# Ghotit Real Writer and Reader for Chromebooks and Android User Guide

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### **Ghotit Real Writer & Reader App**

Ghotit Real Writer & Reader App for Android and Chromebooks is a writing and reading solution combining several advanced assistive technologies tailor-made for people with dyslexia, dysgraphia and other learning disabilities. Ghotit helps children and adults with dyslexia and dysgraphia to read, write and correct text in any application.

Ghotit's patented Text Correction technology provides the most accurate fixes for spelling, grammar and punctuation mistakes according to the intended meaning of a text like nobody does.

Ghotit Quick Spell Word-Prediction is a state-of-art technology designed for writers with typing issues and phonetic/creative writers; this technology increases writing speed and successfully predicts intended words with instant correction of the first misspelled letters.

Ghotit Reading technology makes any text document readable: hear text read aloud in conjunction with dual highlighting.

Ghotit Real Writer & Reader App includes:

- Phonetic and context-sensitive spell checker
- Advanced grammar and punctuation corrector
- Quick-Spell Word-Prediction with instant correction for creative/phonetic writers
- Word-Prediction Topics (Advanced Word-Banks)
- Effective proofreader
- Speak as you write (speech feedback)
- Integrated dictionary
- Reading assistance with text dual highlighting
- Sharing of the text content with other Android Apps
- Independent Text Editor

# Setup

#### Prerequisites

Chromebook with support for Android Apps or an Android 4.4.2 and up tablet/smartphone with screen 4.5 inch and up.

Check that your Chromebook supports Android Apps with Google: <a href="https://www.chromium.org/chromium-os/chrome-os-systems-supporting-android-apps">https://www.chromium.org/chromium-os/chrome-os-systems-supporting-android-apps</a>

Enable Android Apps at your Chromebook by using the Google's guidelines: <u>https://support.google.com/chromebook/answer/7021273</u>

Ghotit App requires Internet for spelling and grammar; all other features are working offline.

Note: Amazon Android-based devices are not supported.

#### **Initial Setup Steps**

#### Download Ghotit Real Writer & Reader App:

Order it and download it from Google Play Store.

#### Setup Your English:

At the first run, you will select your flavor / flavour of English from US, UK, Australian, Canadian, New Zealand or South African English.

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<b></b>		
Standard • Roboto •	- 24 -	
	English Dictionary:          Australian English         Canadian English         Canadian English         New Zealand English         South African English         UK English         US English         Don't speak aloud (mute)         Select English Dictionary and press Next:         Next >>>	
○ ⊙ थ ≧ ⊵ ⊘	1 6:52 🔻 🏽 💽	

Fig.1. Select English Dictionary.

You can change your selection of English Dictionary at any time by clicking/tapping the Overflow

button located at the right toolbar, selecting from the appearing options Settings and going in Settings to the tab "English".

#### Allow Usage of Files:

Ghotit App stores its text in files. Starting from Android-6, Android requires permissions from user for each app that needs to work with files.

After such permissions were granted, Android requires restart of an app.



Fig. 2. Dialog Explains about Granting File Access with Further Restart of the App.

Ghotit App first explains to user that the permissions are required as it is seen at the screenshot above. Click/tap "OK"



Fig. 3. Android Dialog to Require Permission to Use Files.

Next, Android dialog asks for permissions to be granted. Note, that Ghotit App works only with text files and not with "photos, media" as stated. Click/tap "ALLOW".

To use the permissions, Ghotit App closes.

Please, start it once more.

This time you will see the same dialog as at Fig.2, but if permissions were granted, you will not be required to do it once more. Click/Tap OK.

#### **Choose the First File Name:**



Fig. 4. Select the Writable Folder for Your Files.

The Android File Dialog that Ghotit opens has an icon with 3 vertical lines located at the top-left corner. After clicking/tapping the icon, you can see the major storage locations of your device as it's seen at the Fig.4 above.

Click/tap at the location named Downloads known to be writable.



Fig. 5. Write a Filename and Press Save.

It could be files in your folder Download, more or less files, but that does not matter.

Write a file name like we did, i.e. firstFile, and click/tap Save located at the right-bottom corner of the dialog.

If after writing a filename with a few letters, Save is seen as disabled (grey) that means that the location you have selected is not writable.

Please, click/tap the 3-vertical-lines button located at the top-left corner of the dialog and select another folder location.

### **Text Correction Application Main Screen**



Fig. 6: Ghotit Real Writer & Reader App - Main Screen

Write your text in the application's Text Area. After selecting some text or placing the cursor in front of the text to correct, tap the

"ABC"-button

, second from the right at the top-toolbar.

The software marks using colored underlining:

- Misspelled words by red;
- Suspected Confused/Misused words by blue;
- Grammar errors by green.

