MARBLESOFT

Safe at Last!

Switch-Activated Strategy Game

User's Guide

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Contents

System Requirements 5

Installation. 5
- Macintosh 5
- Windows 5

Running the Program 5
- Macintosh 5
- Windows 5

Menus 6
- File Menu 6
- Options Menu 6
- Help Menu 6

Playing the Game 7
- Marking Hazards 11
- Levels of Difficulty 11

Input Options 12
- Direct Selection 12
- Scanning. 13

Preferences 16

Strategy 18

Tutorial Games 21

Tech Support 25

System Requirements

Safe at Last! for Macintosh requires MacOS 10.3.9 or later. Safe at Last! for Windows requires Windows XP or later.

A color monitor of 1024 x 768 pixels or larger is required.

Installation

Macintosh

To install Safe at Last! on a Macintosh, insert the CD in the drive. Double-click the installer icon to begin the process. The installer places Safe at Last! and the Safe at Last! User's guide inside the Marblesoft folder in your Applications folder. It will create a Marblesoft folder if none exists, and it will create an alias on your desktop. You can drag the alias to your Dock if you prefer.

Windows

To install Safe at Last! on Windows, insert the CD in the drive. The installer should start automatically. If you have turned off the auto-start feature, double-click the SETUP.EXE icon to begin the process. The installer places Safe at Last! and the Safe at Last! User's guide inside the Marblesoft folder in your Program Files folder. It will create a Marblesoft folder if none exists, and it will add Safe at Last! and the User's Guide to your Start menu.

Running the Program

Macintosh

To launch Safe at Last!, double-click the icon on your desktop, or click the icon in your Dock. If you have deleted these aliases, or if you're launching the program from a different user account, open your Applications folder, then the Marblesoft folder, then the Safe at Last! folder. Double click the Safe at Last! icon to start the program.

Windows

To launch Safe at Last!, select it from the Marblesoft folder in the Start menu. If you have deleted this shortcut, open your Program Files folder, then the Marblesoft folder, then the Safe at Last! folder. Double click the Safe at Last! icon to start the program.

Menus

The program's menu bar can be hidden or shown at any time. Press the "ESC" key to hide or show the menu bar. All the program settings and features can be controlled from the menu bar. You can also use keyboard shortcuts to access most menu items, even when the menu bar is hidden.

File Menu

Use the File Menu to play a new game or to change levels prior to any points being scored.

Options Menu

Use the Options menu to change the player name, or to change the input/scanning settings.

Help Menu

Use the Help menu for general instructions on the game or on the input method being used.

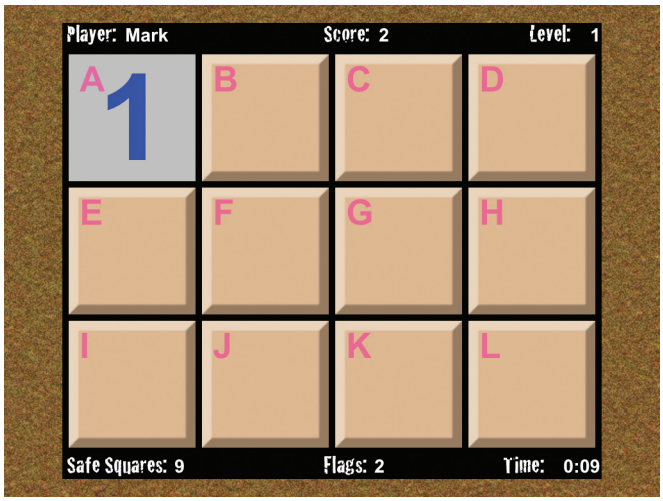
Playing the Game

Safe at Last! is a strategy game specially designed for students with special needs. It is intended for older children and adults.

The object of the game is to successfully reveal all the safe squares in a grid that also contains some hazards to be avoided. The player uses deductive reasoning to determine the safe squares. The player proceeds through the grid, revealing one square at a time until the entire grid is cleared. If a hazard is revealed, the game is over.

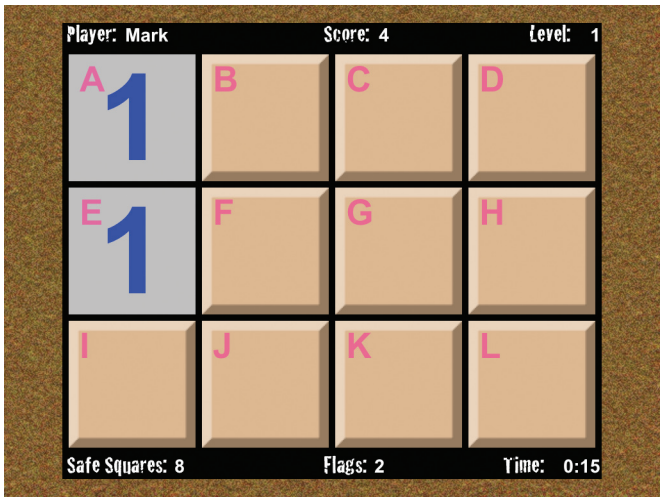
Once a square has been revealed, if it does not contain a hazard, it will be replaced by a number. That number is the number of adjacent squares, up, down, across or diagonally, that contain a hazard. (A blank square indicates that no adjacent squares contain a hazard.)

Consider the following example: (To follow this example on screen, select "Tutorial Game" from the File menu.)

