

# Express<sup>2</sup>

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Project Express<sup>2</sup> User Manual

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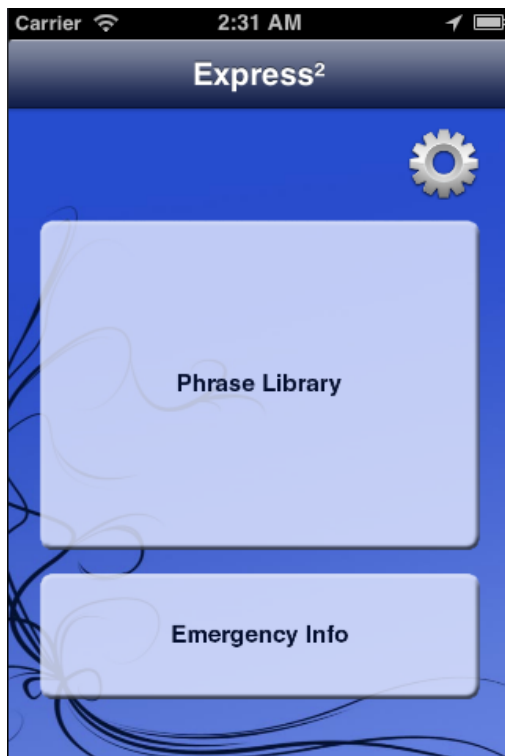
# 1. Introduction

This application is intended to be an aid for children to young adults with Down Syndrome who have trouble articulating their thoughts to strangers in emergency situations. Express<sup>2</sup> hopes to give users a sense of independence when they need it most. Users will be able to navigate through a phrase library to their desired sentence in an efficient and visually stimulating manner. While the application will be primarily composed of a phrase library, it will also include integrated maps, settings, introductory tutorials and error reports. It is important to note that this application is not a replacement for speech or speech practice; it is merely an aid to these individuals, during times of distress, to ensure that they convey their thoughts to a stranger effectively and efficiently.

## 2. Getting Started

How to make the most out of Express<sup>2</sup>.

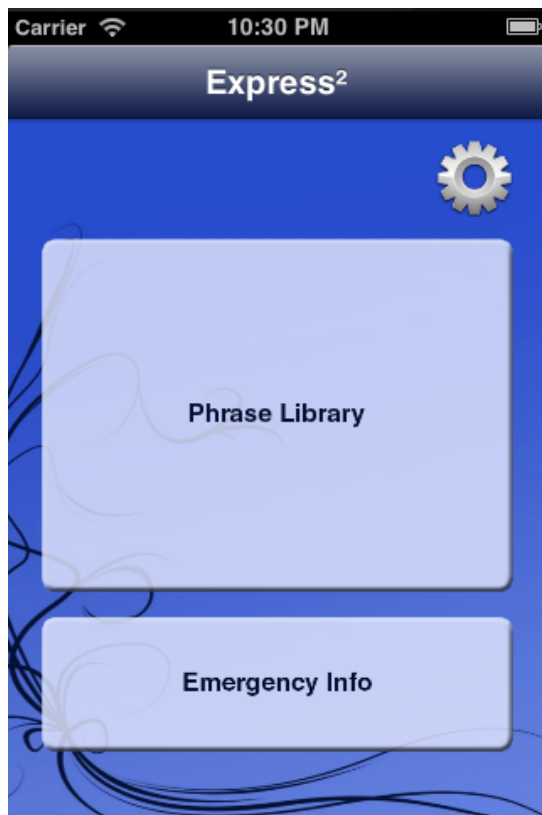
Upon downloading the app, you will be prompted to create a 4-character password to be able to adjust the settings to the user's preference. Please note that only you, the Guardian, is expected to have secure access to the settings thus allowing the user to focus on the applications primary purpose, to serve as an aid in an emergency.



### Main Menu

The Main Menu comprises of three buttons: Phrase Library, Emergency Info and Options (represented by a gears symbol).

Note: The background color of the screen will be default to blue. You can edit this in the Settings Menu.



## Phrase Library

The Phrase Library button leads to another screen displaying 3 buttons for Food, Actions and Feelings, to get the user started with their sentence. To see the phrase library hierarchy, please refer to Table 3.3-A. The Phrase Library button will be the gateway to the rest of the Phrase Library. The Food button will lead to another subcategory with the Snack, Drink, Meal and Allergies buttons. The Actions button will lead to another subcategory with the Need Help, I'm Lost, Home, Bathroom and Next Bus buttons. The Feelings button will lead to another subcategory with the Sick, Hurt, Too Hot, Too Cold, Tired and Sleepy Buttons. Upon pressing any of these final buttons, the application will read out the sentence in the first-person.

