FINGERCARD System (BioFinger+)

Inet version

User's Guide

ELSYS Corp.
2015

CONTENT

1. General information

FingerCard - the program for dermatoglyphic analysis of psychological characteristics based on 10 fingerprints data. The program allows removing and saving in a database 10 fingerprints of a person, providing dermatoglyphic analysis to define psychophysiological characteristics of person, as temperament and to print a fingerprint portrait of the person. Program compares Hans Eysenck personality test result with dermatoglyphics analysis.

FingerCard gives information about Multiple Intelligences levels of person base on Howard Gardner theory classification.

BioFinger+ system includes FingerCard program + fingerprint scanner.

2. Package contents

Standard **FingerCard** (BioFinger) system includes:

CD (or files from www.Psymaker.com) with drivers and FingerCard software	-	1
Code for program installation	-	1
User's guide		
Fingerprint scanner ZK-4500 (option)	-	1

3. System requirements

Operation System	Windows XP Prof/Vista/7/8 with DirectX 9.0 or later
Processor	Pentium IV 2400MHz or better
RAM	1024MB or better
HDD	10MB plus space for fingerprint database
USB port	1 free USB ports version USB 2.0 or USB 3.0
Fingerprint scanner	Type: DC21U; ZK-4500, ZK-7500

Attention! Before the beginning of work with program FingerCard it is necessary to check up, what version DirectX is installed on your computer. Software FingerCard works with versions DirectX 9.0 and is higher.

4. Software specification

FingerCard software is a part of BioFinger + system for scanning and analysis of person fingerprints. Results of personal dermatoglyphics analysis are used for definition character, personality, Multiple Intelligence and for printing of fingerprint (dactyloscopic) portrait of a person. FingerCard application for various scientific, psychological and medical purposes is possible.

FingerCard solves the following tasks:

- Scanning 10 fingerprints of the person and saving it in archive in format BMP
- Input and saving of the demographic data in a file in format TXT
- Definition of the basic type of a fingerprint pattern
- Calculation dermatoglyphics parameters of fingerprints
- Calculation of fingerprint portrait of person including the following characteristics:
    - Extravert-introvert
    - Right – left hemisphere
    - Leadership level
    - Stability level
    - Multiply Intelligences Levels and its variability
- Calculation psycho-physiological parameters of the person is made on the basis of the analysis:
    - basic type of a pattern of a fingerprint
    - Orientations of the basic pattern
    - Mutual site of concrete patterns on concrete fingers
    - Width between fingerprint lines
    - Quantity of bifurcations and ends of lines

In the folder \FingerCardUSB\ the complete set of files of the FingerCard program is located.

The basic operating modes of the software are described in section «FingerCard. User's guide».

5. Hardware technical specification

DC-21U scanner technical specification:

1. Size of an input fingerprint, mm^2	9.2 (H) x 14.0(V)
2. Resolution , no less than, elements	512 x 576
3. Speed of finger's input in 512x576 mode, no less than, f/s	10
4. Speed of finger's input in 512x128, mode, no less than, f/s	50
5. USB interface	USB 2.0, USB 3.0
6. Reading of plastic cards	Yes
7. Sleeping mode	Yes
8. Pulse detection and analyze	Yes
9. Function of protection against the falsification	Yes

Note, The DC-21U scanner does not support work with USB port of version 1.0 and 1.1.

ZK-4500 scanner technical specification:

1. Size of an input fingerprint, mm^2	15 (H) x 18(V)
2. Resolution , no less than, elements	280 x 360
3. USB interface	USB 2.0, USB 3.0
6. Resolution	500 dpi
7. Sleeping mode	No
8. Pulse detection and analyze	No
9. Function of protection against the falsification	No

6. Getting started

It is necessary to execute the following actions for installation of FingerCard program on your computer:

1. To check up conformity of technical parameters of your computer to the system requirements resulted in section «System requirements». Note to the version, software DirectX installed by your computer;

2. Close all other applications to avoid file sharing errors;

3. To lead installation of drivers of the DC-21U scanner according to the recommendations specified in section «DC-21U drivers installation» (see below);

4. Connected scanner to PC.

5. To lead installation of FingerCard software on your computer according to the recommendations specified in section «FingerCard Installation» (see below);

6. Attentively read the basic operating modes of a complex which are specified in section «FingerCard. User's guide»;

7. To run FingerCard.exe programs and to check up serviceability of the scanner and FingerCard system.

8. In FingerCard program to make a choice of folder for record dactocard and results of the analysis (see item 7.4 of the present description)

9. **Note**, in the program it is necessary to specify with which fingerprint scanner you are working (fig. 1)

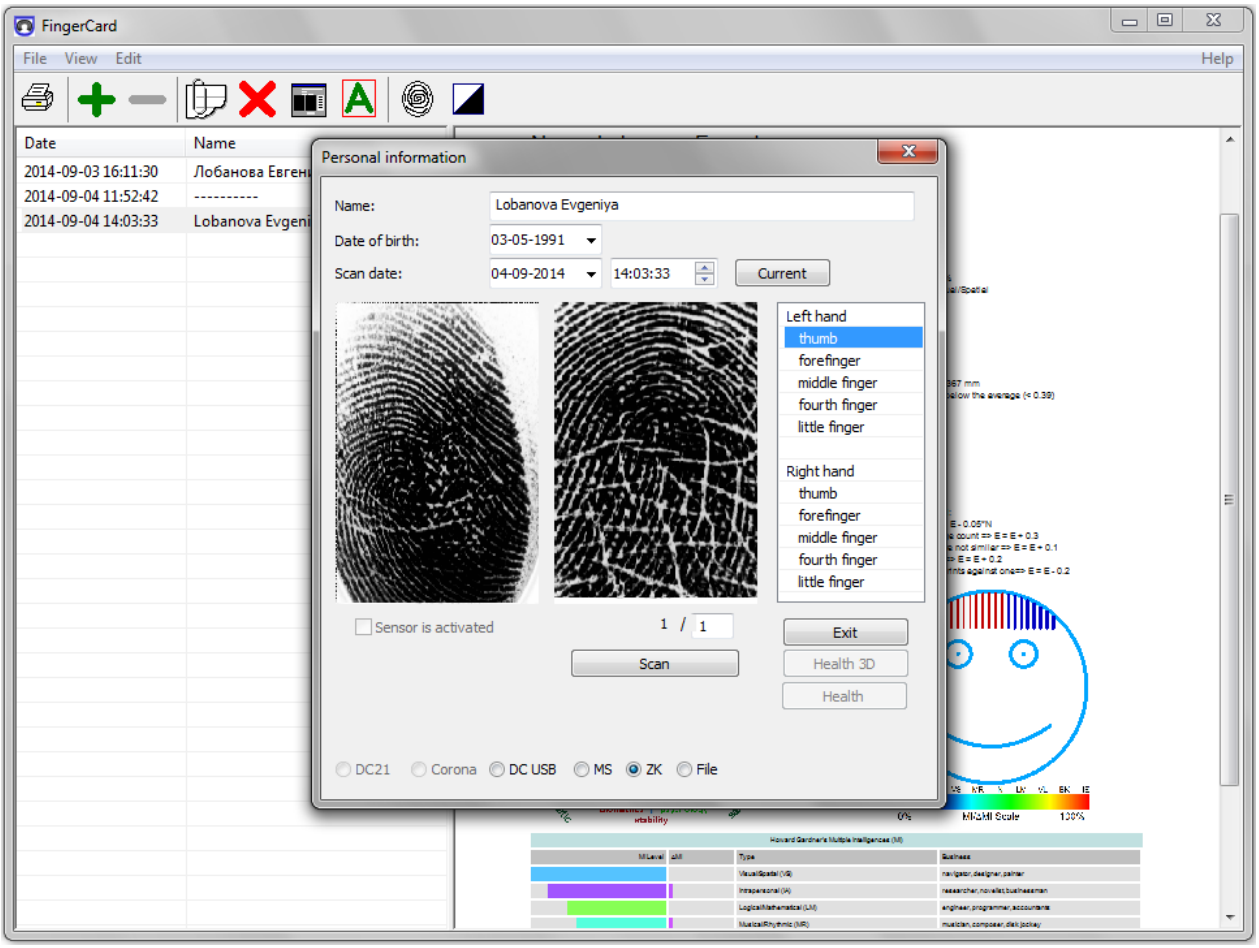


Fig.1. Selection of DC_USB device (DC21U) in FingerCard program. MS – Microsoft Fingerprint Reader

6.1. DC-21U drivers installation

1. Installation of drivers and the software is necessary for making before the first connection of the device to a computer;
2. From folder **CD:\BioFinger\Drivers\Drv** install file **CyBulkSw_1008.inf** For this purpose click of the right button of the mouse to cause the options menu and to choose the item **«Install»** (fig. 2);
3. From folder **CD:\BioFinger\Drivers** install updating Windows FrameWork 1.1., having started file **«dotnetfx11.exe»;**
4. From folder **CD:\ BioFinger\Drivers** install drivers **«DC USB CP.msi»;**
5. The software of ELSYS Corp. located on a CD disk, allows to work and with old versions of fingerprint scanners. If old scanners DC-21 or DC-21_Corona will be used, it is necessary to install in addition the driver for these devices;

6. Connected scanner to PC. **Note, scanner DC-21U work only with USB2.0 or 3.0 ports;**
7. To connect the scanner, when Windows will find out the new device, to specify the same driver which has been installed in item 2.

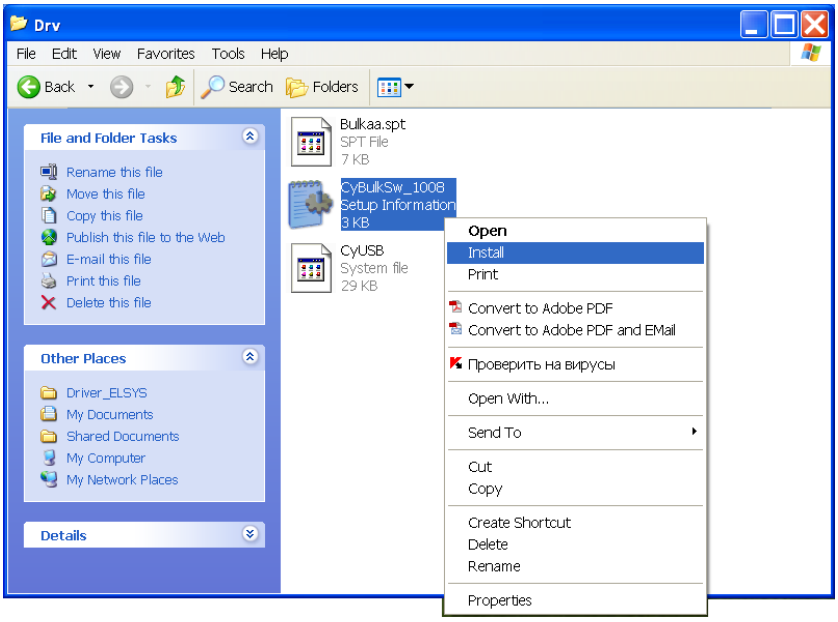


Fig. 2. DC21U driver installation

8. After Windows message, that the device is connected and ready to work, it is necessary to check up in system properties, that the scanner has been recognized as EZ_USB_Port_0547_1008 (fig. 3)