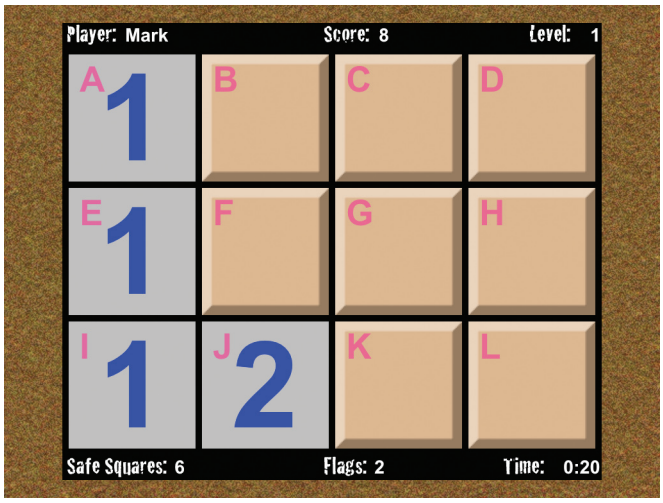


The player has clicked in square A, revealing the number 1, which means that one and only one of the adjacent squares, B, E or F, contains a hazard. We have nothing definitive, yet, so we still need to guess. Let's guess that square E is safe, and click there.

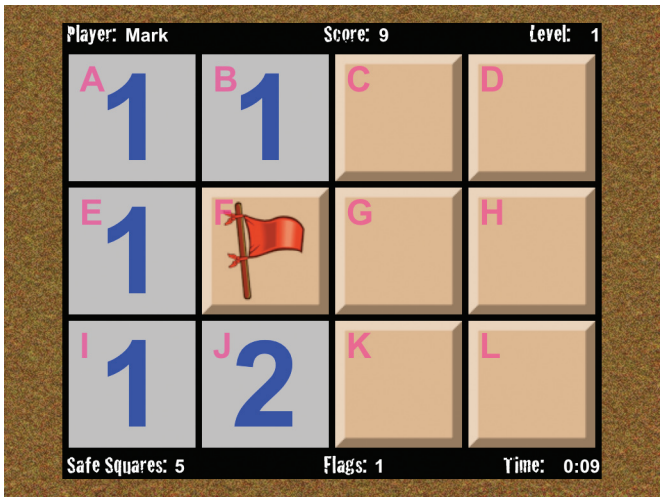
Note: It is a good idea to start the game by revealing one or more of the four corners. The corners are the best squares to try first because you can more often reveal solvable squares. In the above example, it would be mathematically best to try one of the other three corners. However, for the purposes of this tutorial, we are going to try square E.



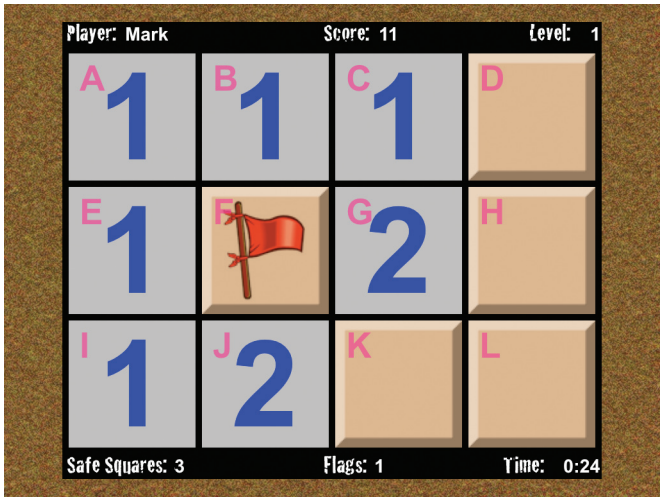
The next screen shows squares A and E revealed, each containing a 1. Now we have enough information to logically make the next move. From the 1 in square A, we know that either B or F contains a hazard. Since either B or F contains a hazard, and they both touch E, we know that the one hazard to satisfy the 1 in square E must be in either B or F. That means that I and J must both be safe. Need proof? If I or J contains a hazard, E says there cannot be one in B or F, making it impossible for A to touch one hazard. So now we need to reveal the safe squares I and J.



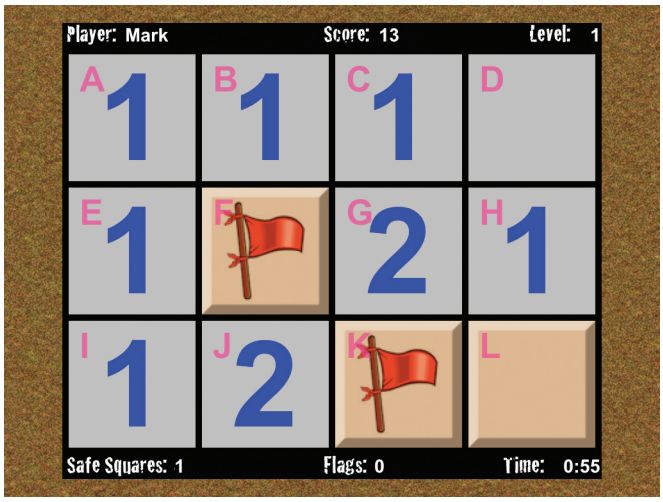
After clearing I and J, we see the next screen. We can now identify the first hazard. Square I needs one adjacent hazard, and there is only one unrevealed square adjacent, F, so the hazard must be there. Since a hazard in F also satisfies A and E, we know that B is safe. The proof? If B contains a hazard, A and E say that F must be safe, and that would be impossible because of the hazard needed by I.



Before clearing B, we'll put a flag in square F to remind us that it has a hazard. We'll discuss how to do that later. The above example shows the screen after we put a flag in F and clear B. Now we're getting somewhere. B is satisfied by the one hazard in F, so C and G are clear. Lets reveal them next.