Library Phrase	Pathway
I would like a snack, please.	Phrase Library > Food > Snack
I would like to have a drink, please.	Phrase Library > Food > Drink
I would like to have a meal, please.	Phrase Library > Food > Meal
I have the following allergies:	Phrase Library > Food > Allergies
I need help.	Phrase Library > Actions > Need Help
I am lost, can you help me?	Phrase Library > Actions > I'm Lost
I need to go home.	Phrase Library > Actions > Home
Where is the bathroom?	Phrase Library > Actions > Bathroom
When is the bus coming?	Phrase Library > Actions > Bus
I feel sick.	Phrase Library > Feelings > Sick
I am hurt.	Phrase Library > Feelings > Hurt

I am feeling too hot.	Phrase Library > Feelings > Too Hot
I am feeling too cold.	Phrase Library > Feelings > Too Cold
I am feeling tired.	Phrase Library > Feelings > Tired
I am feeling sleepy.	Phrase Library > Feelings > Sleepy

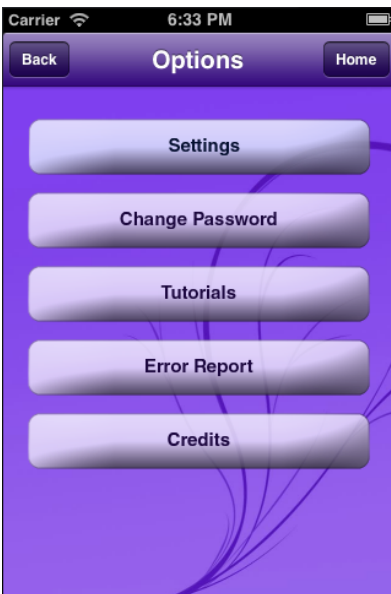
*Table 3.3-A:* A table also illustrates the path within the Phrase Library that the user has to go through in order to reach that phrase.

## Emergency Information

The Emergency button leads to another screen displaying the users name, their allergies, emergency contact information (name, number, relation), along with buttons for View Home Location and View School Location.

## Home Location and School Location buttons

Upon pressing either button, if the user's mobile device has a network connection through Data or Wi-Fi, the integrated maps feature will display directions from their current location to their preset location. If there is no network connection available, the application will display the preset address through text on a prompt-overlay.



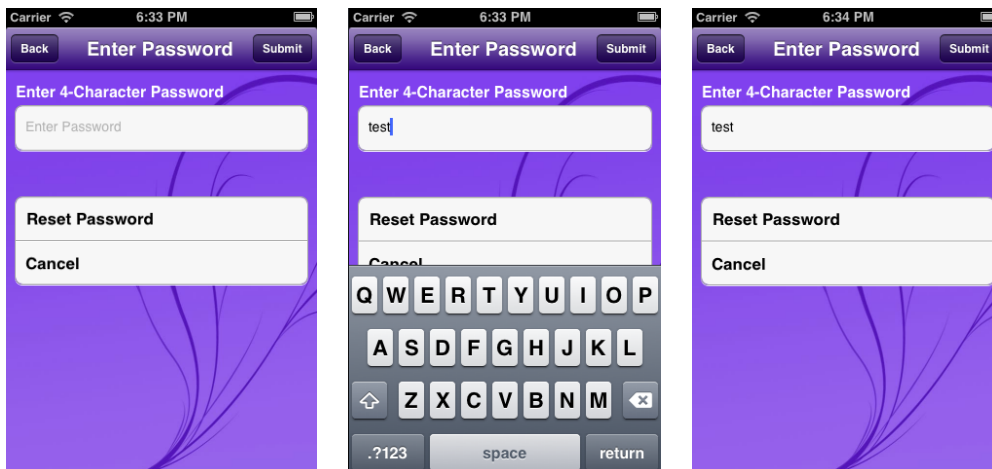
## Options Screen

This screen contains different option categories for the Guardian to access. This screen includes buttons for the following screens:

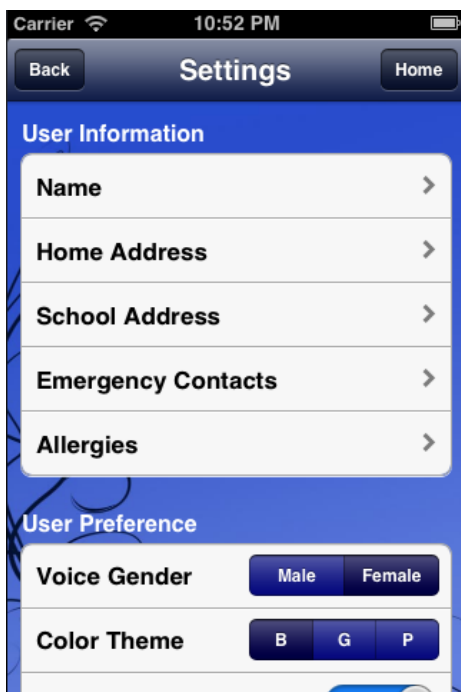
- Settings
- Change Password
- Tutorials
- Error Report
- Credits

## Password Protected Options

After pressing the Options button from the Main Menu, the application will advance into a screen requesting for the password that was previously set during the initial setup. This ensures that the user will not accidentally adjust the preferences. If the user accidentally accesses this screen, they can press either the Back or Cancel button to be brought back into the Main Menu. If you forget your password, you have the option to press the 'Reset Password' button that resets the password to: 'Exp2'.



