Hypo-Mac Documentation

The application was built using the Swift Programming Language and the Xcode 8 IDE. It is a simple diagnostic tool similar to the Hypo tool used for Windows machines. It was intended to assist STS technicians in extracting general information about the machine, installing/uninstalling applications and other minor network diagnosis.

Requirements

Due to restriction by Apple of the development environment, the application will not work on machines that do not run macOS 10.12 or above. Moreover, in order to successfully open, edit and run the source code Xcode 8 or above is required.
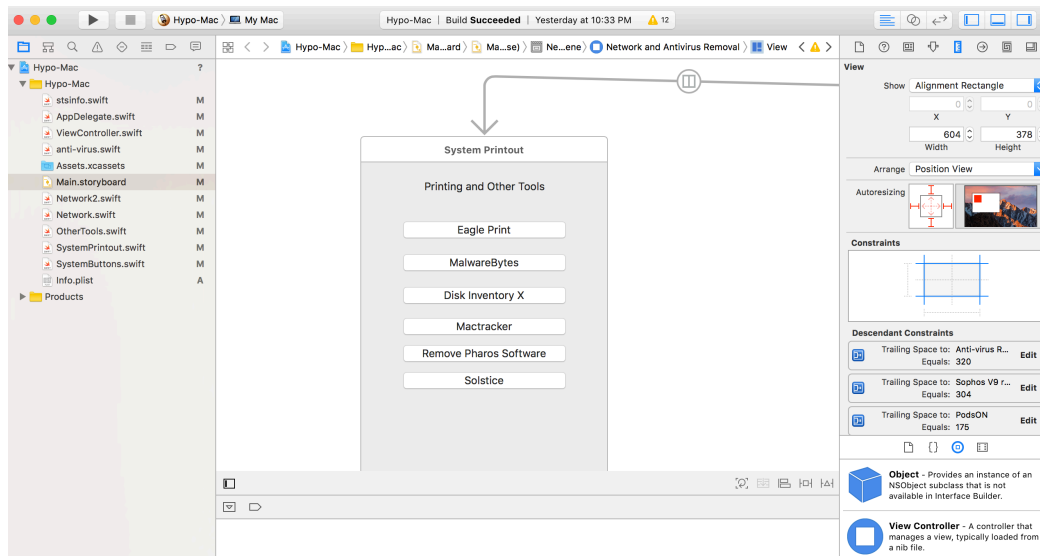
Opening the application in Xcode

To open the application and all of its contents, launch the ***Hypo-Mac.xcodeproj*** file. The project will open in a new Xcode window. On the left side of the Xcode window is the ***project navigator***. This is where all the source files related to the project can be found.

Making changes to Hypo-Mac

Graphical Changes

To make graphical changes such as adding/removing buttons, changing button names and icons, select the ***Main.storyboard*** from the list of source files under the ***project navigator***. A screenshot is given below.