We can learn a lot from this screen. First, continuing the logic we've been using, we can see that F satisfies the 1 for square C, making D and H safe. But we can also see that the 2 hazards that are needed by J can only be in F and K. Lets mark K with another flag, while clearing D and H.

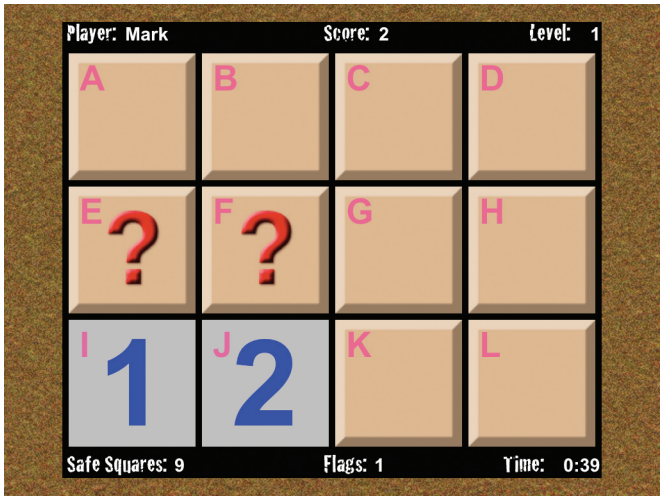


That leaves only one square to solve. We can see that G is satisfied by F and K, so L must be clear. You can also see that K satisfies H, again showing that L is safe. Finally, you can see by the "Safe Squares" count that there is still one remaining safe square.

By the way, did you notice the blank square in D? That means there are 0 surrounding hazards, as you can clearly see. More about that later. For now, lets clear L and win the game.

Marking Hazards

If you know a square contains a hazard, you can mark it with a flag, as we did in squares F and K in the previous example. If you're unsure, you can mark a square with a question mark.

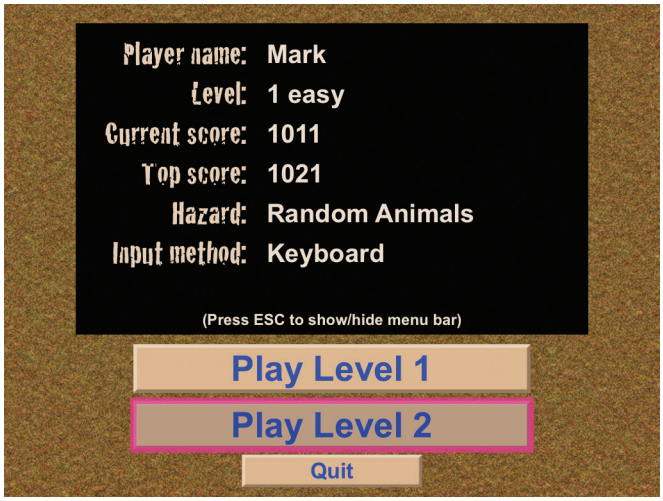


In the above example, we know that either E or F must contain a hazard to satisfy I. We can mark these squares with a question mark to show that one of them has a hazard, but we don't know which. We'll show you how to mark squares a little bit later.

It is easier to deduce the contents of a square when the surrounding hazards are marked. However, you do not need to mark hazards to solve the game. In fact, the fewer hazards you mark, the more points you will score.

Levels of Difficulty

After each game, a screen like this one will appear.

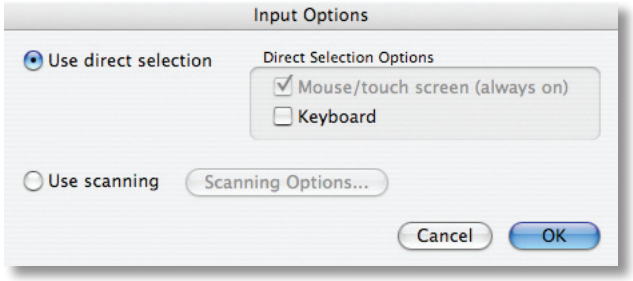


If the previous game was won, there will be an option to play a harder level. If the previous game was lost, there will be an option to play an easier level.

Input Options

Safe at Last! provides several ways that a player can input their choices. The simplest and fastest are direct selection with a mouse, touch screen or keyboard. For players who cannot use the mouse or keyboard, scanning allows the user to input using one, two or three switches.

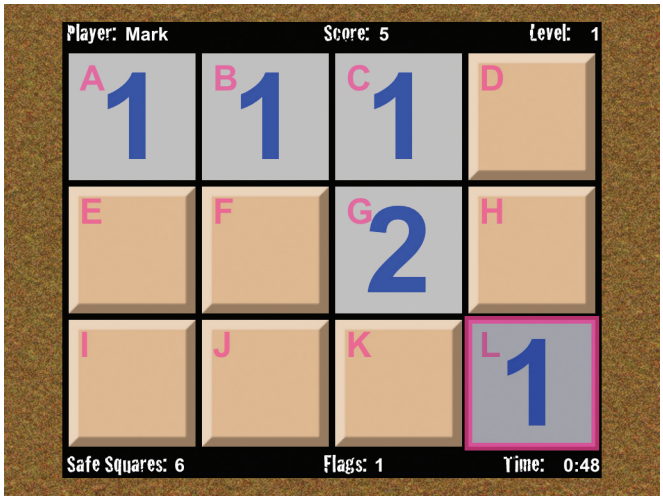
To change the input options, choose Input Options from the Options menu, or type (**Mac**: ⌘I or **Win**: Ctrl+I). A dialog something like this one will appear:



Direct Selection

Direct selection allows the user to directly clear or mark a square with a mouse, keyboard or other pointing device. Direct selection with a mouse, touchscreen or similar device is the fastest for those players who can use it. Simply click on a square to clear it. To mark or unmark a square with a flag or question mark, hold down the CTRL key while you click.