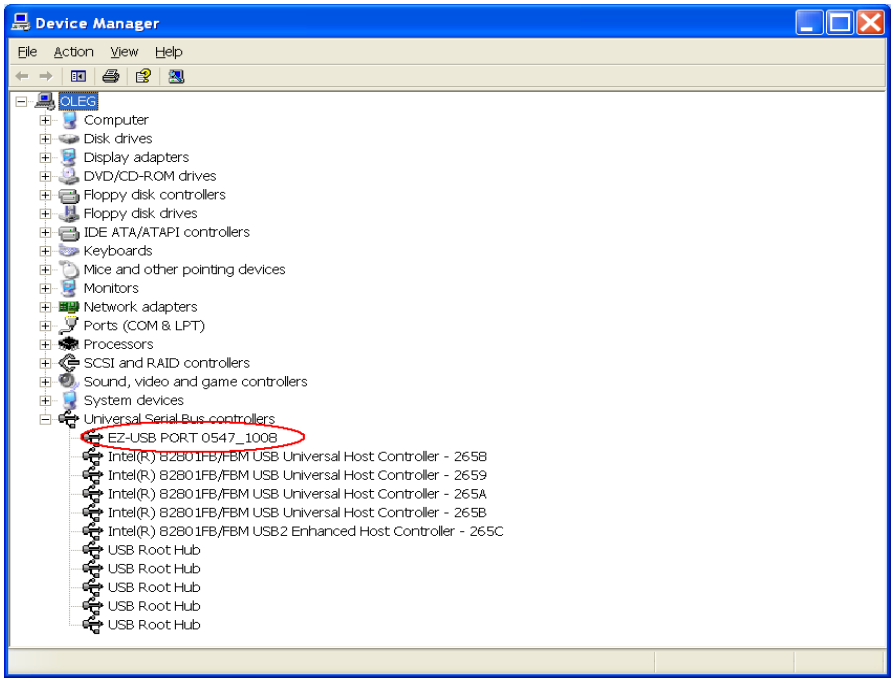


Fig. 3. Windows has connected to DC-21U scanner

9. Using **«Control panel»** run the program **«DC USB Devices»** and check serviceability of the device (fig. 4, 5).

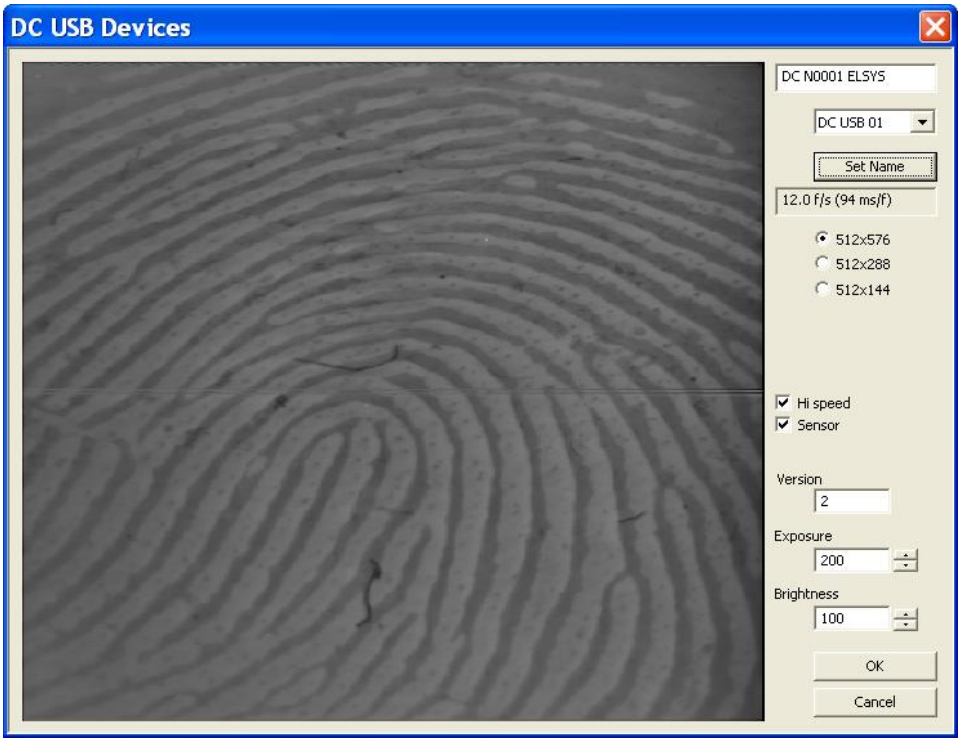


Fig. 4 check serviceability of the device

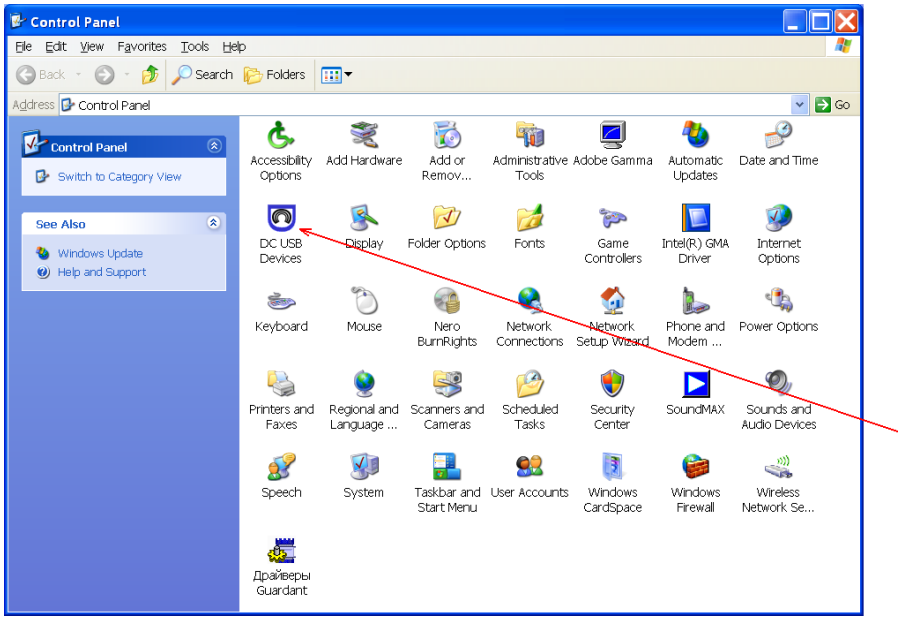


Fig. 5 DC USB Devices pictogram location in the control panel

10. Install the driver of DC-21U device FOR ALL USB PORTS of a computer!!!! Connecting to them the scanner by turns.

Attention! After finishing of scanner drivers installation is necessary to restart your computer.

6.2. ZK-4500 (ZK-7500) drivers installation

Run Setup.exe file from CD from the package of ZK-4500 (ZK-7500) scanner and go on corresponding instructions.

6.3. FingerCard program installation

For installation of FingerCard program on your computer it is necessary to execute the following actions:

1. To insert CD ROM a disk into the CD - drive of your computer and to copy the catalogue \Software\FingerCardUSB\ on a hard disk of your computer.
2. Run FingerCard.exe programs and check up serviceability of the scanner.

   Note, that in some programs it can be demanded in addition to specify with what model of fingerprint scanner you work. On fig. 1 was selected DC21U scanner.
3. In FingerCard program to make a choice of folder for record dactocard and results of the analysis (see item 7.6 of the present description).

4. Run FingerCardSetup.msi file (downloaded from internet) and goes for Windows instructions.
5. In the installation window press button Next.
6. Accept license agreement and press button Next.
7. In the shown window write the way to catalog with FingerCard program operation and press button Next.
8. In the appeared window press button Next for installation program on your PC.
9. For finishing installation process press button Close on the window.
10. After installation you will see the FingerCard mark on PC screen.
11. Restart your PC

6.4 FingerCard activation

Note

1. Activation procedure is needed to do only one time during the first program start.
2. One activation code gives one working place for Biofinger operation.
3. Program activation is possible only for PC connected to the internet.

6.4.1. Standard activation

1. Start FingerCard.exe program from the screen of your PC.
2. You see activation window shown on the fig.6

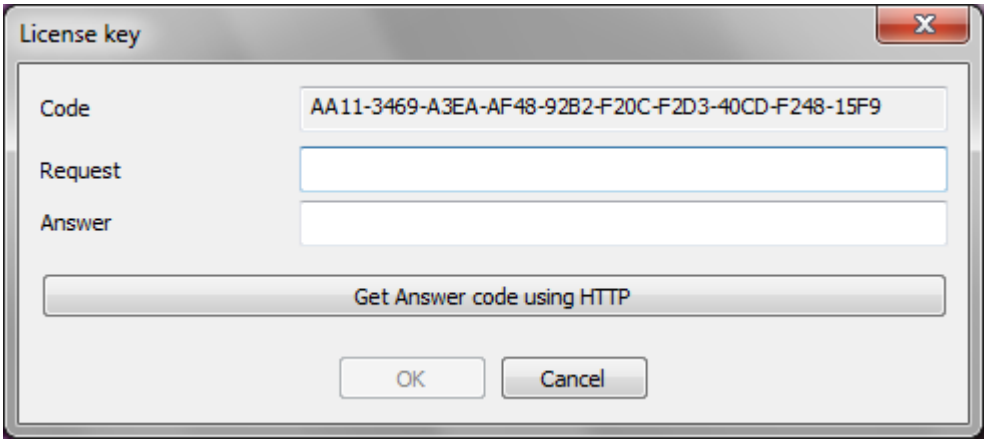


Fig. 6 First start of activation window.

3. Put activation code received from the e-mail into area «Request» (fig.7).

4. After putting code into area «Request» press button «Get Answer code using HTTP».
5. Activation code would be tested by internet testing and after successful confirmation you receive confirmation code (fig 8)

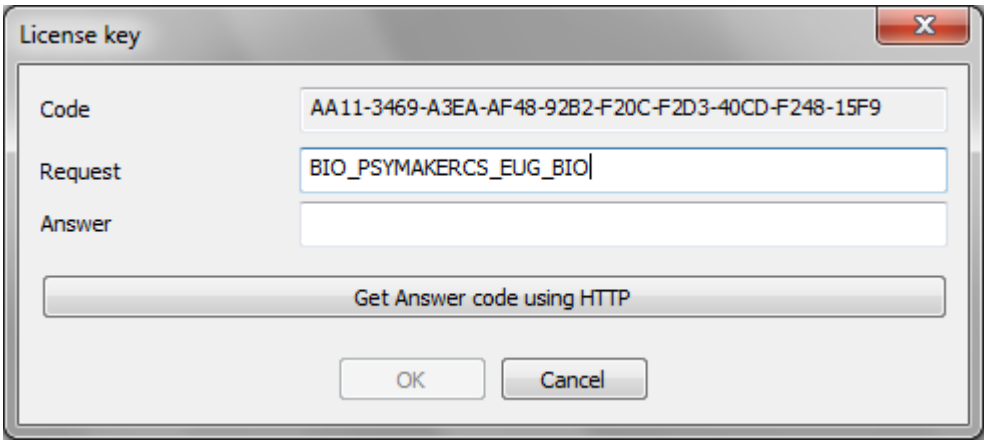


Рис. 7. Putting code into «Request » area

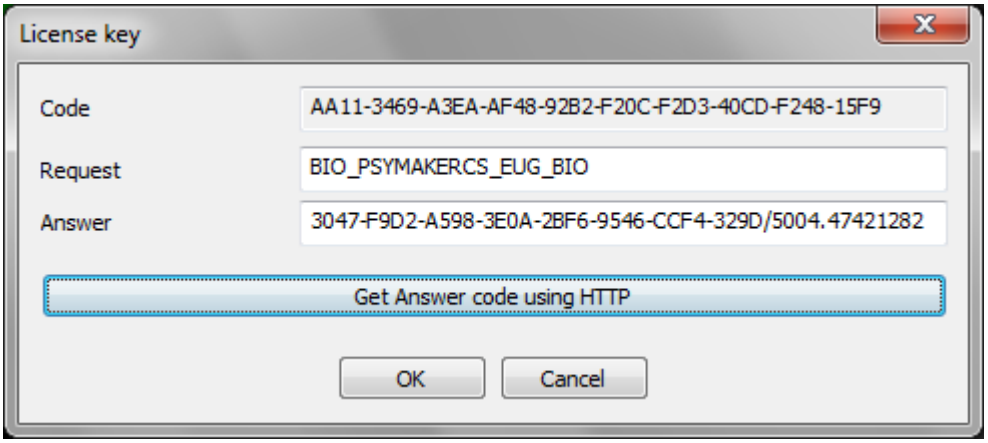


Рис.8. Successful activation procedure

6. Press button OK and FingerCard program starts automatically
7. Start operation with FingerCard program.

6.4.2. DEMO mode activation

FingerCard program have an ability to start in DEMO mode 5 times.

1. Start FingerCard.exe program from the screen of your PC.
2. You see activation window shown on the fig.6
3. Put «DEMO_FC» into area «Request» (fig. 9).
4. After putting code into area «Request» press button «Get Answer code using HTTP».

