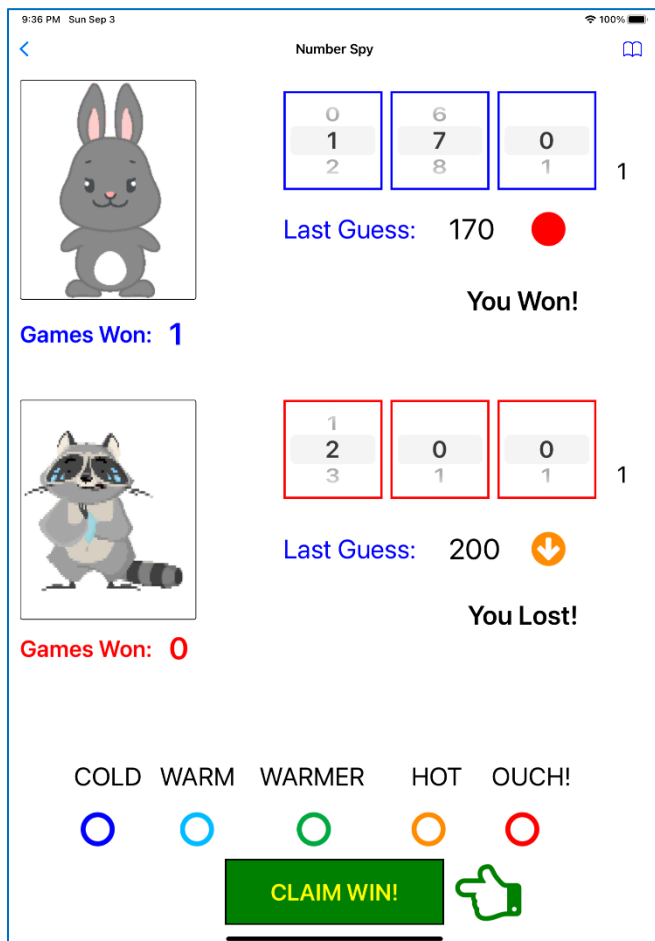


You opponent chose 200. It is transferred to your playfield and you are cued for your next guess.

The game proceeds back and forth until there is a winner.



For the sake of brevity, we skip to the screen where you enter 170, which is the Mystery Number.



The bunny avatar is happy for the win. The raccoon is not. Your opponent's device displays a mirror image.

Now CLAIM your WIN. This updates the games counters in both devices. When one device accumulates a sufficient number of games, the match is over.

It should be noted that both devices can set the Games for Match value independently. This is a convenient way to give some advantage to a less experienced (younger) player and still make it interesting.

CHEAT MODE.

Sometimes a teacher, parent or older sibling might need to know the Mystery Number ahead of time in order to help direct a child.

If the Cold (BLUE) indicator light on the game board is pressed and held for more than two seconds, the winning number will be momentarily revealed.



Product Name: Number Spy

Copyright: 2023

Company: TurboSoftSolutions.Com

Programmer: Neil Rohan