Another direct selection option is to use the keyboard. When keyboard selection is on, a rectangle marks the current square. Use the arrow keys to move the rectangle up, down, right or left. When the rectangle is on the square you want, press RETURN or ENTER to select it, or press the TAB key or space bar to mark or unmark the square.



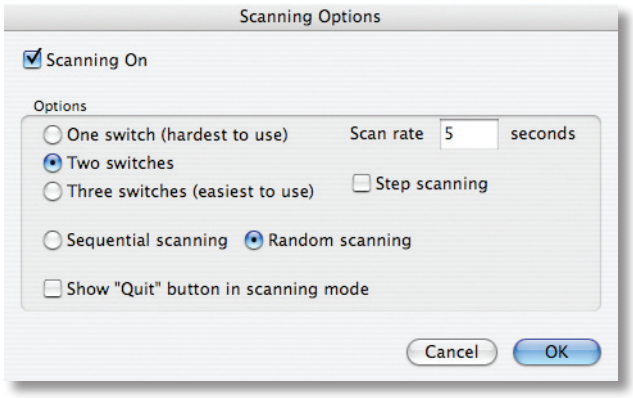
In the above example, the player has just cleared square L by pressing RETURN. The up arrow will now move the cursor up to square H, and the left arrow will move it left to square K.

When keyboard selection is on, you can still use the mouse for direct selection.

Scanning

In scanning mode, the computer will scan all possible plays for the player. The player can move to a different square by pressing a switch. When the player has selected a target square, the computer will display several different icons in that square. When the player hits the switch while the green arrows are displayed, the program will scan to the next square. When "OK" is selected, the program will reveal the square. When a flag or question mark is selected, the computer will mark the square with the selected icon.

To change the scanning options, choose Scanning Options from the Options menu, or type (**Mac**: ⌘Y or **Win**: Ctrl+Y). A dialog something like this one will appear:



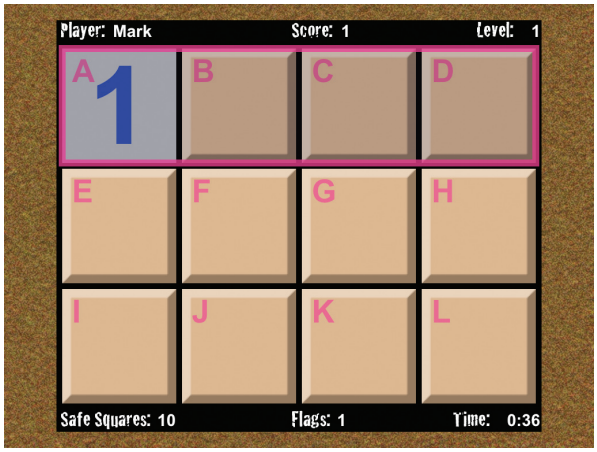
Select the number of switches, type of scanning, and the scan rate (for timed scanning). The player can use one, two or three switches to control the program.

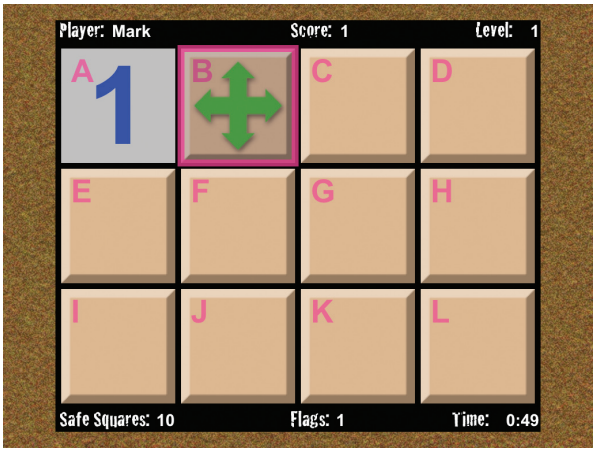
There are two basic methods of scanning in Safe at Last! - Timed Scanning and Step Scanning, and two types of scanning with each method - Sequential Scanning and Random Scanning. With timed scanning, the computer scans the available choices at the scan rate you have chosen. With step scanning, the student uses two or more switches to scan the choices and make a selection.

The "Draw 'Quit' button" option causes a Quit button to be drawn on the pre-game screen, allowing switch users to quit the program.

Sequential Scanning

In Sequential Scanning, the computer will scan each row of squares. When the player selects a row, the computer will start scanning each square within the row. The player then selects the square they want to play.