5. Activation code would be tested by internet testing and after successful confirmation you receive confirmation code (fig. 10)

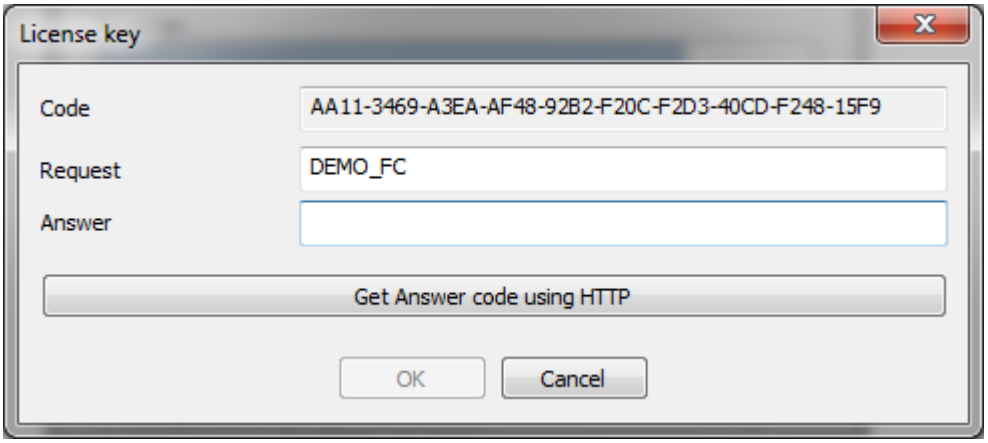


Fig. 9. Activation in the DEMO mode

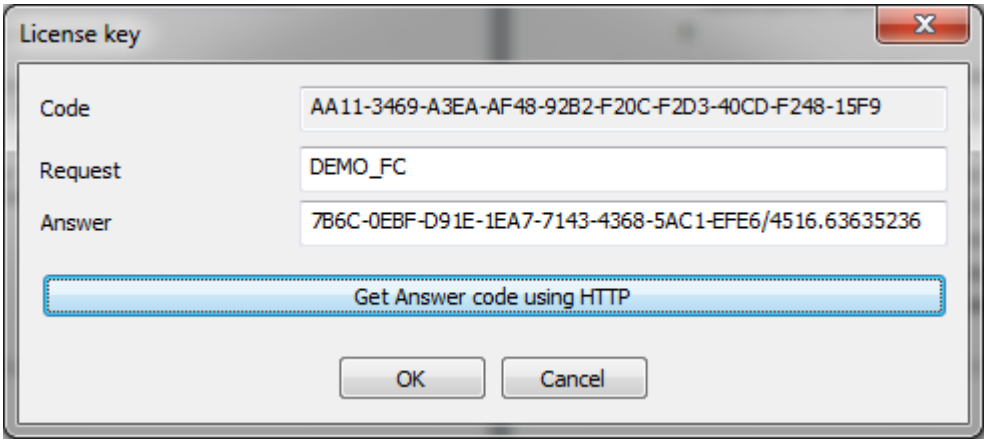


Fig. 10 Successful activation procedure.

6. Press button OK and FingerCard program starts automatically
7. Start operation with FingerCard program.

6.5. Reinstallation of FingerCard

The program FingerCard (Inet version) can be installed on the same computer or removed from one computer and installed on another computer. This operation is also recommended before any upgrade SW or HW on PC.

For this purpose it is necessary to execute the following actions:

1. In the submenu «Help» to choose item «About FingerCard…»
2. Should appear the window with button «Unregister key» (fig. 11)

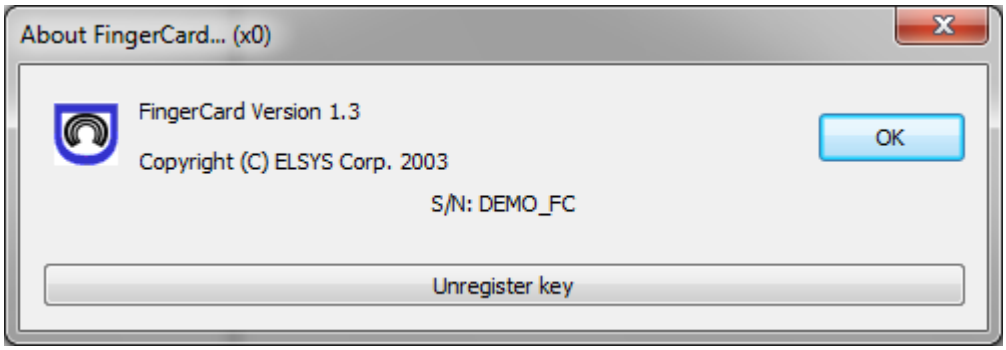


Fig. 11. The window with button «Unregister key» for reinstallation program.

3. To check connection of the PC to the Internet
4. To press button «Unregister key»
5. After this action, the program must close and you can do the upgrade computer.
6. After the upgrade, you can restart the program on the computer and enter your personal activation code.

7. FingerCard. User guide

7.1. Main module (FingerCard.exe)

The program FingerCard allows removing and saving in a database 10 fingerprints of a person, to provide processing, and dermatoglyphics analysis, to define psycho-physiological parameters of the person, temperament, Multiply Intelligences Levels and printing a fingerprint portrait of the person (fig.12).

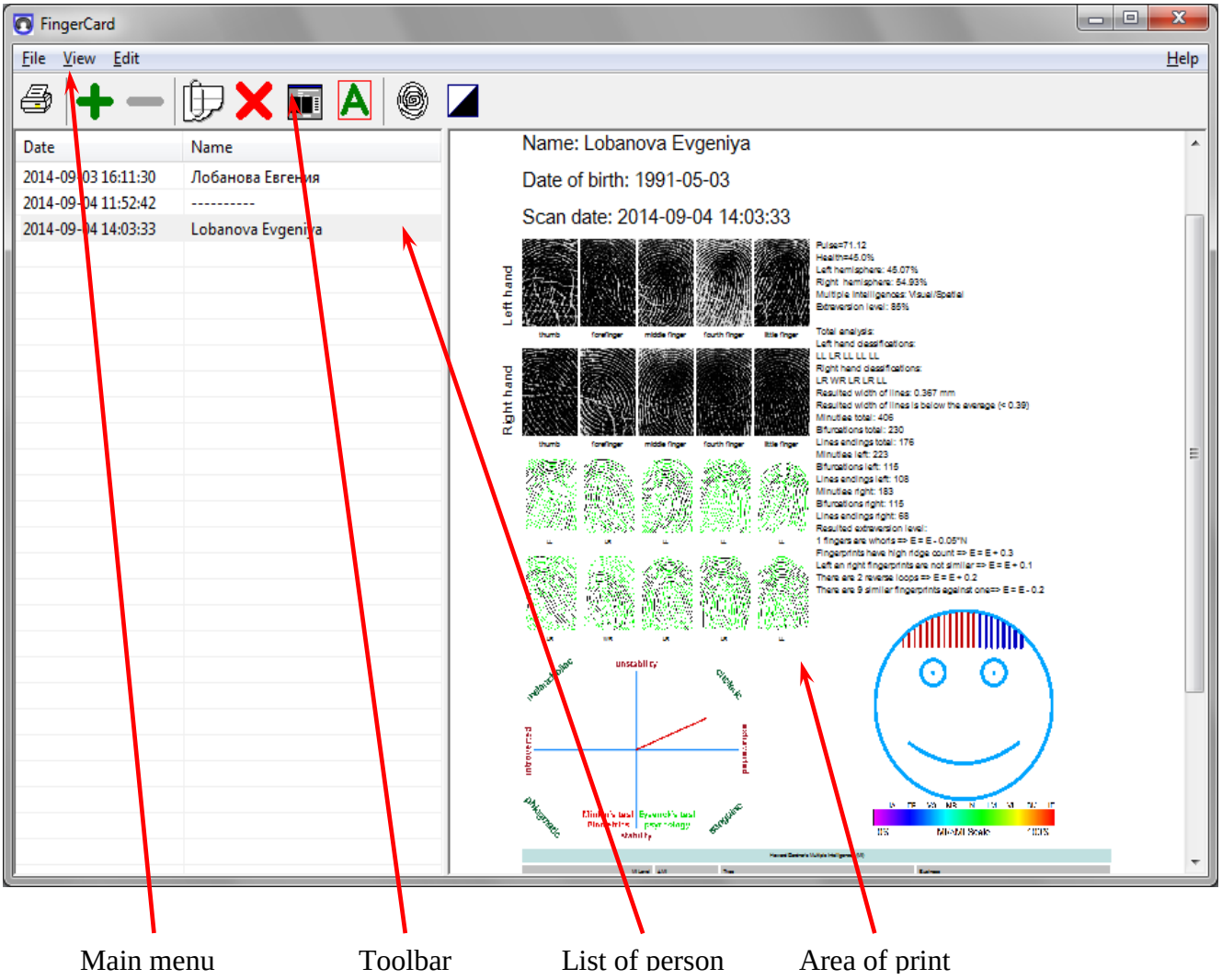
Main window (fig. 12) consists of the following parts:

- main menu;
- list of person;
- area of print;
- toolbar;

The list of persons (fig. 12) is intended for display of the list of records of fingerprint archive and a choice of record for viewing and a print.

At a choice the current record is allocated with the cursor, corresponding to it fingerprints, results of the analysis and the demographic information are displayed in the area of print.

Area of print (fig. 10) it is intended for display fingerprints, results of the analysis and the demographic information, corresponding to the current record of the list of person.



Main menu Toolbar List of person Area of print

Fig. 12. Main window of FingerCard.exe

7.1.1. Main menu

The main menu contains the following items:

- **File**
- **View**
- **Edit**
- **Help**

Menu «File»

«File» menu (fig. 13) contains the following items:

- «Change archive folder...»;
- «Print… Ctrl+P»;
- «Print Preview»;
- «Print Setup…»;
- «Exit».

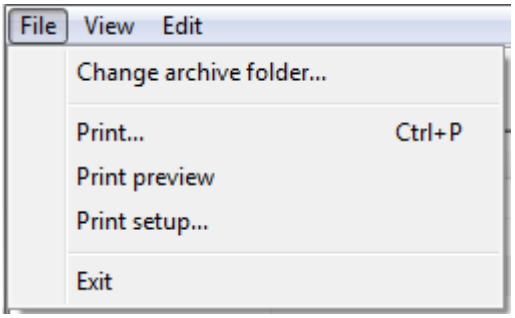


Fig. 13 Menu «File»

Item **«Change archive folder … »** it is intended for change of a place in which the data of fingercard and results of the analysis (fig. 14) are stored.

Fig. 14 Archive folder installation

The item **«Print … »** is intended for a print of the information from area of print. It also can be caused on «Ctrl+P» or a command «Print … Ctrl+P» of toolbar. Before a call of a command «Print … » it is necessary to choose required record in the list of person. Thus in the area of print the corresponding demographic data and images of fingerprints will be displayed.

«Print Preview» - print preview of current frame from area of print (fig. 15).

«Print Setup…» - set printing options.

«Exit» - end of program.

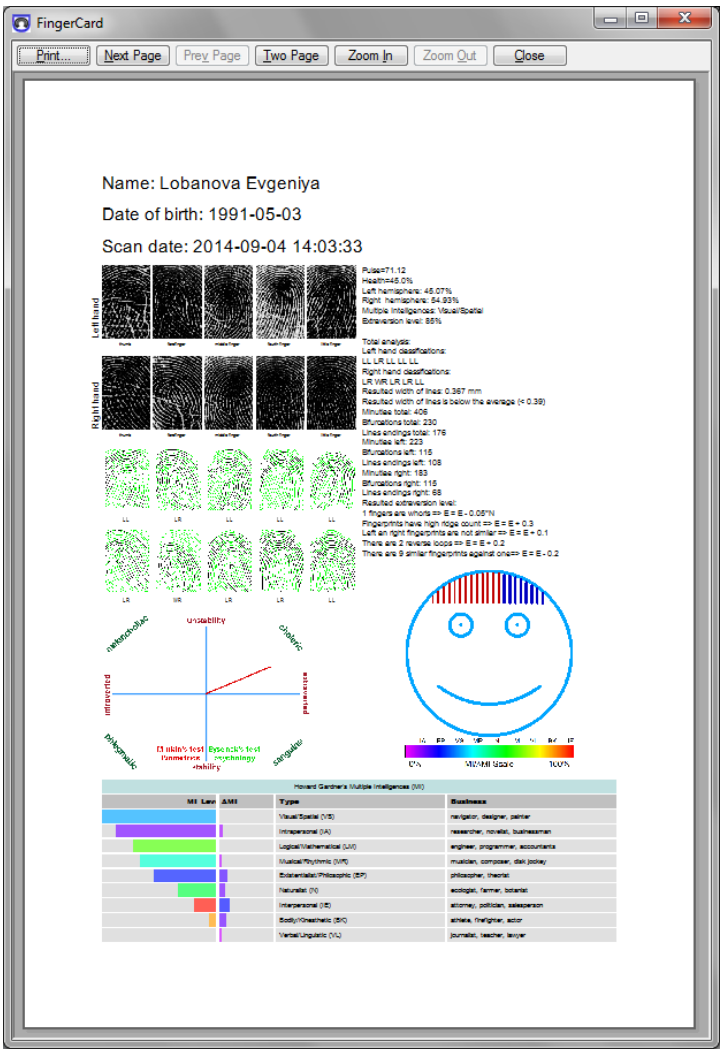


Fig. 15. Printing window

Menu «View»

Menu **«View»** (fig. 16) defines visible in the basic window information and contains the following items:

- «Zoom In Ctrl+"+"»;
- «Zoom Out Ctrl+"-"»;
- «Inversion»;
- «Leadership»;
- «Sort by name»;
- «Sort by date »;
- «Language».

