Vysoká škola báňská – Technická univerzita Ostrava
Faculty of Eletrical Engineering and Computer Science

User documentation

About application

This application is created as a project for Fundamentals of Programming at VŠB-TUO. This applications subject is *Application for managment personal contacts of type „Business card".*

This project has been programmed using **C++** and **Qt** framework for **GUI** and multiplatformness. Whole project is under **LGPL** Licence, parts of code are under **BSD** Licence (applications basis has been created from official Qt documentation).

Application can import business cards / contacts from **CSV** and **XML** files and export them to CSV, XML, **SQL** and **HTML** files. There is also special file for this project, **BCF** (Business cards file) which contains all records. This is default open/save file type.

How to compile and run program

Since it's created using Qt framework, compilation and starting the program depends on it. To successfuly compile the program, you have to have installed Qt 4.8.4. It can be downloaded from http://qt-project.org/downloads . Multiplatformness is accomplished by **qmake** utility.

- **Windows compiling**

  - To compile program under Windows, you have to have either Qt with MinGW or Qt for Visual Studio©**.**

  - First step is creating Makefile. It is created by qmake utility with command „*qmake ./src/make.pro"* from *solution* folder. Next step is compiling the project. It's done by make utility, the only thing user has to do is run „make" or „nmake" command in command line. Then, the project is build.

  - If you have Visual Studio version, you can use command „*qmake -tp vc ./src/make.pro"* for creating *vcproj* file. Then you can skip previous steps.

  - **Important:** All Qt binary files has to be linked to system variables. Either you can edit system settings or you can use *„Qt Command Prompt"* application installed with Qt.

- **Linux/BSD/Mac compiling**

  - To compile this program under these operating system, you have to have installed correct version of Qt, make and any c++ compiler.

  - For creating makefile, you have to run command „*qmake ./src/make.pro"* from *solution* folder for creating *Makefile.* Then you just have to run command „*make"* to create

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binary file.

- **Downloading binary files instead of compiling**
    - Binary files for Windows and Linux can be downloaded from http://dev.sysq.cz/zp/

- **Redistribution**
    - Redistribution has to meet the conditions of LGPL and BSD Licences. Compiled windows binary file has to be distributed with QtCored4.dll and QtGuid4.dll to work. Compiled *nix binary file has to have Qt installed on targets system.

Using the program

Applications goal was to keep it simple, intuitive, user-friendly. Therefore, program is does not have many columns, buttons.

User can add new contacts, open files, import files. There is also drag&drop feature, but it works as opening file simulation only, hence, user cannot import files through drag&drop.

To achieve intuitiveness, there are **mnemotic handlers** and **keyboard shortcuts.**

- **Mnemotic** handlers are special shortcuts invoked by pressing left Alt button on keyboard.
- **Keyboard shortcuts** are shortcuts create with intent to simplify using of this program.
    - **Ctrl+N –** New project
    - **Ctrl+A –** Add new record
    - **Del –** Delete record
    - **Ctrl+O –** Open project
    - **Ctrl+S –** Save project
    - **Ctrl+Shift+S –** Save project as
    - **Ctrl+I –** Import contacts
    - **Ctrl+E –** Export contacts

Sorting the records

Records can be sorted with built-in tabs by Name, Profession, Address, Mobile, Email or Website.

Default sorting is by Name.

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Illustration 1: Records sorted by Profession, ascending order

Adding new record

Adding new records is handled in separated window, which is invoked either by clicking menu button or Ctrl+A shortcut.

Conditions

- Name cannot be empty

- Email has to be valid.

Email is the only value checked for validity. Next possible value could be website, but it can be in many formats. Last possible value could be mobile, but because of american special phone number types (555-THERECANBEANYTHING), it's not implemented.

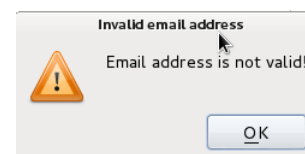If invalid email address is inserted, there is invoked error window and adding new record fails.

Illustration 2: Email validity check

Editing record

For editing selected record, there is used same window as for adding new record. There are also same conditions that has to be met.

Invoking edit window can be done by clicking „Edit entry" button in menu or **double-clicking** desired record in table widget.

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Filtering exports

When exporting records, records can be filtered depending on file type. Only SQL and HTML file types can be filtered according to version 1.0.

Records are cross-checked with every cell (from Name to Website). It record contains desired filter word (case insensitive), record is exported.

If filter is empty, all records are exported.

Illustration 3: Exporting records to HTML file with "Ostrava" filter

Unsaved data check

There is implemented feature that checks for unsaved project and throws window if unsaved data could be lost.

Window is invoked by every possible data loss – Opening new file, closing the window.

User can whenever determine, if project is unsaved by looking at title of main program. If there is *, project is unsaved.
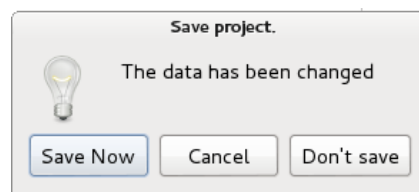

Illustration 4: Unsaved data check

Illustration 5: Unsaved project marking

Example of HTML export filtered by Ostrava

Business cards - Ostrava

ID	Name	Profession	Address	Mobile	Email	Website
1	Čeněk Horák	Učitel	Lesní 866, Ostrava, 942 59	+420 464 542 872	stiv30@seznam.cz	http://www.Paya36.cz
2	Xaver Fiala	Soudce	U Peráků 339, Ostrava, 331 71	+420 542 916 458	rada51@seznam.cz	http://www.slowakia10060.cz
3	Petr Soukup	Soudce	Objížďková 452, Ostrava, 194 76	+420 263 167 699	ScaniaSevHvez66@seznam.cz	http://www.peta80935.cz
4	Radek Doležal	Květinář	U Jitky 141, Ostrava, 979 33	+420 774 545 703	Paya38@seznam.cz	http://www.nim74.cz
5	Igor Král	Soudce	U Nových Domovů 923, Ostrava, 379 71	+420 723 634 335	Magnum9223@seznam.cz	http://www.milkos27.cz
6	Jiří Sedláček	Programátor	Rožmberská 780, Ostrava, 359 65	+420 637 945 132	McDrive52@seznam.cz	http://www.Ondrapajas82.cz
7	Norbert Nguyen	Květinář	Pod Skalkou 632, Ostrava, 784 50	+420 632 688 516	VlkyScania93@seznam.cz	http://www.slowakia10088.cz
8	Adam Pospíšil	Krejčí	Horní Náměstíčko 338, Ostrava, 689 11	+420 626 710 374	Vajoja27@seznam.cz	http://www.Ondrapajas23.cz
9	Karel Doležal	Soudce	Lipová 566, Ostrava, 866 42	+420 398 482 873	Paya73@seznam.cz	http://www.TheUndertaker83.cz
10	Igor Kratochvíl	Prodavač	Tovární 831, Ostrava, 583 11	+420 659 860 661	Pavlos55@seznam.cz	http://www.ScaniaSevHvez16.cz
11	Waldemar Novák	Krejčí	Na Moráni 722, Ostrava, 704 20	+420 780 169 826	Paya64@seznam.cz	http://www.motr93.cz

Disclaimer

Testing and example data has been generated by simple generator. Data has been taken from public entries about most frequent surnames, lastnames, most populated cities and random nicknames. Everything else has been generated randomly and all characters figuring in testing data are fictitous and any resemblance to persons living or dead is purely coincidental.

GUI can differ, examples were created on Debian Sid with GNOME 3.

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