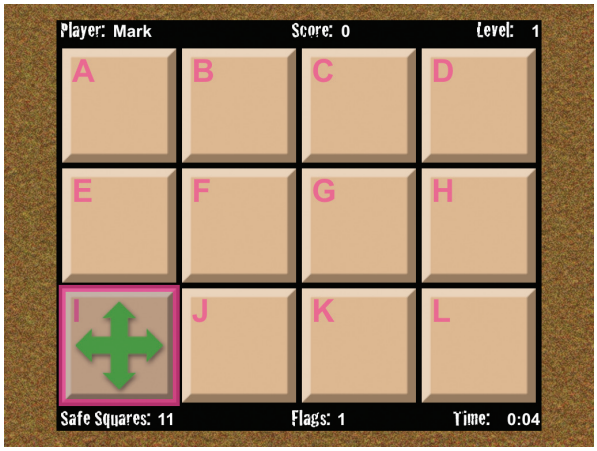


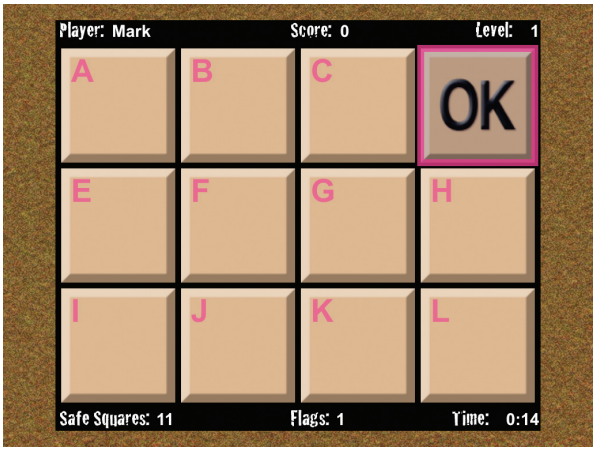


The example on the left shows sequential scanning a row. The right side shows sequential scanning after the row has been selected. The green arrows indicate that a selection will move the cursor. In this case, hitting the selection switch would cause the cursor to move to square C.

Random Scanning

In Random Scanning, the computer will randomly scan to all playable squares. However, the program will favor the squares most likely to be played.





The example on the left shows random scanning on square I. When the green arrows are displayed, hitting the switch causes the cursor to move to another random square. The right side shows another square after scanning to square D. Hitting the switch while the “OK” icon is displayed will cause the square to be revealed.

One Switch Scanning

When using a single switch for timed scanning, the computer will scan at the rate specified in the Scanning Options dialog. The student uses the switch to select the desired icon.

Configure your switch interface to send a mouse click, space bar, RETURN character, number "1" or letter "Y" when the switch is pressed. The same keys on the keyboard can also be used as "switches".

Two Switch Scanning

When using two switch timed scanning, the program operates like single switch scanning, but the player can also use the second switch to scan. When the Step Scanning option is turned on, the student must use the second switch to scan (the scan rate does not apply).

Configure your switch interface to send a mouse click, RETURN character, number "1" or letter "Y" when switch #1 is pressed. Configure your switch interface to send a right-click, space bar, TAB character, number "2" or letter "N" when switch #2 is pressed. The same keys on the keyboard can also be used as "switches".

Three Switch Scanning

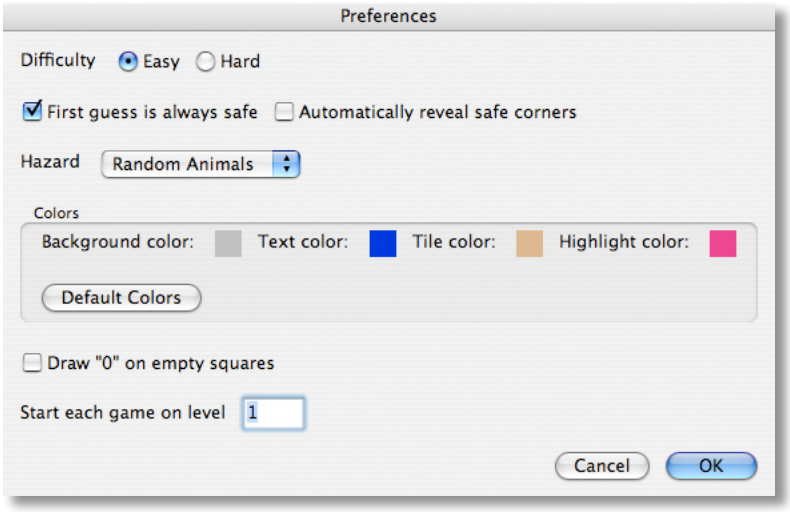
With three switch scanning, the student uses an optional third switch to change the flashing icon. Switch #2 moves the cursor to the next square, and switch #1 selects the target square. With timed scanning, the computer will auto-scan at the specified scan rate, acting exactly like the third switch. Three-switch scanning is actually the easiest and most effective way for a two-switch user to play the game - two switches plus timed auto scanning in effect gives the player three switches.

When the Step Scanning option is turned on, the student must use the third switch to scan (the scan rate does not apply).

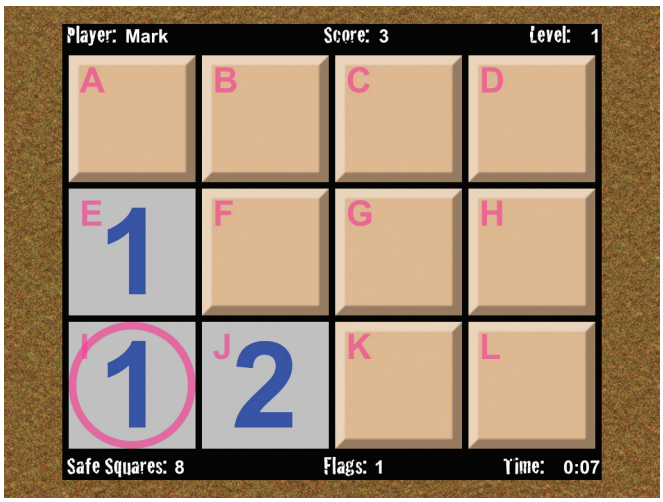
Configure your switch interface to send a mouse click, RETURN character, number "1" or letter "Y" when switch #1 is pressed. Configure the interface to send a TAB character or number "2" when switch #2 is pressed. Configure the switch interface to send a right-click, space bar, number "3" or letter "N" when switch #3 is pressed.