I sore buterflis in the garden. I did not <u>under stand</u> It was winter at home bet it was sumer at the garden. I notest it was time for school. So I ran awte, so that I wood not be late. wen I got to school I told my frends abwte the garden.

Fig. 7: Marking Text for Correction

Place the cursor on a marked word. The software will offer the word correction suggestions.

To share changes with various applications, click the Sharing button  $\square$ ; this will open a standard Android application selection screen with different applications as the sharing options.

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	Comple	ete action using		
St	∢	Bluetooth		
	ෙ	Copy to clipboard		
		Drive		
	@	Email		
	3	Firefox Sync		
	3	Ghotit Real Writer & R	eader 3	
	Ŷ	Gmail		
	<b>8</b> +	Google+		
	9	Hangouts		
	P	Кеер		
		Always	Just once	
		б (		

Fig. 8. Share Text via Standard Android App Sharing Selection.

Clicking the Sharing button will also remove all remaining markings from the screen. In order to share only part of the text, you will need to mark some text of your interest and click the same Sharing button . To have the software read out loud the text written in the Text Area, place the cursor at the text position you'd like to read from and click the Text-to-Speech button .

#### **Text Selection**

To select some text by finger or mouse, touch/click your text at the beginning of the desired selection and move it to the end of the desired selection; when you release the finger or mouse, the text is selected. Selecting a text by a finger/mouse, you can move the finger in either direction. To remove the text selection, tap/click at some screen point.

### **Suggestions Menu**

The text correction Suggestions Menu displays a list of suggested spelling or grammar candidates and their descriptions. To select the correct word, click/tap on the word. The correct word will be inserted into the Main Screen text replacing the misspelled word. In addition, you may request the software to read out the suggestions and their descriptions, by

clicking the Voice Button. The Voice icons  $\checkmark$  are used to toggle playback of the suggestion and its description to an on/off mode.

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I spell ovoide	withe spelling mistakes and this is why I writing.
	If something is "ovoid", it is oval or oval-like
	↓       Ovid         ↓       Ovid         ↓       If something is "ovoid", it is oval or oval-like in shape.
	↓     Ignore Suggestions       ↓     Add to Dictionary
> 🧿 🗠	1 🗈 🖻 📎 🧭

#### Fig. 9. Suggestion Menu

Standard	• Roboto	
a I spell with	e spelling mistakes and th	is is why I
voide wri	ting with This is used to show the ot present when something h	her people or things appened.
	the Used, instead of a, to refere specific, already known to the specific already known to the s	ence something exist.
	wither Dry out.	
	white 1) The color of pure snow.	2) Innocent. 3) Pure.
	vi the	
	Ignore Suggestions for: withe	A flexible, slender twig or shoot, especially when used as a band or for binding.
	$\smile$	

Fig. 10. Read-Out-Loud Suggested Words and Their Meanings

### **Dictionary with Descriptions**

Get meaning of a word in a written text by selecting a word or placing a cursor on it and clicking the Dictionary button located at the right corner of the top toolbar.

The meanings or usage examples are opened in a dedicated Dictionary Window located just under the target word.



Fig. 11. Dictionary Window with Explanations.

The text in the Dictionary Window is by default read aloud when touched, but it could be muted via Preferences->English.

### **Word-Prediction**

Word-Prediction helps a user to write by "predicting" a word the user intended to type. Predictions are based on spelling, context, grammar, syntax, and frequently/recently used words as well as by loaded Word-Prediction Topics. The Word-Prediction feature assists in the writing of kids and adults who struggle with typing as it enables them to write correctly with fewer keystrokes.

Ghotit Word-Prediction provides highly accurate predictions, specifically when the writer has dyslexia or dysgraphia by using **Ghotit Quick-Spell Word-Prediction Technology** - non-stoppable instant corrective word-prediction which continues even when the writing contains several misspellings.

You can try to write with prediction the following: "Help us to **andes**"

and despite two errors already made in the attempted writing of the real word "**under**stand", the prediction suggests correctly the word "**understand**".

The message is - never give up trying to write and expect the right prediction to come.

Click Word-Prediction icon icon located at the left toolbar to enable/disable writing with Ghotit Word Prediction.



Fig. 12. Word Prediction Menu with Descriptions.

### **Word-Prediction Menu**

The word prediction list appears just under the text that you are writing, and you can select word by tapping the appropriate word written in a word-selection-button. Words in the list are automatically read aloud when tapping the area from the right to the selection button.

Word-Prediction Menu and its elements are depicted below at Fig.13:



Fig. 13. Word-Prediction Menu with Selection Buttons and Reading-on-Tapping Areas at the Right Side.