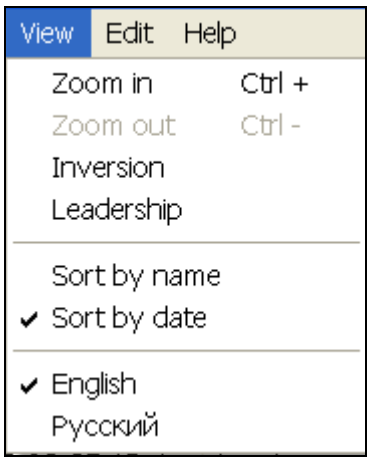


Fig. 16. Menu «View»

Items **«Zoom In Ctrl + » and «Zoom Out Ctrl + ”-”»** are intended for change of scale of supervision of the information in the area of print.

Items **«Sort by name»** and **«Sort by date»** are intended for change about sorting records in the list of person.

The item «**Inversion»** is used at work with different types of fingerprint scanners. For different types of scanners papillary lines are treated by their drivers as a line of «black» or «white» color depending on model of the scanner. For unification of representation of the information on a fingerprint in the given program the opportunity of inverting of colors «white – black» is entered.

The item **«Leadership»** defines will be showed in the area of print the information on parameter «leadership» whether or not.

The item **«Language»** - select language of program text and help.

Menu «Edit»

«Edit» menu (fig. 17) contains following items:

- «New record Ctrl+N»;
- «Delete record Del»;
- «Analyse»;
- «Eysenck’s test»;
- «Personal information F7».

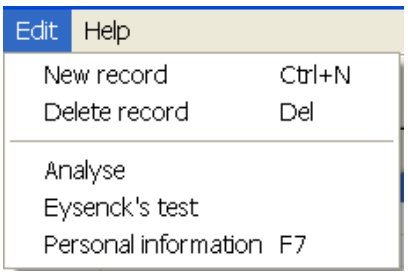


Fig. 17. Menu «View»

Items « **New record Ctrl+N** » **and** «**Delete record Del**» are intended for input of new record in list of person or remove of the selected record from list.

Item « **Personal information F7** » it is intended for a call of a window for input of the demographic data and fingerprints scanning (fig. 22). It also can be caused on F7 or the button «Enter personal information... F7» of toolbar.

The item **«Analyse»** is intended for a call of a window for analysis of fingerprints (fig. 29). It also can be caused by button «Analyze» of toolbar.

The item « Eysenck's test » is intended for run traditional «question- answer» Eysenck's test;

Menu «Help»

«Help» menu (fig. 18) contains the following items:

- «About FingerCard…»;
- «Help F1»;

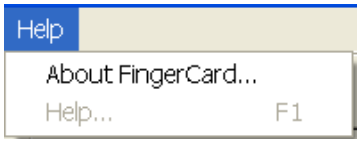


Fig. 18. Menu «Help»

Use **«About FingerCard…»** …» command to view the information about software version.

Use «**Help**» command to call the help system.

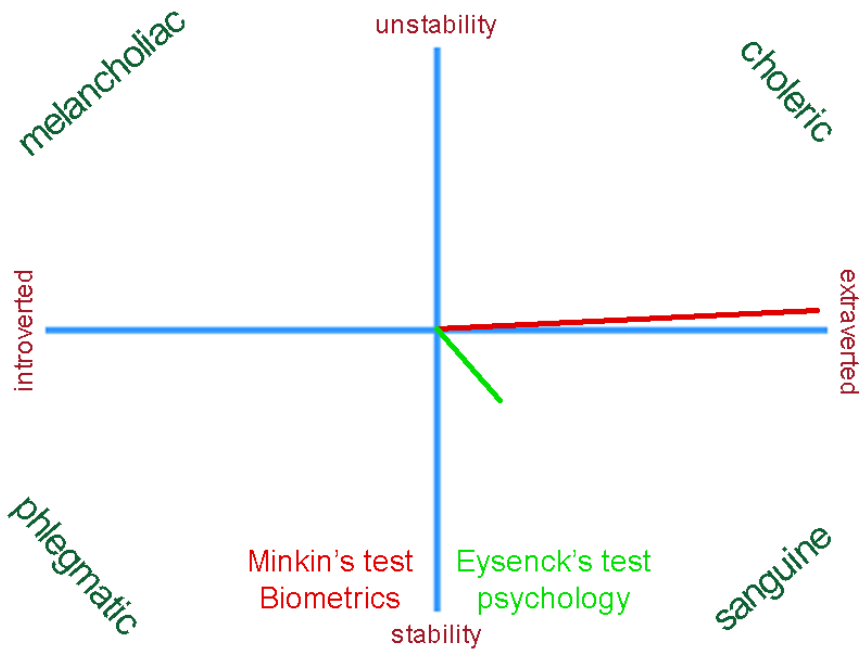


Fig. 19 Comparative results of the analysis for the nature of the biometric and psychological testing

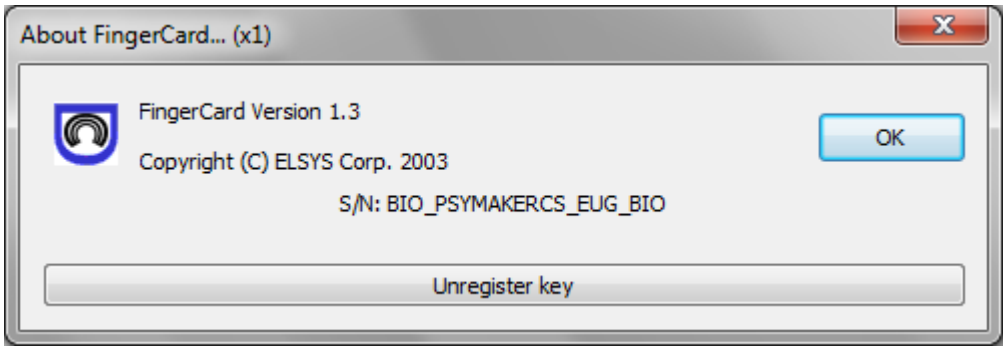


Fig. 20. Information about program version

7.1.2. Toolbar

The toolbar (fig. 21) duplicates, correspondingly the following menu items:

- – «Print Image...» (Menu «File»);
- – «Zoom in Ctrl+» (Menu «View»);
- «Zoom out Ctrl-» (Menu «View»);
- – «Create new record Ctrl+N» (Menu «Edit»);

- – «Delete record Del»; (Menu «Edit»);
- – «Personal information F7» (Menu «Edit»);
- – «Analyse» (Menu «Edit»);
- – «Contrast increasing F6»;
- – «Inversion » (Menu «View»).

Fig. 21. Toolbar.

7.2. Fingerprint loading

7.2.1. Fingerprint scanning

Scanning of all fingerprints, repeated scanning of separate fingerprint, choice for work of model of the scanner, filling of demographic information fields (a surname, a name, a patronymic, date of a birth and date of scanning), start mode of health check is made in a window **« Personal information »** (fig. 22).

The call of a window in the program can be executed the next ways:

1. Select item «Personal information F7» in «Edit» menu;

2. Select button «Enter personal information» in toolbar;

3. Double click of the left button of a mouse above the chosen line in the list of persons;

4. Double click of the left button of a mouse above the image of a fingerprint in the field of a print of the chosen person from the list of persons. This mode also is used for repeated scanning the chosen fingerprint;

For scanning fingerprints it is necessary to execute the following actions:

1. To choose type of the scanner of fingerprints which is connected to a computer;
2. input demographic data of person;
3. Having pressed button «Current» to install date of scanning.

Note, that the data in archive for each person are stored in separate folders, as a name of a folder date of scanning is used. For example, the folder «20070624190941» has been created 24-06-2007 years at 19 o'clock 09 minutes and 41 second;

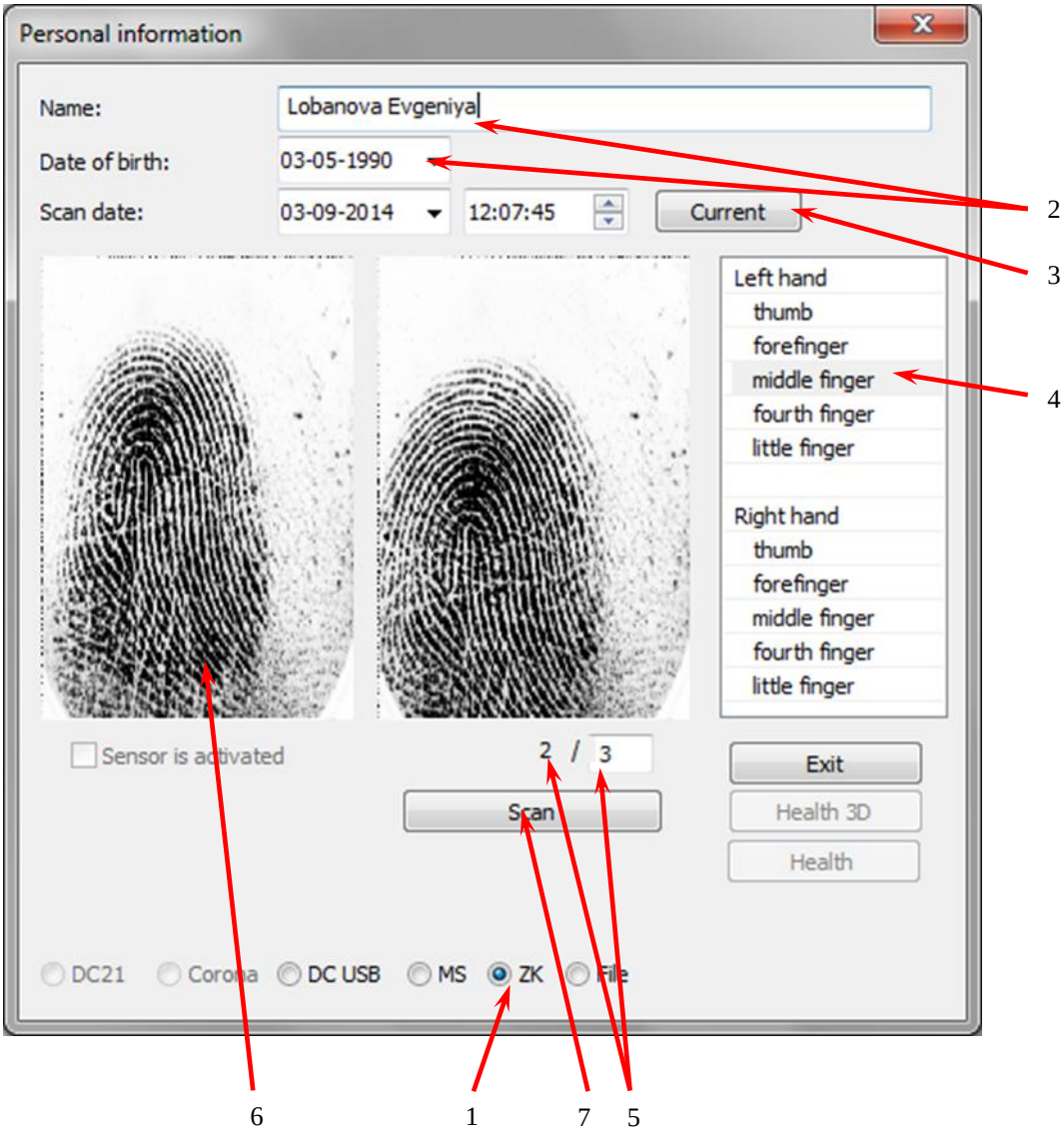


Fig. 22. Scanning fingerprints window

4. To choose from what finger to begin scanning.
5. To put on a finger in the scanner. In the left window the image of a fingerprint received from the scanner will appear.