Preferences

To change general game preferences, choose “Preferences” from the Safe at Last! menu on a Macintosh, or from the Edit menu on Windows, or type (**Mac**: ⌘, or **Win**: Ctrl+,). A dialog like this one will appear:



Difficulty - Easy or Hard. In easy mode, fewer hazards are placed on each level. Also, a number is circled if it matches the number of unrevealed squares around it. For example, on the following screen the circle in square I indicates that its one hazard can be identified (in square F).



First guess is always safe - Check this box to make the player’s first guess a safe square every time. When the check box is off, the player’s first guess could reveal a hazard, and the game would be over.

Automatically reveal safe corners - Check this box to make the computer automatically start each game by playing some safe corners. This speeds up the play considerably, especially for switch users.

Hazard - You can choose the hazard you wish to avoid, from a list of animals or other dangers. You can also choose “Random Animals” to change the hazard to a different animal on every game.

Colors - You can specify any color for the background, text, tile and highlight colors to make the game easier for students with vision difficulties.

Draw 0 on empty squares - This check box causes a 0 to be drawn on squares that have no surrounding hazards.

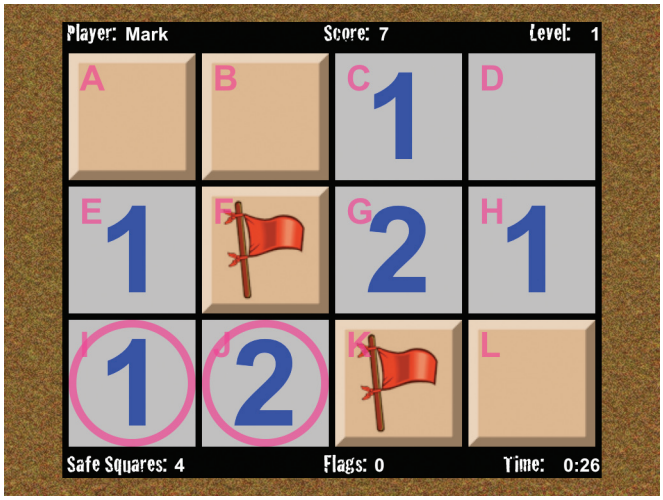
Start each game on level - Set this number to the level on which to begin each game. Use this option for players who are bored with the lower levels.

Strategy

There are lots of strategies you can employ to solve Safe at Last! Here are some of the simpler ones.

Easy Mode

In easy mode, place a flag in every square adjacent to a circled number. In the following example, the circles in squares I and J indicate that we should place flags in F and K.



Corners

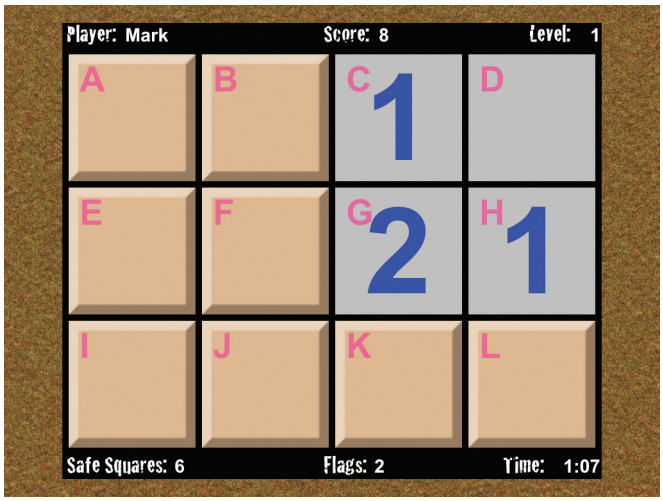
Many players like to start the game by revealing the corners. Many times it's easy to figure out squares in a corner, because there are fewer possibilities to consider.

Adjacent Squares

It's always easier to solve adjacent squares than scattered squares. If you are at a point where you have to guess, guess a square that touches another already revealed square.

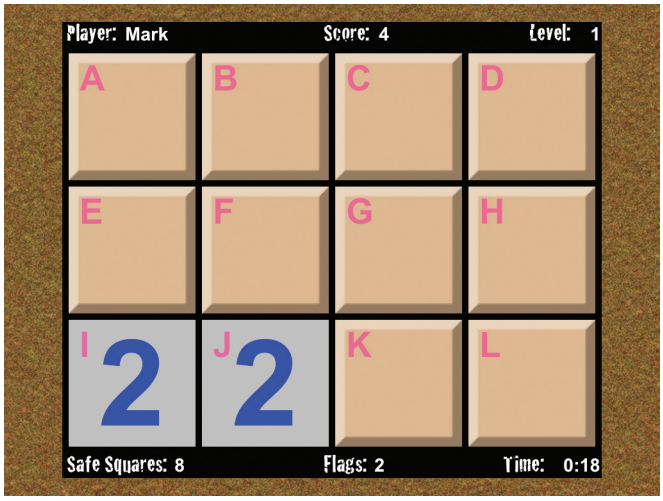
1s

Squares containing the number 1 are usually the easiest to solve. Look for 1s in a corner, like square I above. Also, look for 1s next to other numbers. In the example below, we can see that C requires either B or F to contain a hazard, and that H requires either K or L to contain a hazard. Since that would give G its 2 hazards, we know that J is safe.



