

How to Use the Ghost Application on your Phone

About Ghost

Ghost allows the user to practice reading and writing Braille letters using V-Braille. It is an application suitable for blind, low-vision and sighted users who wish to practice writing Braille letters. In ghost, players take turns adding letters onto a word fragment. If a player adds the last word onto the word fragment or adds a letter that results in a fragment that is not the beginning of a valid word, she loses.

Running the Program

- 1) Start the application by selecting the Ghost application from your phone's application menu.
- 2) Hold the phone vertically (in Portrait orientation) with the buttons at the bottom.
- 3) The first time you play, you will be presented with a screen with the ghost icon as the dictionary (containing the words that the phone will select from while playing ghost) is downloading. The phone will tell you when the dictionary has downloaded, and you will automatically move to the main menu screen
- 4) On the main menu, some brief instructions for how to use the menu are spoken, and you can choose what version of the game that you would like to play. In order to make the selection, touch and drag your finger down the screen to hear the options and then double tap anywhere on the screen to select the last heard option.
- 5) If you select the single-player version of the game, you will be taken to the **Enter Letter** screen so you can enter the first letter of the word.
- 6) On the **Enter Letter** screen:
 - a. You can swipe down with two fingers for instructions at any time.
 - b. You will be presented with a screen that represents a blank Braille cell.
 - c. Pressing the back or menu buttons will take you back to the main menu.
 - d. If you swipe with two fingers to the right, the phone will spell out the existing word fragment.
 - e. Use your finger to navigate to the dots that should be raised -- dot numbers are spoken when touched to help you navigate to the desired dot. After you hear the number you want, double tap in that same location.
 - f. The application will respond verbally that the dot has been added and the dot will begin vibrating when touched. (Note: the dot will be added in the location where the double tap occurs. The regions are fairly large so unless your finger is right on the border area between regions, you should be able to add dots accurately to the dot number last spoken.)
 - g. If you need to remove a dot, navigate to it and double tap. Again the application will respond that the dot has been removed and the dot will no longer vibrate when touched.
 - h. Alternatively, you can raise or lower dots using the numbers 1 - 6 on the phone's keypad.

- i. When you are finished entering the dots in the current letter, swipe with two fingers to the left or press the left button on the keypad.
 - i. If you did not correctly enter a Braille symbol, the phone will tell you and you will once again be given a blank Braille cell.
 - ii. If the letter is not part of a valid word fragment or the letter is the last letter in a word, the phone will inform you that you lost and will return to the **Main Menu** screen.
 - iii. If it is part of a valid word fragment, the phone will enter a new letter and take you to the **Read Letter** screen (or the **Main Menu** screen, if the phone loses the game by entering a letter that completes a word).
- 7) On the **Read Letter** screen:
 - a. The phone will display a letter in V-Braille on the screen by displaying the six dots of the standard Braille cell.
 - b. Use your finger to navigate to each of the six dots, noting by the presence (or absence) of vibration whether or not a dot is raised. Dot numbers are spoken when touched to help you navigate to each dot. Try to identify which Braille letter is being displayed based on where the vibrating dots are located within the Braille cell.
 - c. If you swipe left with two fingers, the phone will read the existing word fragment (including the new letter).
 - d. If you swipe right with two fingers, you will be returned to the enter letter screen, where you can enter your next letter.
- 8) To exit the application, press the **Back** button repeatedly (through the current game screen, main menu screen and loading dictionary screen), or press the **Home** button (If you exit using the **Home** button, you will be taken back to the current game when you restart the application).