   Note, scanning of fingerprints will be possible only after the previous finger will be measured;

   For achieving more accuracy in fingerprint details and minutiae calculation it is recommended to provide several inputs (3 on the fig. 22) of one fingerprint, especially for difficult fingers.

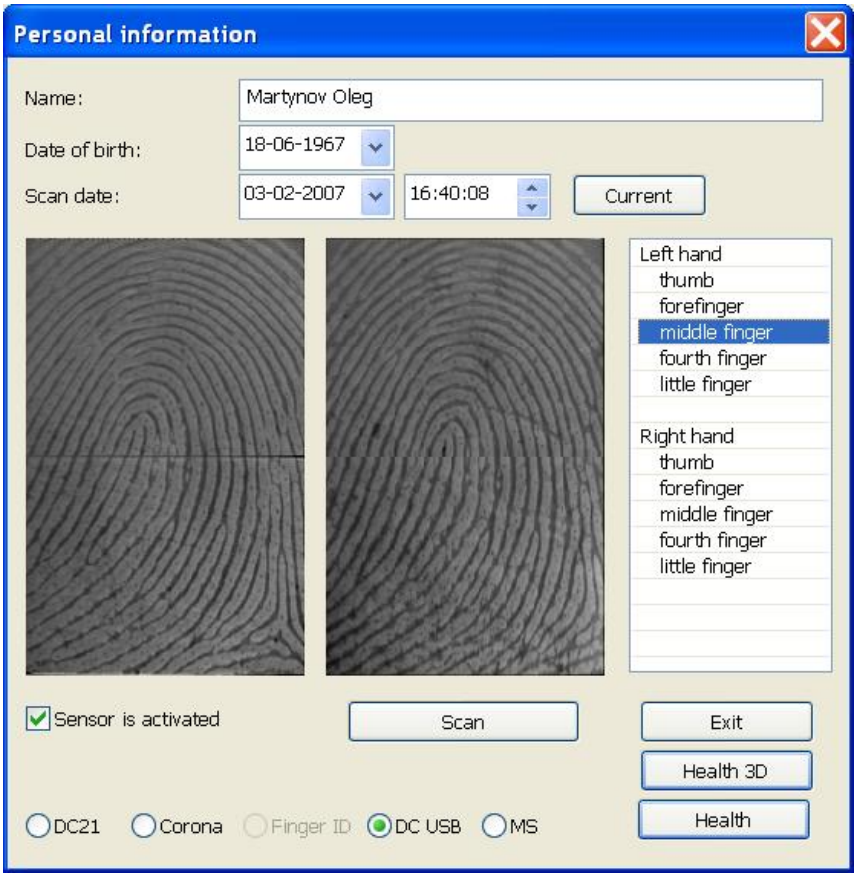


Fig. 23. Scanning of an index finger of the left hand has passed successfully. The finger is correctly located in scanner.

Note special attention, to correctness installation of a finger in scanner. The finger should be installed so that the center of the basic pattern of a print has been located on the middle. In figures 24 and 25 in a right window show the correct arrangement of a fingerprint, and in the left window - wrong as the center of figure (it is shown red cross) is displaced to edge of a scanner surface.

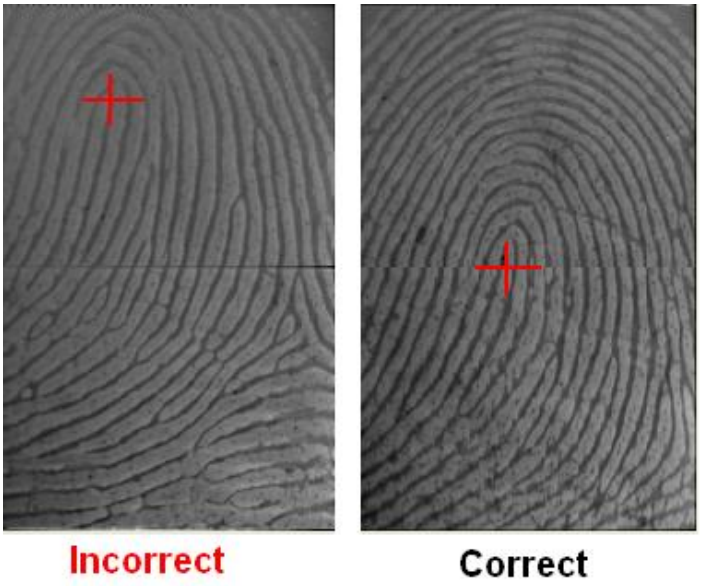


Fig. 24. Wrong (left) and correct (right) finger position in scanner

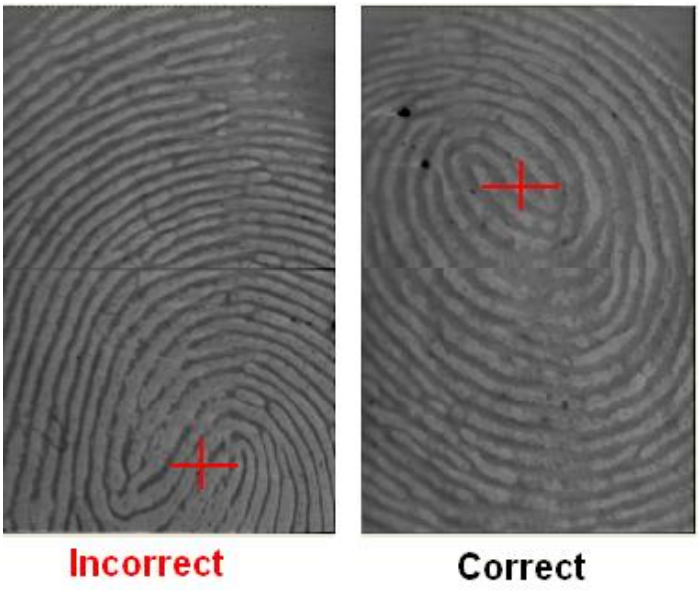


Fig. 25. For example, correct and wrong position finger in scanner

6. To press button «Scan». In a right window the scanned image of a fingerprint will appear, than it will be saved in archive

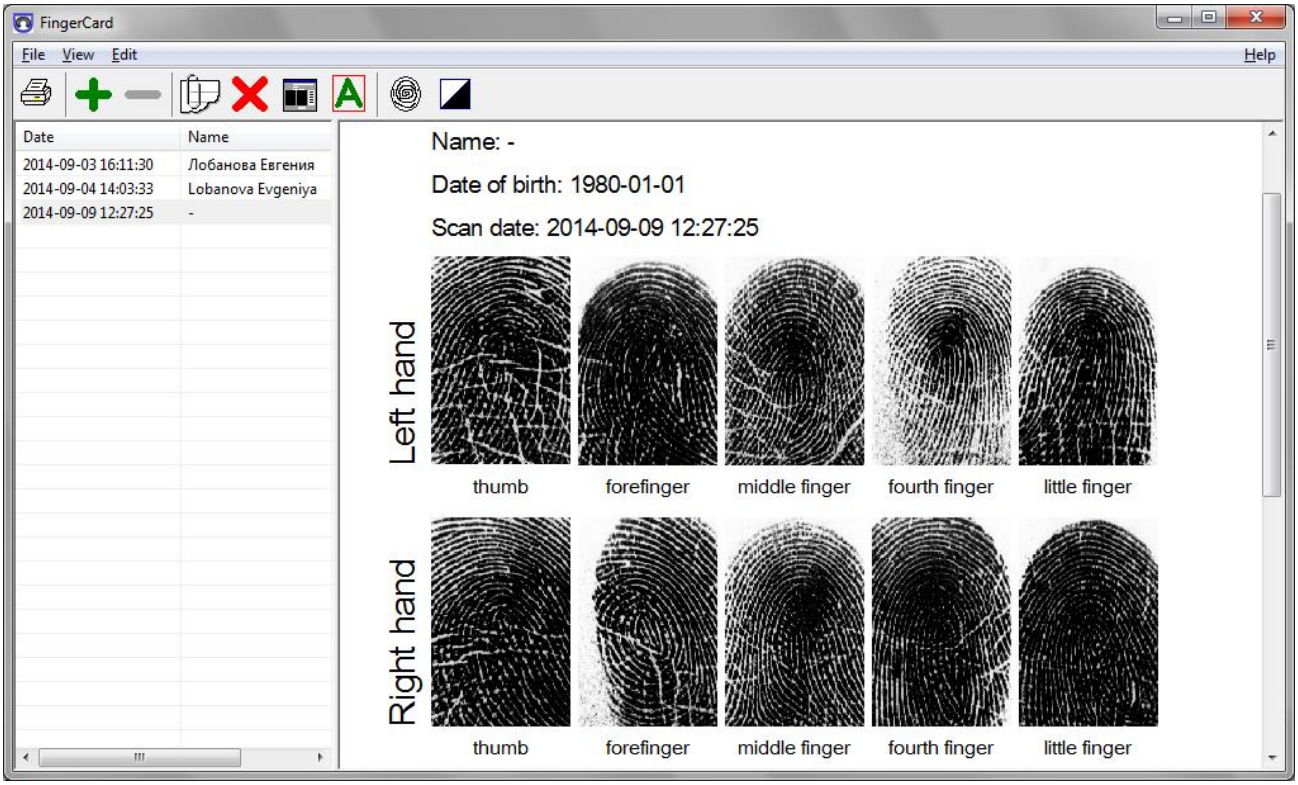


Fig. 26. Fingerprints before analyze

7.2.2. Fingerprint input from file

Biofinger system allows input fingerprints scanned on any scanner and even inked printed on paper and scanned by usual scanner. In this case fingerprint images usually stored as bmp files. You can stand mark for downloading fingerprints from file (fig. 27) and stand corresponding resolution of fingerprint scanning. So you can input any finger or 10 fingerprints into Biofinger system and conclude remote dermatoglyphic analysis for any person distantly sent to you fingerprints,

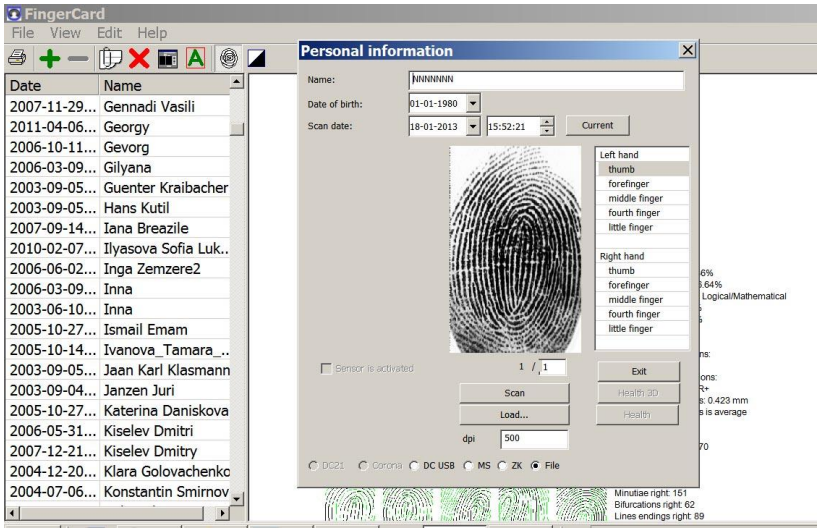
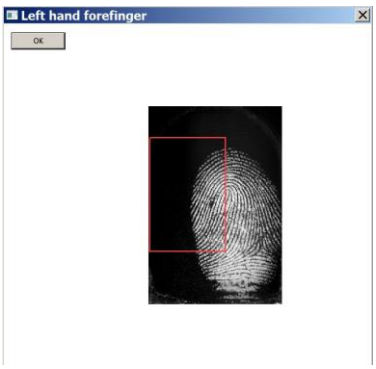


Fig. 27. Fingerprint input from file. Resolution 500 dpi

During the input of fingerprint file you need to move image and select central area of fingerprint (red area) as it shown on the fig 28b instead of original scan shown on the fig. 28a.



a *b*

Fig. 28. a. Original scan, b. Selected area of scan

7.3. Fingerprint analyse

7.3.1. Automatic mode

The analysis of the scanned fingerprints is made in a window «Analysis» (fig. 29).

