Cobbler

Overview

Cobbler is a desktop application for text editing of COBOL program text files. The tool offers basic light editing features and syntax highlighting. Cobbler was written by [Joshua Horvath](#).

Quick Start

On first launch of the Cobbler application a new Cobbler folder is created at the root level of the current user's user folder. This folder is used to store application settings such as what display theme to load and locations of recently opened files.

Open Files

To open a COBOL text file:

1. From the **File** menu select the **Open...** menu option.
   a. If there are unsaved changes, a confirmation dialog will be presented allowing a chance to stop the current operation and save the current document.
      i. This unsaved changes check takes place for all operations were a file is opened, created, closed, or the application is shut down.
2. In the **Select a COBOL file** dialog, navigate to and select a COBOL text file.
   a. The file suffix filter is available, and on by default, to only allow COBOL files to be selected.
      i. The current COBOL file suffixes supported by this filter are:
         1. .cob, .cbl, .cpy, .pco, .fd, .sel, .ws
            a. These suffixes will be recognized with all lowercase or uppercase versions.
      ii. The filter may be turned off to allow other types of text files to be opened.
3. Click the **Open** button.
4. The contents of the text file are displayed in the main text pane of the application window.

To open a recent file:

Files that have been opened in Cobbler in the past can be reopened under the Recent Files menu.

1. From the **File** menu select the **Recent Files** submenu.
   a. Files that have been opened are listed in the Recent Files menu with full file paths displayed.
2. Select a file path from the submenu to open the file and display the contents in the Cobbler application.
   a. If the file was moved, renamed, or deleted, an error will be displayed.

Save Files

1. From the **File** menu select the **Save** or **Save As...** menu option.
   a. If the **Save** option was selected, and file exists on the disk, then the changes will be written to the file and the operation ends. If the **Save** option was selected and the file does not exist on disk, then the **Save As** dialog is displayed.
2. In the **Save As** dialog, select a location to save the file, and edit the name of the file as needed, and click the **Save** button.
   a. If a file suffix is not added by hand, the file suffix ".cob" will automatically be appended.

Edit Menu

The Edit menu features contain controls that are standard for a text editor including:

- Undo
- Redo
- Select All
- Copy
- Cut
- Paste

Utilities Menu

The Utilities menu contains features that assist in the editing of text files and changing application settings.

- Go to line...
- Find...

- Replace...
- Add Line Numbers
- Remove Line Numbers
- Settings...

Go to Line

Opens a dialog that allows quickly moving to a specific line number in the text file.

Find and Replace Dialogs

Dialogs for finding and replacing text within the open text file are available under the Utilities menu. Results, such as find and replace counts, will appear in the status bar at the bottom of the application window. Closing the find or replace dialog will reset the status bar contents.

Add Line Numbers

Automatically add line numbers to COBOL files. Line numbers are incremented by ten. If the file already has line numbers, then the file will be renumbered. If the first six characters in each line are not either all digits (in the renumbering case) or all word spaces, then Cobbler may have trouble adding the line numbers without breaking changes. In this case a warning confirmation will be displayed, and Cobbler will do its best to add the line numbers without making breaking changes. COBOL code should not be wholly overwritten with numbers, in worst case statement code will be pushed to the right and may require minor editing. Note that tab characters may cause this behavior.

Remove Line Numbers

Automatically remove hard coded line numbers from COBOL files. The first six columns of COBOL code are reserved for line numbers but are rarely needed in modern COBOL code. If Cobbler thinks it may have trouble removing line numbers from a file, a warning confirmation dialog will be presented. Also in this case, if Cobbler encounters a line where it finds anything other than digit characters in the first six columns, that line will be skipped. If after removing line numbers the number of lines skipped is greater than zero, then a pop-up dialog will be displayed stating how many lines were skipped.

Application Settings

From the Utilities menu exists a menu option to open the Settings dialog. In this dialog the user can select a visual theme for the cobbler application, including a dark mode. From the

settings dialog there are also options to clear the Recent Files menu and to enable or disable the spell checker.

New Document Template

Because COBOL is a verbose programing language, a feature that can be helpful is to autogenerate a basic file structure without having to manual type some of the boilerplate header information.

1. From the **File** menu select the **New Document Template** menu option.
2. A new hello world COBOL program is displayed in the main text pane of the application window.
   a. The current user name is displayed as the Author.
   b. The current date, in the form MM/DD/YYYY is displayed as Date Written.

Text Autocomplete

Text autocomplete is available through the key command, control + spacebar. On typing this key combination, a popup menu is displayed. This popup menu is populated with all the COBOL keywords and intrinsic functions stored inside of Cobbler. The popup menu is filtered by what characters are typed to the immediate left of the curser location in the editor.

Spell Checker

Comments within COBOL code can be spell checked. When a word appears within a code comment that is not recognized, then a squiggle line appears under that word. The comment spell checker can be turned off and on in the settings dialog.

Notes and Current Issues:

- Keywords are recognized in lowercase, uppercase, and title case.
  - Recognized:
    - DISPLAY
    - display
    - Display
  - Not recognized:
    - disPLAY
- Syntax highlighting is not complete.
  - COBOL keywords containing a word space may not highlight correctly in the second word.

- Sometimes a word may not highlight correctly if there is not a word space after the keyword.
- Keywords containing a hyphen may not highlight.
- The feature checking for unsaved changes is currently a little buggy sometimes.