## Settings



### i. User Information

All titles under 'User Information' will be represented by buttons which lead into a secondary screen with editable text fields. These secondary screens will display the relative text fields, a Back and a Save button. After entering the required information, you will need to confirm the changes by pressing 'Save'. This will activate a pop-up that confirms the changes, where you will need to press 'YES' or 'NO'. The 'YES' button will save the changes and return back to the Settings Menu. The 'NO' button will not edit anything and return back to the currently displayed title screen. To ensure full app functionality, you will need to fill in the user's Name, Home Address, School Address, Emergency Contact (names, number and relation to user) and Allergies.

### ii. User Preferences

User Preferences will be saved automatically, without any confirmation messages. The Guardian can choose between the following options:



- Voice Gender Option: The Voice Gender Option changes the gender voice of the output audio file from the selected phrase in the Phrase Library to Male or Female.
- Button Graphics Option: The Button Graphics Option is a toggle button that turns the graphics in the Phrase Library On or Off. When the Button Graphics Option has been enabled, the button size will be larger, displaying both an image representation of the button as well as a short text description. When the option is disabled, the button size will decrease, no image will be displayed on the button and only the text representation of the phrase will be displayed.

- **Color Theme:** The Color Theme setting will have a menu of preset colors (Blue, Green and Purple) which changes the color scheme of the applications interface to promote interactivity. This application also ensures that no matter what color is chosen, users will be able to distinguish the button from the background.
- **Contact/Address Privacy:** The Contact Privacy and Address Privacy allow the Guardian to enable or disable the display of the Emergency Contacts information and the Address information within the Emergency Information screen. When Contact Privacy is enabled, the text in the contact information fields will change to ‘Private’. When Address Privacy is enabled, the View Home Location and View School Location buttons will not be displayed.

## Change Password

The Guardian has the option to change the password after the initial set-up by hitting the Options button and entering their 4-character password, which will lead to the Options Menu. You will then need to select the Change Password button, which goes to the Change Password Screen where you will need to enter your old password, new password, and confirm the new password before pressing the Submit button.

## Tutorial Videos

Express<sup>2</sup> will come with links to introductory tutorials on YouTube where the Guardian will be able to watch and learn about the application’s functionality.

## Error Reports

Should the application malfunction, you have the option to send the developers an error report through a form within the application. Submitting the form will send the developers details of the issue through email.

# 3. Glossary

## General Terms

Term	Definition
Data	Mobile internet network supported by a wireless network service provider.
Down syndrome	Delay in cognitive ability, specifically focusing on individuals experiencing significant speech delay who have trouble developing clear speech.
Error Reports	A compilation of system errors performed by the application.
External Aid	Someone or something that helps the user learn and use the application.



Guardian	The person in charge of the settings and teaching the user about the application.
Integrated Maps	Navigational features to pre-selective places (Home and School).
Password	A numerical lock for the Settings feature to be created and used by the Guardian.
Phrase Library	A hierarchical organization of emergency phrases divided into sub-categories which will be navigated by the user to reach their target phrase.
Secure Access	Access to settings in secure fashion (Password)
Tutorials	Guides on how to operate the application successfully.
User	A child or young adult who has Down syndrome.
Wi-Fi	A mobile hotspot whereby an internet connection is provided wirelessly.

## Screen Names

Term	Definition
Change Password screen	This screen will contain three text fields: Old Password, New Password and Confirm New Password, and a Submit button.
Emergency Information screen	Displays both emergency contact(s) information along with buttons for Home Address and School Address.
Error Report screen	Displays an email form in which the Guardian will be able to send the developers, Team X.I.S, an error report upon completion of the requested information.
Main Menu	The first screen encountered by all users; the hub of the application. Displays the Phrase Library, Emergency and Settings buttons.
Options screen	The screen will contain the following buttons; Setting, Change Password, Tutorials and Error Report.
Password screen	Displayed after a person has hit the Settings button. Contains a text field for user to input their 4-character password along with Back and Cancel buttons should the user accidentally click on the Settings button. Pressing either of the buttons will return the user back to the Main Menu screen.
Settings Menu	Displays User Information, User Preferences contain Themes and Privacy Settings.

## Button Names

Term	Definition
Back button	A button that returns the user to the previous screen.
Change Password button	Links to the Change Password screen.
Emergency button	Links to the Emergency Information Screen.
Error Report button	Displays the Error Report screen.
Options button	Displays the Options screen.
Phrase Library button	Links to the next page containing the sub-categories: Food, Actions and Feelings.
Phrase Library Sub-Category buttons	Link to the next sub-category till the user reaches the target phrase.
Settings button	Links to the Settings Menu.
Submit button	This button confirms edits made by the Guardian.
Toggle button	An iPhone button that allows user to switch between two defined options.
Tutorials button	Displays the list of video links that are meant to be used as guides for learning the application's use and functionality
Voice Gender Option	A toggle button that lets the Guardian set the audio output voice between Male and Female.