Edges

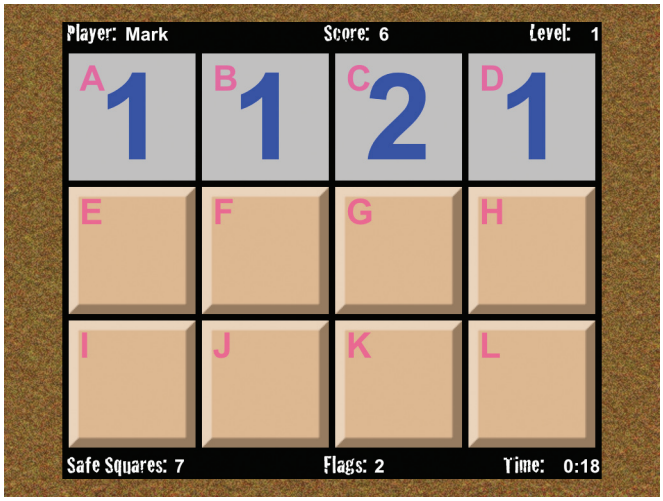
Look for multiple squares that border the edge of the puzzle, or that make a perpendicular line to another revealed square. Again, in the previous example, we can see that C requires either B or F to contain a hazard, and that H requires either K or L to contain a hazard, making J safe.



In the above example, the 2 hazards needed by I have to be in E and F, thus satisfying the 2 squares for J. That makes G and H safe.

Long Runs

Look for long runs of squares in a single column or row. If you can solve one end of the run, you can often keep going for a long way.



In the above example, working from left to right, we can see that A requires a hazard in either E or F, satisfying B and making G safe. If G is safe, C requires F and H to be hazards, and E is safe. Working from right to left, D requires a hazard in G or H, meaning that F must be the second hazard for C. F satisfies B, so E and G are safe. Both C and D require a hazard in H, completing the row.

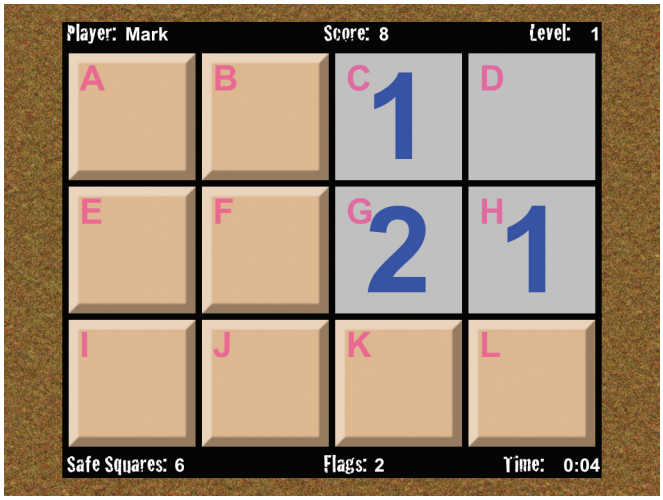
Tutorial Games

Safe at Last! includes a tutorial game that you can play for practice. This game was solved earlier in the "Playing the Game" section. We'll play the same game and solve it a couple different ways in this section.

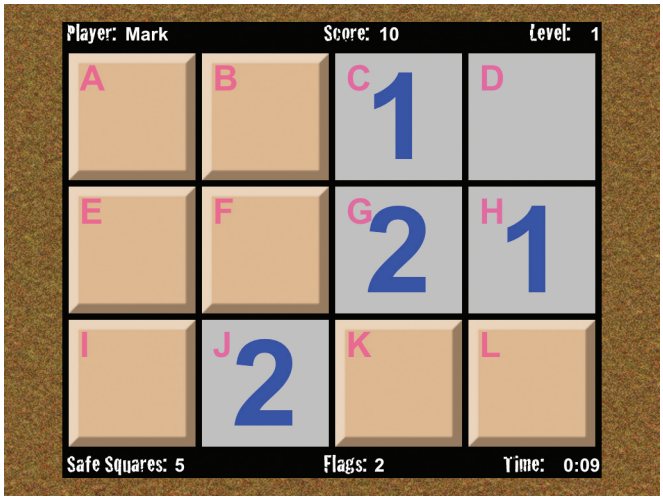
To play the tutorial game, select "Tutorial Game" from the File menu, or type (**Mac**: ⌘T or **Win**: Ctrl+T).

Tutorial 2

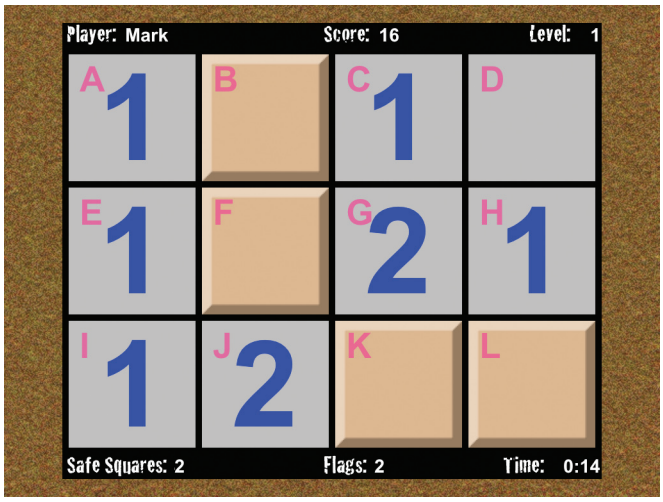
In "Playing the Game", we started in the upper left. This time, lets start in the upper right.