On tapping the reading area at the right side from a word-selection button, the word is selected by a frame and read aloud. If there are descriptions for the word available, it is indicated by the double arrow N button that becomes visible as depicted below at Fig.14:



Fig. 14. Word-Prediction Menu. The First Word Was Tapped to Read It Aloud.

When tapping the double arrow button, a separate window appears with meanings for the predicted word, and the meanings are read aloud:



Fig. 15. Word-Prediction Menu with Opened Meanings Window.

### **Text Editor Main Screen Icons**

The main screen offers a set of features to optimize the text editing experience.

Quick Access icons:



New file – creates a new file



Open File – opens a file



Undo – undoes the latest change

Redo - redoes the last change

#### Clipboard icons:



💑 Cut – cuts the text



Copy – copies the text



Paste – pastes the text

Paragraph icons:



Align text to the left

Center text

Align text to the right

Justify – Align text both to the left and right margins

#### Font icons:



#### Dictionary icons:

 -	
 -	
 -	
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C	

Dictionary - meanings of words: descriptions and examples

Learning and Topics for Word-Prediction icons:



Learning – Learning to Word-Prediction Topics from Ghotit and text files



Topics – Management of Word-Prediction Topics

# **Reading Mode**

Ghotit Real Writer & Reader can read text from any text application, for example browser, text editors and e-mail clients.

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	Ghotit Real Writer and Reader reading mode	$\bigcirc$
	Word being read Sentence being read Text being read	S

Fig. 16a. Ghotit Reader Screen



Fig. 16b. Ghotit Reader Screen

To enter Reading Mode, click the To-Reading button icon from Text Editing Mode.

To share the text displayed, click the Sharing ᠫ icon.

Clicking the To-Editing button icon 🥖 , switches the software back to Text Correction Mode.

Ghotit Reader screen icons:







- Read next sentence
- Stop reading

Yet another option is reading aloud directly from the Editing Mode by clicking the Voice Button located at the left toolbar.



Fig. 17. Reading Aloud from the Editing Mode by using the Voice Button.

### **Integration with Common Applications**

Android applications with text sharing option can share and send their text directly to Ghotit Real Writer & Reader App.

For example, after selecting some text seen in Chrome browser application, touch the Share button and select "Ghotit Real Writer & Reader".

Yet another option is to copy text and paste it to Real Writer & Reader window by using the

Paste button  $\square$  located at the top toolbar.

To copy text from Ghotit Real Writer & Reader, select the text and take advantage of the Copy

button from the top toolbar, or use the Sharing button from the right toolbar with further selection of "Copy to clipboard" from the "Complete action using" chooser menu.

### **User Preferences & Customization**

In order to customize Real Writer & Reader for Android, run the application, touch

the Application Overflow Button (3 vertical dots) located at the right toolbar Select from the dialog window the top option Settings, and further select Preferences.

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Standard	- Roboto - 24 -	
Ghotit help and dysgra English tex	s children and adults with dyslexia phia to read, write and correct ts. Settings Best Practices User Guide About	
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Fig. 18. Selecting Settings.

Speech	English	Prediction	Advanced			
				System Voice:	Default Voice	•
	Test Voic	e				
V Sp	eech Feedb	ack				 
V Du	ial Highlight xt to Speech	ed h				
	Word H Color:	Highlighting				
	Phrase H Color:	lighlighting				

Fig. 19. Opening Settings. Speech Tab

The customization tabs are:

- 1) Speech Select Text-To-Speech Speech Feedback option and word highlighting & sentence coloring
- 2) English Select an English dictionary
- 3) Prediction Personalize the way Word-Prediction works
- 4) Advanced Set the default font of your preference

Note: To close Preferences window, touch the editing area of the main window.

## **Speech Options**

Real Writer & Reader offers read-out-loud services. These services read out loud to the user his written text and Ghotit's suggested words with their meanings.

You are selecting you preferred voice at the level of your Android device by going to Settings -> Speech -> Text-to-speech output, see the above Fig. 19.

In Speech options of Real Writer & Reader you can select the Speech Feedback option to readout-loud the text while you are writing.

Additionally, you can select the word and sentence highlighting color.

#### **Selecting English Dictionary**

Speech English Prediction Advance	ed
English Dictionary:	US English 👻
Descriptions Window Settings:	
Standalone window	i't speak aloud ite)
Personal Dictionary:	
Add Enter your word	Speak Delete

Fig. 20. Select Your Preferred English Dictionary

The supported English dictionaries are:

- Australian English
- Canadian English
- New Zealand English
- South African English
- United Kingdom (UK) English
- United States (US) English

### **Word-Prediction**

Personalize the way Ghotit's word-prediction works.

