Student Name: Ashley Gwinnell

Student Number: 4204611

Programming 2 Assignment 1 - Address Book Application

Features:

Open / Import Undo / Redo Recent Files
Quick Search Mail Unlimited Data
File Safety Supported Address Book Formats Feature Abstraction

Cross-Platform Executable

Open / Import

Not strictly specified in the assignment brief, I had decided to differentiate between these two actions. Opening a document will replace your currently opened document (after asking you whether you want to save any unsaved changes) with the one you're opening. Importing a document will add contacts to your currently opened document, giving you options to "Combine", "Replace" or "Keep" duplicate contacts that are found.

Combine will add everything from the duplicate contact into the existing contact

Replace will replace the existing contact with the duplicate.

Keep will discard the duplicate from import and keep the existing contact.

Undo / Redo

The undo/redo stack that I've implemented doesn't override the system default. This means it will allow you to undo actions such cutting/pasting text alongside actions such as "Remove Contact".

Recent Files

The recent files listing allows you to quickly access Address Books that you've recently used.

Quick Search

Quick Search allows you to search contacts by any of their data. Search criteria is separated by commas so your criterion can contain spaces. The contact must match ALL of the search criterion to return as a result, not just one piece of criterion. The software will automatically refresh the results on every key press for faster searching (i.e. not at the click of a button).

Mail

The assignment brief has a strict scope, so my address book application does not double as a mail application. However, I have implemented a button in my application which will open up the system's default mail application so the user can email at the click of a button (instead of opening their mail application, copying contacts email address).

Unlimited Data

A contact can have as many addresses, telephone numbers or email addresses as he/she likes. Adding more types of data such as website can be implemented *easily* in the future if requested.

File Safety

The Application will check if you have data that is not compatible with a certain file type (such as .BUAB) and will warn the user accordingly. The Application will check if you have unsaved changes before you open a new document or try to the close the program. The Application will also check with the user before it attempts to overwrite a file.

Supported Address Book Formats

The Application currently supports BUAB and VCard 3.0, but will support export to hCard in the near future.

Feature Abstraction

I have developed this application with code reuse as a priority. The Undo / Redo stack is reusable and so is the Recent Files listing. The classes have been grouped into my <u>org.aq.util</u> Java package.

Cross-Platform Executable

This Address Book Application is created in Java and has been compiled into an executable .jar file. Executable .jar files can run on Windows, Mac and Linux.