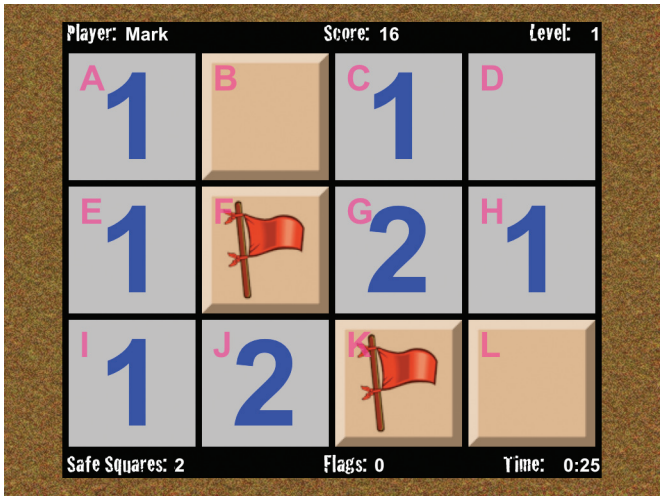
Whoa! Because D is a "0" square (blank), clicking in D also reveals the 3 surrounding squares, as you can see above. As we learned earlier, B and F must contain a hazard to satisfy C, and K and L must contain one for H. That satisfies G and makes J safe. Lets mark it.



Now look at the Safe Squares count in the above example. Since we need 5 safe squares, and we know that two of them are in B, F, K, and L, we know that A, E and I are safe. Lets clear those.



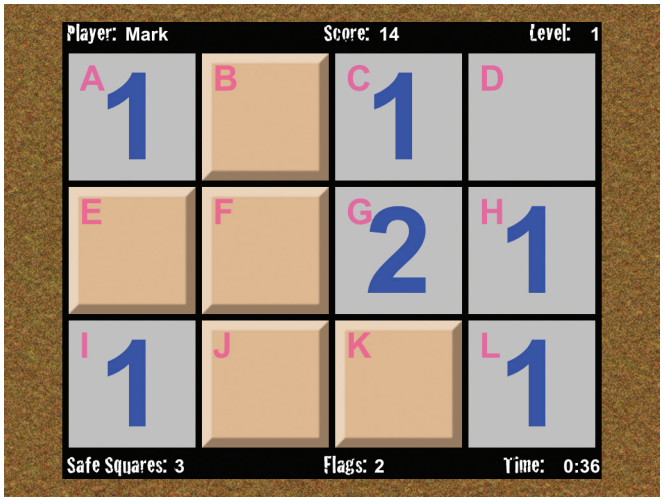
In this example, we can see that J requires F and K to contain hazards. Mark them.



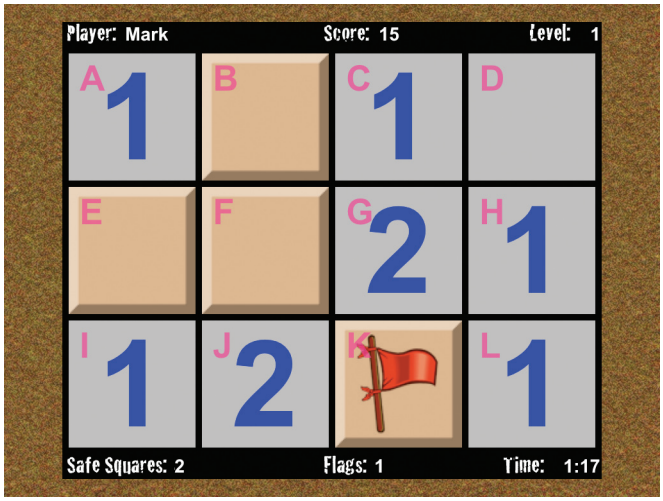
Finally, we see that B and C are safe!

Tutorial 3

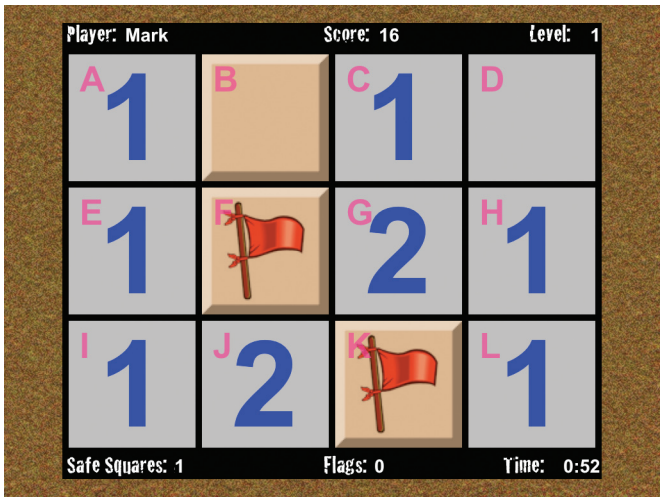
Many players like to start by playing all four corners. Of course, it won't always work, because there may be a hazard in one of the four corners. But lets try it with the tutorial game and see what happens.



Not a bad start. We immediately see that we have a hazard in K, and one in either B or F. That means that J is safe. Lets mark K and clear J.



Since we know that B or F contain a hazard, we know that A is satisfied, so we can mark E as safe. That makes F the hazard to satisfy I and J. Lets mark those two squares.



Finally, we can see that B is safe.

For the remaining tutorial games, we'll give you the order of squares to clear. It's up to you to determine how you can determine the specified moves in the specified order. Feel free to flag the known hazards as you go.

Tutorial 4

D-B-A-E-I-J-L

Tutorial 5

I-E-A-B-C-G-D-J-L

Tech Support

Contact Marblesoft Technical Support if you have problems installing or running Safe at Last!

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Suite 205
Blaine, MN 55434

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763-502-0440

e-mail

support@marblesoft.com.


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