The call of **«Analyse»** window in the program can be executed the next ways:

1. Select item «Analyse» in «Edit» menu;

2. Select button «Analyse»  in toolbar;

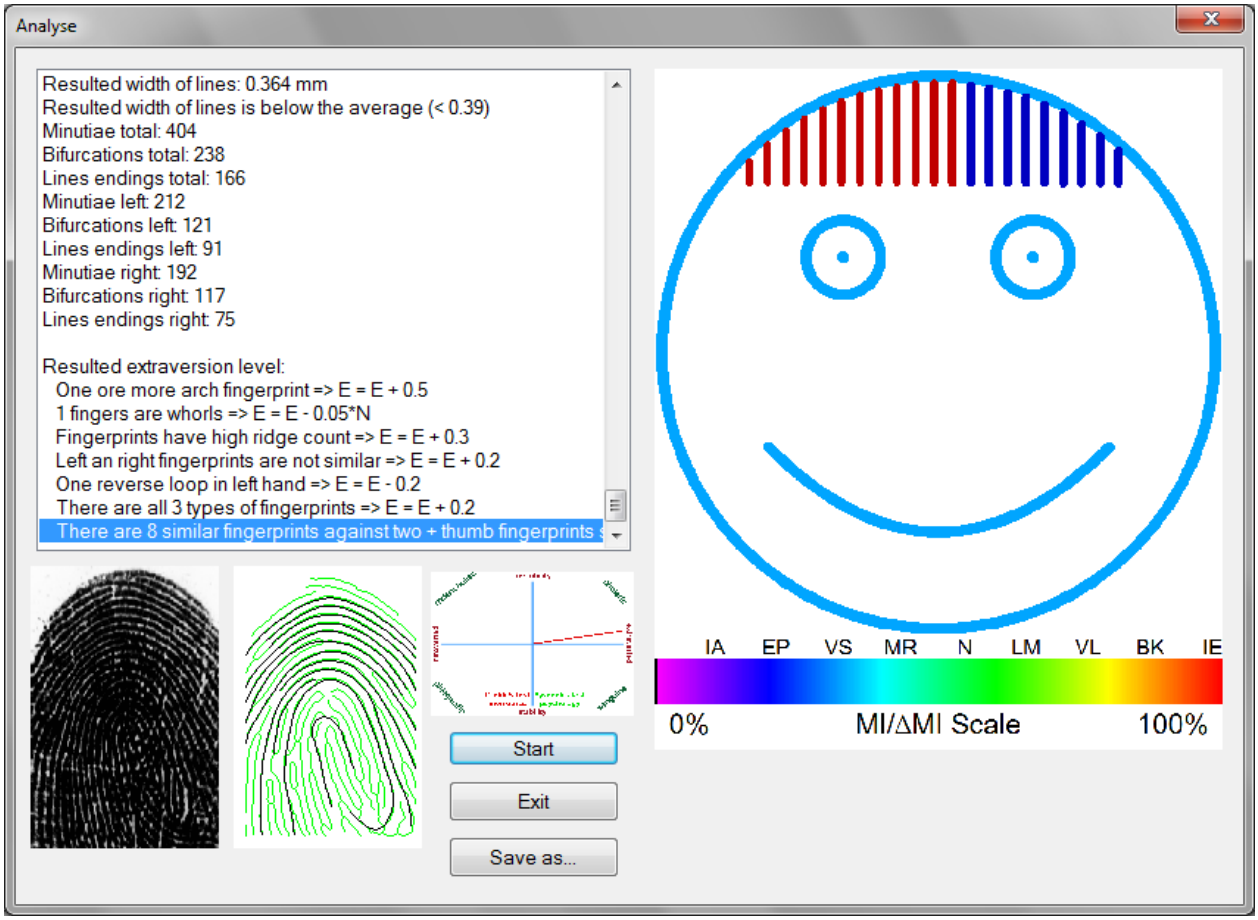


Fig. 29. Window for analyze of fingerprints

After pressing buttons «Start» the analysis of your fingerprints will be started. Results of the analysis will be given at once on the screen as the text data and color changes of «a conditional portrait» (fig. 29) and also results will be automatically saved in a folder of archive in corresponding files.

If necessary results of the analysis of fingerprints can be saved in any place which can be specified, having pressed «**Save As…**».

Information about the results of the analysis (fig. 30) and the graphical testing results will display after exiting of the analysis window in printing area in the main window.

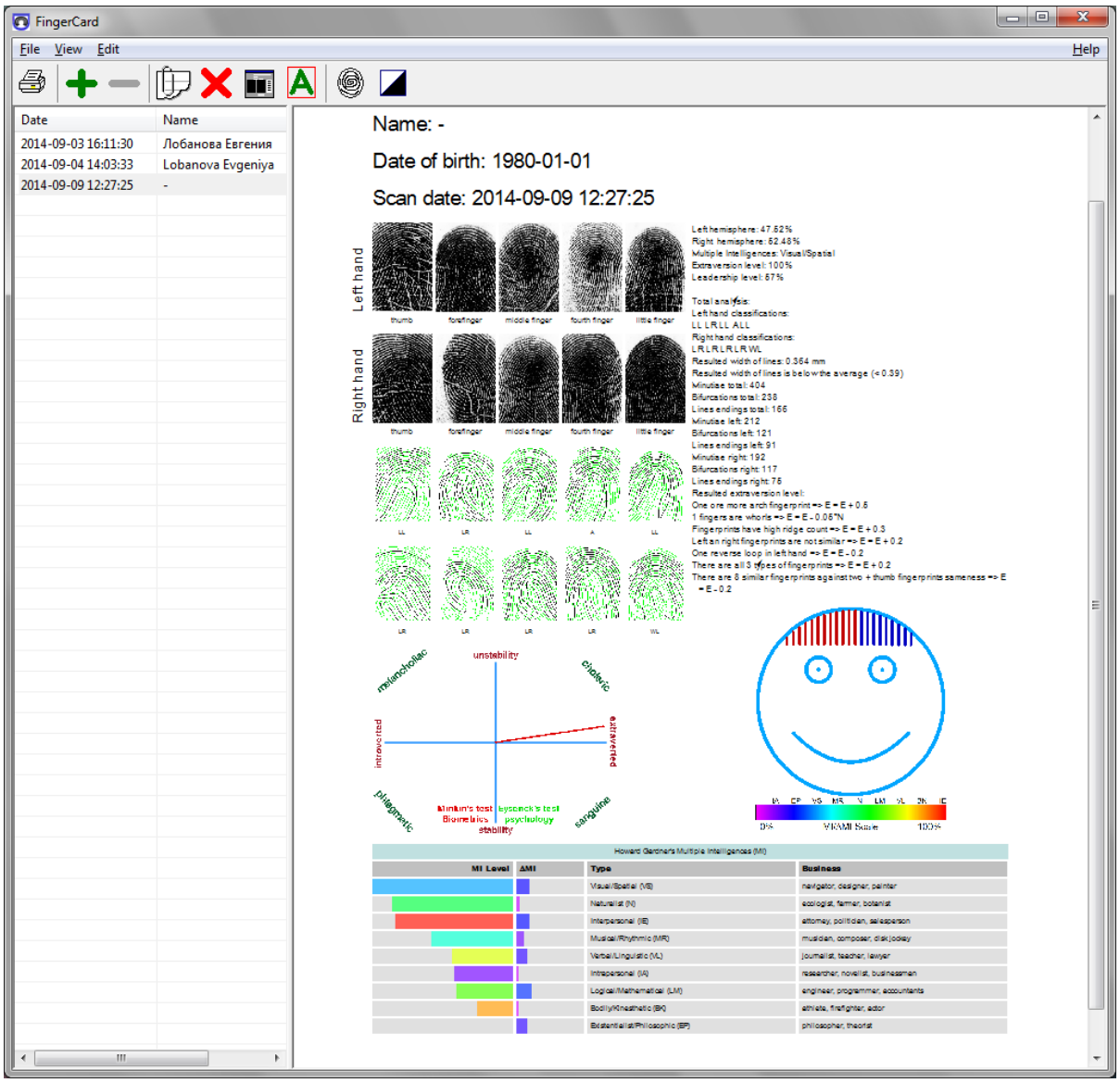
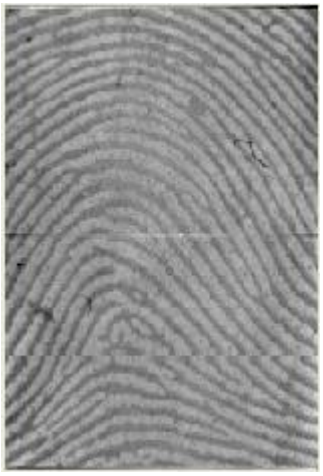


Fig. 30. Analysis results in the main window

7.3.2. Manual mode

If fingerprints of the person not so high quality and the program in an automatic mode, in your opinion, has not correctly defined type of a pattern of a print, than the opportunity to enter type of figure in a manual mode is given you. For this purpose it is necessary to bring the mouse pointer to figure of a print of a concrete finger, to press the right button of a mouse and to choose required type of a print (fig. 31). Types of fingerprints which have been changed by the user, in the field of a print will be designated by symbol «+», for example, LR + or WL +.

Note, all changes will enter actions only after the analysis of prints will be repeatedly started.



Fingerprint type: A (arch)

Fingerprint type LL (left loop)

Fingerprint type LR (right loop)

Fingerprint type WL (left whorl)

Fingerprint type WR (right whorl)

Fingerprint type C (Composition of two figure)

Fig. 31. Fingerprint types

If after the made changes it is necessary to return to a variant which was distinguished by system in an automatic mode, than in the appeared list it is necessary to choose the top line «---».

Note, all changes will enter actions only after the analysis of prints will be repeatedly started.

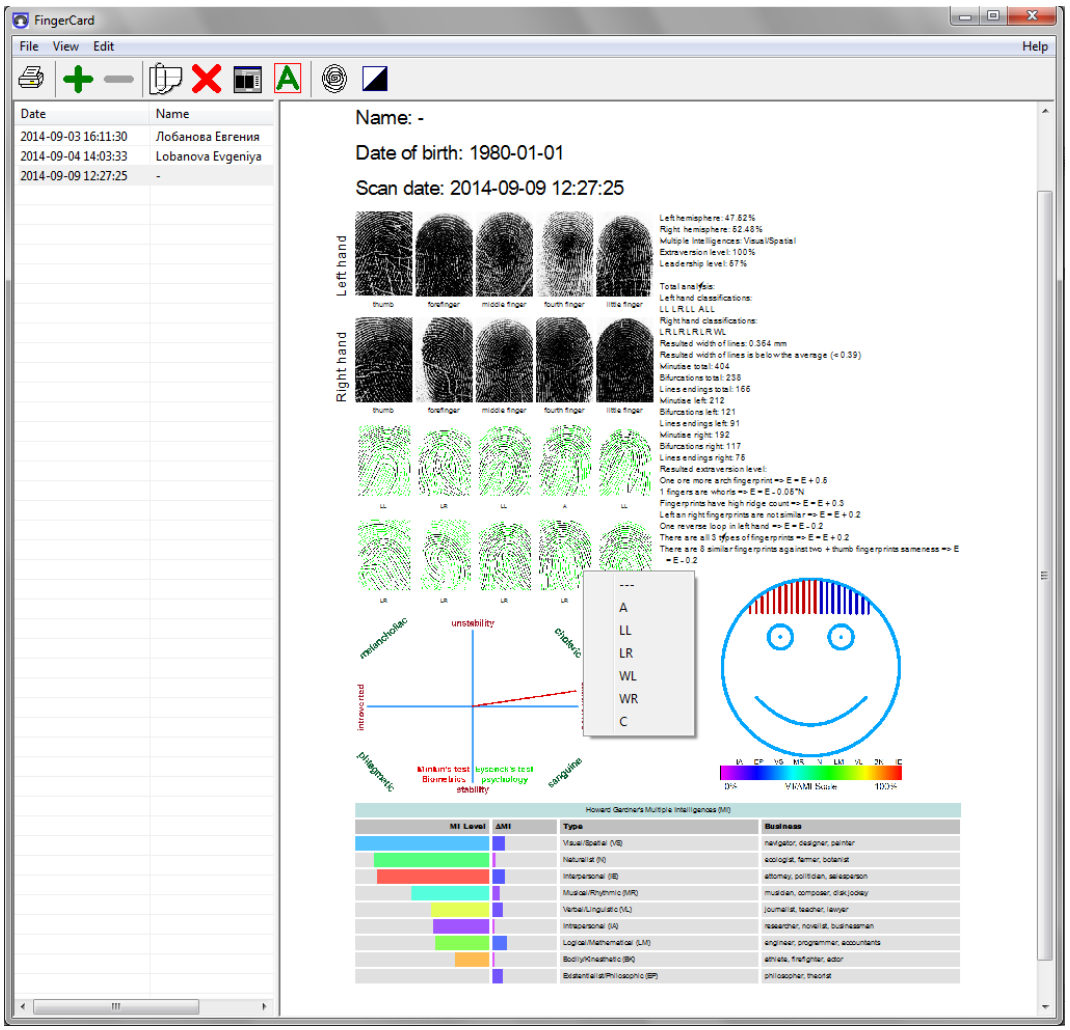


Fig. 32. Input of fingerprint image type in a manual mode

7.3.3. Health testing

Note, this mode is only for DC21U scanner.