To change button text, simply double click on a button and make the necessary changes. Other more complex graphical changes can also be made using the ***Main.storyboard.***
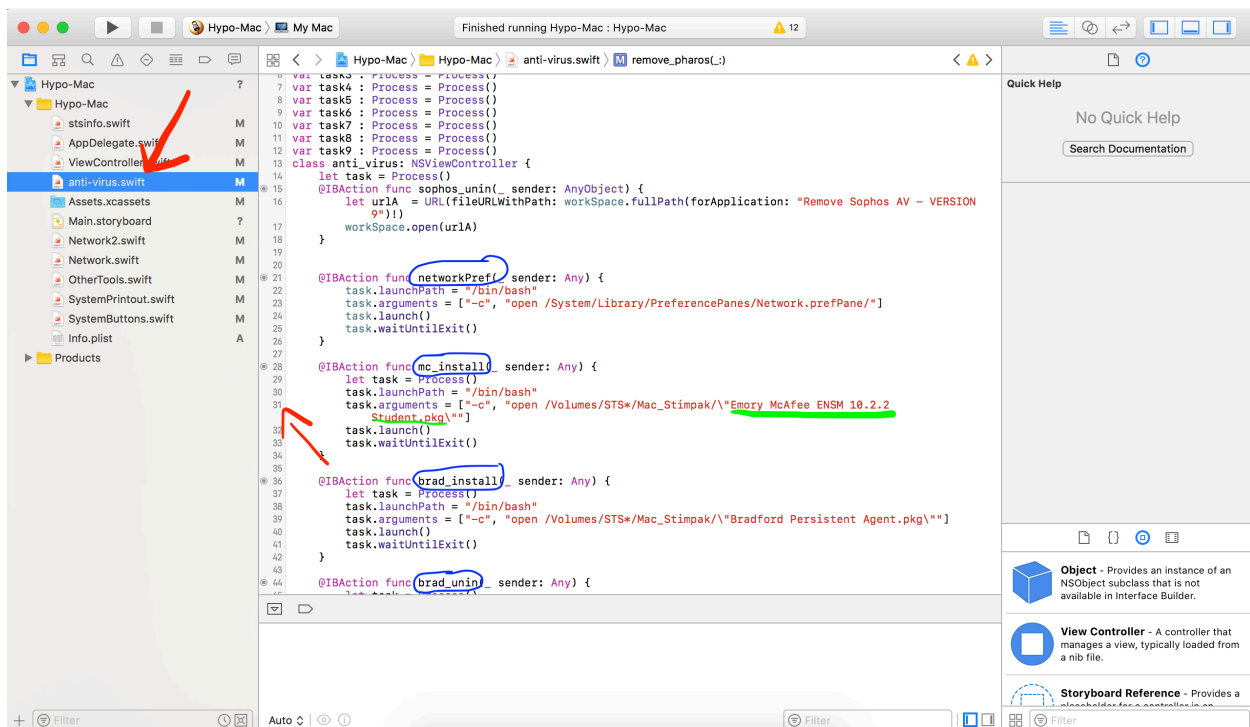
Source code changes

When there are changes to the filenames of applications launched via Hypo-Mac, the corresponding changes (filename change) should also be made to the source codes.
There are two main *.swift* source code files that can be edited appropriately when such types of changes occur. These are *anti-virus.swift* and *SystemPrintout.swift*.

All changes concerning the second page of the application *Network and Antivirus Removal* are made on the *anti-virus.swift* file and all changes concerning the third page of the application *Printing and Other* are made on the *SystemPrintout.swift* file.

A detailed example

For the purpose of illustration, consider the case when the filename for McAfee changes. In order for the Hypo tool to launch the new McAfee with the new filename, the new filename has to to replace the current filename for McAfee in the source code. This change can be made by opening (clicking on) the *anti-virus.swift* file from the *project navigator.* Afterwards, navigate to *line 31* in the main window. To make the necessary filename modifications, change the *ONLY* the -- "*Emory McAfee ENSM 10.2.2 Student.pkg"* part of the line to the appropriate filename. Refer to the screen below for visual illustrations.
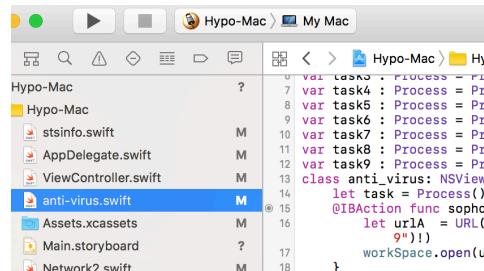

Any similar modifications to application filenames can be made in similar manner. The blue bubbles in the screenshot give the names of the functions that contain the filenames associated with the respective button. Theses function names can be used to easily locate the function for a given button.

Furthermore, additional complex changes and upgrades can also be made to the source code to add more features and improve functionality.

Exporting application
After any change has been made to any part of the application source code, it needs to be recompiled and exported as a macOS application. The exporting process can be done by performing the following steps;
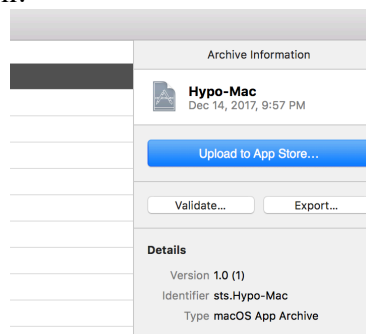
Step 1: Build and run the current modified version by clicking the *play button* on the top left. See below;

Step 2: After the build and run complete, click on the *stop button* located next to the *play button*.

Step 3: From the menubar, click on the *Product* option. Then click on the *Archive* option. A new window will popup.

Step 4: Click on the *Export* button.

Step 5: From the options provided, select *Export as a macOS application.*

Step 6: Specify a filename and destination and click *Export* to export the application.