Speech English	Prediction Advance	ed	
Standalone windo	w		Don't speak aloud
Number of Words:		8 👻	V Phonetic spelling
			√ Insert space after word
			✓ Predict ahead

Fig. 21. Personalize Word Prediction

- Don't speak aloud (mute) mute the voice and don't speak aloud predicted words when touching prediction window
- Phonetic /creative spelling Allow word-prediction to present suggestions which are phonetically close to the letters the user typed
- Insert space after inserted prediction
- Predict ahead Whether to predict the next word after space based on the previous words.
- Number or Words The number of Word-Prediction candidates suggested.

#### Advanced

Speech English Prediction Advanced	
Default Text Font:	Default Text Font Size:
Roboto 💌	24 -
Text Background Color:	Spelling Area Color:
	Restore the Default Layout

Fig. 21. Advanced Settings Screen

The Advanced screen has three major functions:

1. Configuring the default font and font size of the text editor to be used both by editing as well as by reading mode.

2. Configuring background colors for Text and Spelling areas.

### **Topics ("Prediction Word-Banks") & Learning**

Writing a text on a very specific subject requires sometimes specific lexicon and/or general words used in specific subject-dependent combinations or in their rather rare meanings.

To improve a quality of word-prediction, use Ghotit Topics. Known alternatives to Ghotit Topics are commonly called Word-Banks.

Ghotit Topics are superior to Word-Banks since the Topics contain not only words, but also adopt a writing style suitable to the topic. Even if a Topic does not add a single new word to the Ghotit dictionary, the Topic will improve Word-Prediction and suggest predictions more accurately based upon the context of your writing.

Writing with word-prediction school assignments or professional writing could be significantly improved by using Ghotit Topics.

#### **Creating Topics: Learning from File or Ghotit**

Learn from Ghotit:		
	Select Topic:	Add New Topic:
	Dinosaurs -	Enter To O
	Topic's New Words: parasaurolophus ankylosaurus iguanodon	
	Speak Delete	

Fig. 22. Create Topic and Review It

For example, let's create a new topic named Dinosaurs. The Dinosaur topic will include names of dinosaurs and a matching writing style suitable for writing academic articles about Dinosaurs.

Steps to create a topic:

1. If it is a new topic, type the topic name, Dinosaurs, to the "Add New Topic" text-field in

Learning tab of Preferences and click button<sup>1</sup>. For an existing topic, select it from the topics list under "Select Topic".

2. Learn new words and contextual connections to the topic by either:

Ghotit Real Writer & Reader for Chromebooks and Android

- a. Clicking "Learn from Ghotit" G button to learn from Ghotit Text Area
- b. Clicking "Learn from File" button and selecting a text-only file (format txt) from a file dialog.
- 3. Following step 2, a list of new words may appear; you can inspect the words, read them aloud by using Speak Button. Delete the words you decide are not appropriate whatever is the reason. If there are no new words listed, it is still fine since the topic has been enriched by contextual connections.

Note: When there are multiple documents you wish to be learned to a topic, save them in text format (txt) and learn the text files one after another by following step 2b for each file. Thus, your topic will contain all necessary contextual information along with discovered new words – all taken from those multiple files.

### **Topics ("Prediction Word-Banks")**

Import Topic:  Export Topic: to Downloads		
All Topics:		Topics In-Use:
Dinosaurs	Load	
	Unload 《	
Delete	Speak	

Fig. 23. Manage Topics: Load, Unload, Import, Export or Delete.

This screen is for managing topics. Here you can:

- 1. Import a topic file (file with Ghotit .ghtopic extension) i.e. which was sent to you by a teacher. Alternatively, you can create your topic and fill it by learning from files or Ghotit text area as described in previous section.
- Export a topic to your Downloads. Select a topic in "All Topics" section and click the "Export Topic" button. Now you can find the topic file at your Desktop and i.e. share it with your pupils by emailing it or placing it at a memory stick, etc.
- 3. Load a topic to use it. If you have created or imported a topic, it doesn't mean that the topic is in use. Load it to use explicitly by selecting a topic from "All Topics" section and clicking Load button. Now it is used by Word Prediction.

- 4. Unload a topic from use. Select a topic in "Topics in-Use" section and click Unload button. The topic will be stored and kept, but it will not be used for Word-Prediction.
- 5. Delete a topic. If you do not need a topic anymore, you can select it from "All Topics" section and click the Delete button. Prior to deleting, you should unload the topic from use and it is advisable to Export the topic and keep it in some folder for a fallback.
- 6. Read a topic name aloud. Select a topic either in "All Topics" or in "Topics in-Use" section and click Speak button.

# **End User Rights**

To compile the application with your own version of Qt-library used by Ghotit Real Writer & Reader under GNU LGPL 2.1, you have rights to get the object files of the application and building instructions.

Please, contact our Support Team to get it. The object files are delivered as release either armv7a or x86 compiled objects.