The program allows checking health of the person and gives out result on the basis of the analysis pulse waves in a finger of the person. The analysis pulse waves is made on 10 zones: the first zone - all finger, then area of a finger is broken into 9 zones and the analysis of pulse in each their these zones is made. For check of health it is necessary to execute the following actions:

1. To put one of fingers on a scanner surface.

2. To achieve a precise picture, to weaken a finger and strongly to not press on a surface of the scanner. Testing will borrow some tens of seconds, during this time the finger should remain motionlessly on a surface of the scanner.

3. To press «**Health**». In the appeared window (fig. 33) the process of measurement of parameters will be displayed and to be showed a picture of your 3D pulse.

4. After the ending of check in the field of print and in a window «Analysis» numerical value of a parameter of your health (in %) will be displayed, and also color of «a conditional portrait» will correspond on a scale to a parameter of your health.

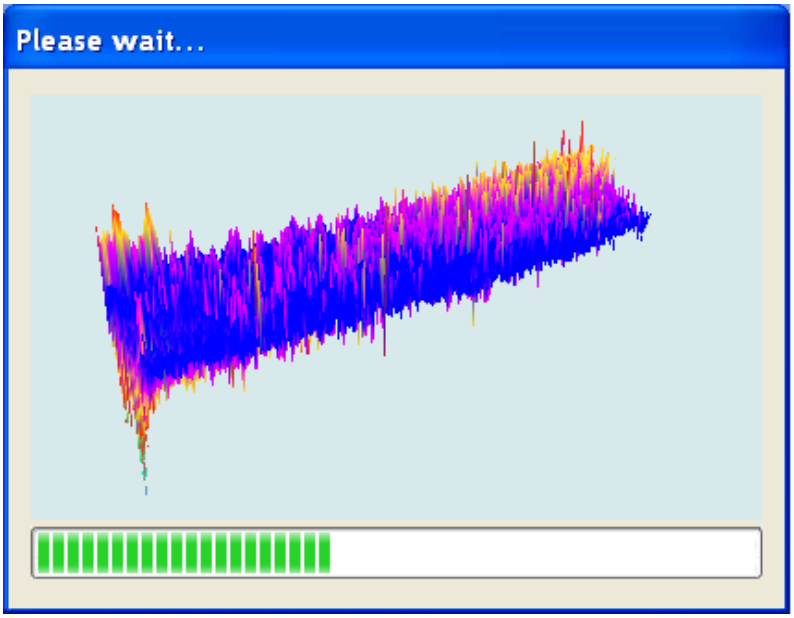


Fig. 33. 3D pulse

7.4. Testing results

All results of scanning of fingerprints, the entered demographic information and results of the analysis of fingerprints are automatically saved in a database. Item «**Change archive folder …** » the menu «File» it is intended for change of a place in which the dactocard data and results of the analysis (fig. 34) will be saved.

Fig. 34. Select folder for saving archive and results

For each person in a database the folder is allocated. As a name of a folder date of the first scanning of prints is used. For example (fig. 35), the given folder has been created 02-07-2007 years at 12 o'clock 08 minutes and 43 seconds.

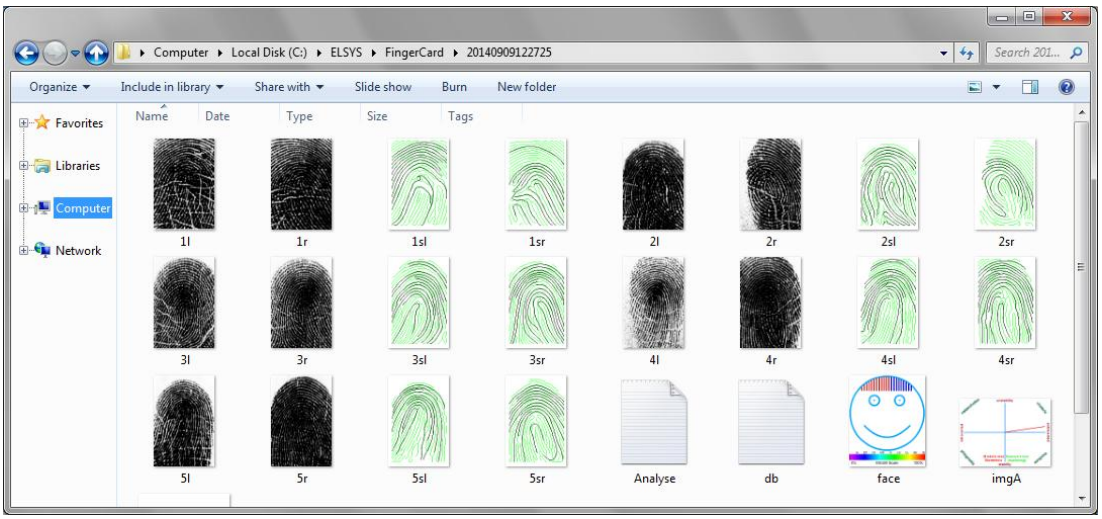


Fig. 35. List of file in person folder

The following data are stored in each folder:

- Pictures of scanning fingerprints (files 1R-5R, 1L-5L)
- «Skeletons» of fingerprints recognized by system (files 1sR-5sR, 1sL-5sL)
- The demographic information on the person and the basic type of his fingers patterns (file db.txt)

```
BD    19800101000000
DATE  20140904115242
DPI
Extraversion      90%
FP0   LR
FP1   LL
FP2   LL
FP3   LL
FP4   LL
FP5   LR
FP6   WL
FP7   LR
FP8   WL
FP9   LL
ID    20140904115242
Inversion   0
Leadership  59%
Left_Hemisphere   49.726776%
MultiplyIntellegence    Visual/Spatial
MultiplyItellegenceA1   0.0%
. . . . . . . . . . . . . . . .
MultiplyItellegenceA9   100.0%
MultiplyItellegenceV1   22.9%
. . . . . . . . . . . . . . . .
MultiplyItellegenceV9   41.4%
NAME  ----------
ProcessImg  0
Right_Hemisphere  50.273224%
SCAN  ZK
```

Fig. 36. File db.txt content

- Results of fingerprint analyze (file analyse.txt)

FINGER N1: Lines count: 30 Lines processed: 13 Middle lines length: 175.833 Minimum line length: 37.035 Maximum line length: 527.898 Clockwise whorls: 0 Anticlockwise whorls: 2 Left loops: 1 Right loops: 2 Archs: 5 Unrecognized lines: 0 Unprocessed lines: 3 Bifurcations: 9 Lines endings: 10 Middle lines width: 6.677 Fingerprint class: WL.	Resulted extraversion level: Left an right fingerprints are not similar => E = E + 0.1 There are 5 similar fingerprints against 5 => E = E + 0.2 One reverse loop in right hand => E = E - 0.2
a	*b*
Total analysis: Left hand classifications: LL LR LL A LL Right hand classifications: LR LR LR LR WL Resulted width of lines: 0.364 mm Resulted width of lines is below the average (< 0.39) Minutiae total: 404 Bifurcations total: 238 Lines endings total: 166 Minutiae left: 212 Bifurcations left: 121 Lines endings left: 91 Minutiae right: 192 Bifurcations right: 117 Lines endings right: 75	Fingerprints analysis: Left hemisphere: 47.52% Right hemisphere: 52.48% Extraversion level: 100% Leadership level: 57% Stability level: 41% Multiple Intelligences: Visual/Spatial Intrapersonal 42.2% (v 4.4%) A=[l(9.82414+8.38587)+r(5.95679+7.6849)] . . . . .
c	*d*

Fig. 37. File analyse.txt content.
a - analysis results on a finger №1, b - features of fingerprints taken into account in the analysis, c - the results of the analysis on all fingers, d - analysis results on G. Ayzenk and on G. Gardner

- Results of the analysis of the person health with the data on pulse in each of 10 zones, calculated in two mode (file health.txt)

```
Pulse A0=69.06
Pulse S0=69.63
. . . . . .
Pulse A9=69.98
Pulse S9=69.97
Total:
Pulse=69.68
Health=100.0%
```

Fig. 38. File health.txt content

- Graphic representation of person analysis results as fingerprint portrait (file face.png - fig. 39). Left (right)-hemisphere it is displayed as vertical lines red (right-hemisphere) and blue color (left- hemisphere). Color of a contour of «a conditional portrait » characterizes parameter «Health». And a smile – extraversion and introversion. At introverts the smile is directed downwards «a sad conditional portrait», and at extroverts - upwards «a cheerful conditional portrait ».

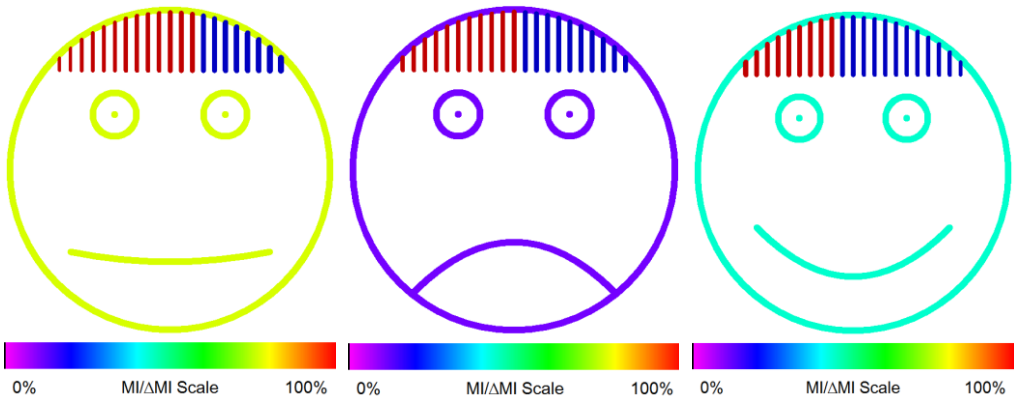


Fig. 39. File face.png content Fingerprint portraits images depends on MI (general color), smile (extraversion), red/blue hair (emotions/logic).

- Graphic representation of results of the analysis of the person temperament as « the conditional schedule». Results are calculated by two modes: on a standard questionnaire and under the analysis of fingerprints (file ImgA.png - fig. 40).

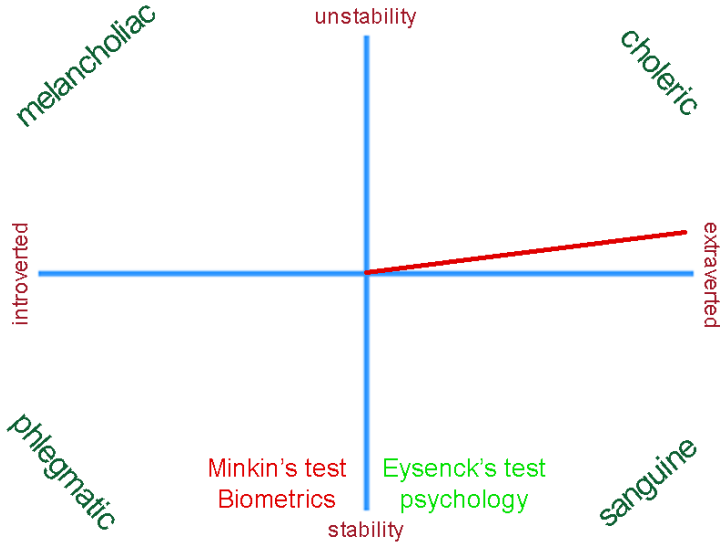
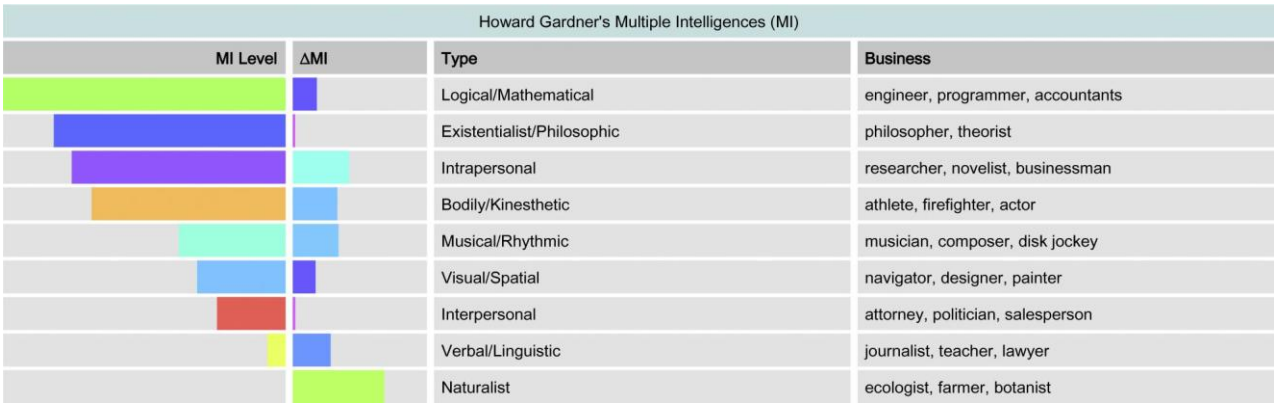


Fig. 40. File ImgA.png content

- Multiply Intelligences (MI level) dermatogliphic analysis results coordinated with Howard Gardner theory are presented as colored histogram on right column of fig. 41 and on graphic on the fig. 42. Maximum levels of Multiply Intelligences are putting in up position. Color of every MI are fixed and based on color scale MI/ΔMI shown on fig. 41. For fig. 41 maximum MI level has Logical/Mathematical Intelligence and this intelligence also has middle variability level, so during the development and education this intelligence could be greatly more than Naturalist (the second position in MI classification).



Howard Gardner's Multiple Intelligences (MI)			
MI Level	ΔMI	Type	Business
		Logical/Mathematical	engineer, programmer, accountants
		Existentialist/Philosophic	philosopher, theorist
		Intrapersonal	researcher, novelist, businessman
		Bodily/Kinesthetic	athlete, firefighter, actor
		Musical/Rhythmic	musician, composer, disk jockey
		Visual/Spatial	navigator, designer, painter
		Interpersonal	attorney, politician, salesperson
		Verbal/Linguistic	journalist, teacher, lawyer
		Naturalist	ecologist, farmer, botanist

Fig. 41. Multiply Intelligences levels and variability histogram

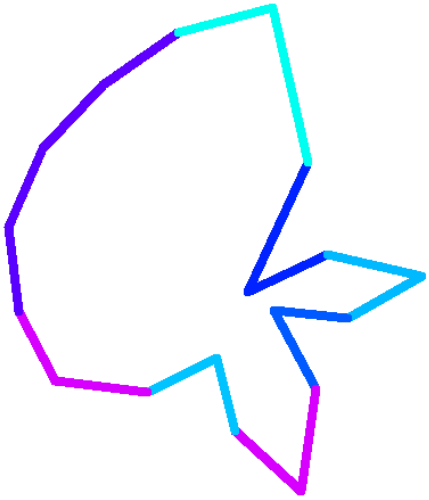


Fig. 42. Multiply Intelligences graphic

Total fingerprint-psychological analysis result are printed on one page (fig. 43) and includes all main psychological personality characteristics.

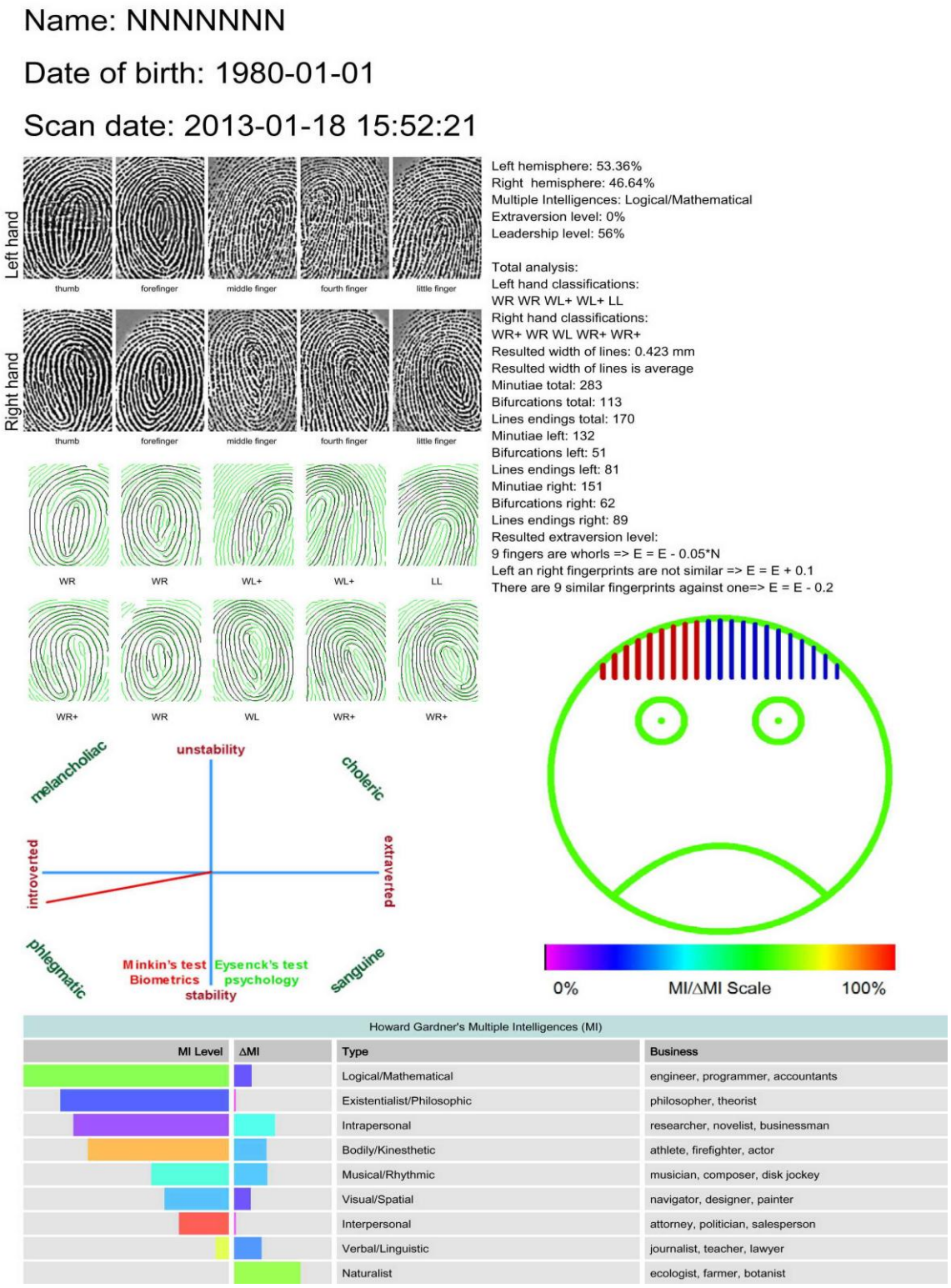


Fig. 43. One page fingerprint portrait and psychological personality characteristics

7.5. Partner in compatibility

Biofinger program can find quickly the best partner in compatibility of character and psychotype. Search of the compatible partner in basis of fingerprints in several thousand people takes no more than one second. The search result is given in the form of the list with specifying of percent of compatibility (fig. 44). The percent of compatibility is specified in an extreme left column. For implementation of search it is necessary to choose in the menu «View» – «Sort by compatibility».

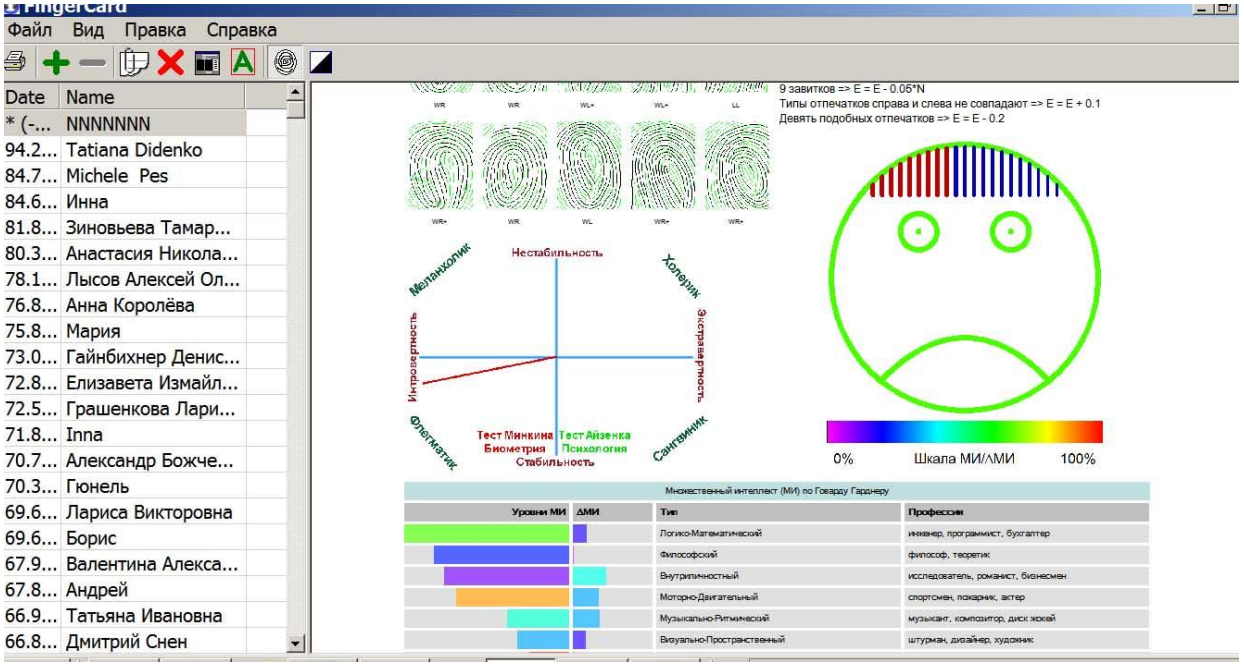


Fig. 44. Compatibility NNNNNN with people defined by fingerprint

8. Maintenance

Maintenance service and service regulations of FingerCard system is carried out according to the given Description and instructions on used hardware (computer, fingerprint scanner, etc.).

Scanning monitoring

For monitoring of number of FingerCard users in the «**About FingerCard**» window title (menu «**Help**») in parentheses, for example, « (x2) », the number of scanning of fingerprints by means of the program is indicated (fig. 11).

Safety Instructions

- At installation of a finger in scanner do not concern the second hand of grounded subjects.
- At installation of a finger in scanner it is not necessary to put effort and to press on a contact surface. For reception of a fine fingerprint enough an easy contact a finger of a contact surface of scanner.
- It is forbidden to carry out metal or sharp subjects on an optical fiber surface of a sensor.

NOTE: the Manufacturer reserves rights to make technical changes in operation and description of dermatoglyphic system FingerCard (Biofinger) without notice.

Russia, 194223 St. Petersburg, Toreza, 68.

Ph./fax: +7-812-552 67 19

E-mail: minkin@elsys.ru

www.elsys.ru

www.psymaker.com