ReactImages

User's Guide

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CHAPTER 1. OVERVIEW

ReactImages is a simple application for Microsoft Windows to test reaction times on different kind of images. Once you open a picture with the program it starts to count how much time passed by watching the different pictures.

The program stores the reaction time for all pictures in a simple table, which can be saved in CSV format, so you can import this table in the most popular office applications, like Microsoft Office, OpenOffice, LibreOffice, etc.

You can also include media files after a specified number of images so the built-in media player will open that file and play it each time you watch this quantity of images.

Any changes to the project table can be saved and opened anytime for future tests.

CHAPTER 2. SYSTEM REQUIREMENTS

The following table contains the software and hardware requirements of ReactImages program. If your system meets the minimum requirements the program will run on your computer but for the best performance your system should meet the recommended system requirements.

CATEGORY	MINIMUM	RECOMMENDED
CPU	400 MHz	1 GHz
RAM	512 MB	1 GB
HDD	10 MB	
OS	Microsoft Windows 95/98/ME/2000/XP/Vista/7	

table 1. System requirements

CHAPTER 3. GRAPHICAL USER INTERFACE (GUI)

On figure 1. you can see the main user interface (or main window) of the program. On the top of the GUI you can see the main menu, in the middle of the interface, there is the content of your project, on the bottom you can see the buffered content (if image buffer is enabled) and the status bar (where you can check the results of the requested operations, including the error messages if an operation failed to complete).
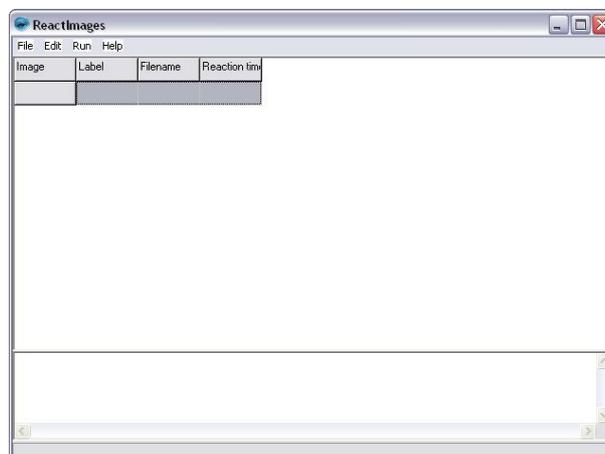

figure 1. The main user interface of the program

3.1. MAIN MENU

On figure 2. you can see the 'File' menu, where you can load or save your project, create a new one, add or remove images to/from it, etc.
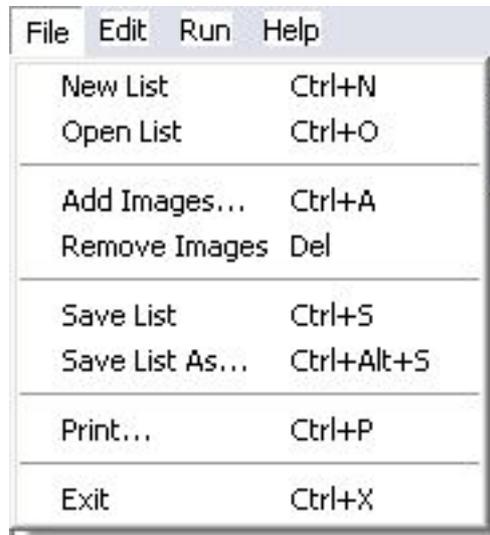

figure 2. The 'File' menu

The 'File' menu has the following options:

- **New List**: create a new, empty project;

- **Open List**: open a previously saved project;

- **Add Images**: add a new image to the end of the list;

- **Remove Images**: remove all selected images;

- **Save List**: save the currently open project or save as a new project (in the case of a new list);

- **Save List As**: save new project;

- **Print**: send list to printer;

- **Exit**: close the program discarding all unsaved changes.

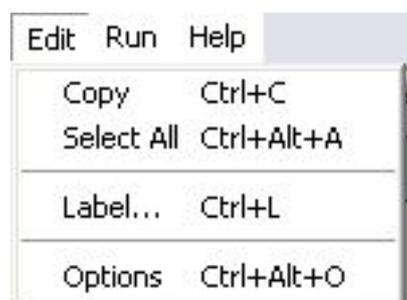The contents of 'Edit' menu is shown on figure 3.

figure 3. The 'Edit' menu

The 'Edit' menu has the following options:

- **Copy**: copy selected rows to clipboard;

- **Select All**: select all rows in the list;

- **Label**: set label of the selected image;

- **Options**: set project and program properties (stored for all projects);
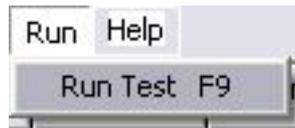
You can run the test by the 'Run' menu (figure 4.).

figure 4. The 'Run' menu

Finally, you can open the User's Guide or the copyright information from the 'Help' menu (figure 5.).
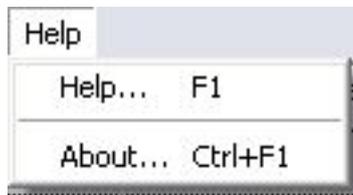

figure 5. The 'Help' menu

3.2. OPTIONS MENU

Either opening the 'Edit->Options' menu, opening a previously saved project table or saving it, the 'Options' menu will be shown (figure 6.).
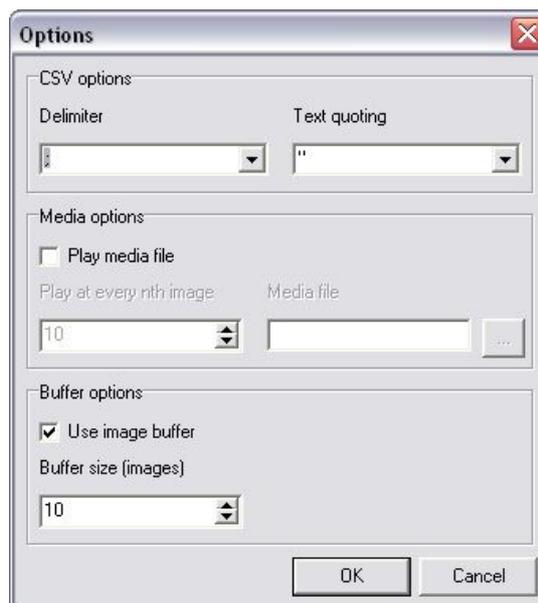

figure 6. The 'Options' menu

In the 'Options' menu, you can set the following:

- **CSV options**: your project table is stored in a simple text (CSV) file, so you can easily import the table into your preferred office application (like MS Excel, LibreOffice Calc, etc.). The main properties of this CSV file are:

  - **Delimiter**: determines which character will separate the different columns of the project table;

  - **Text quoting**: determines how text content will be quoted in the CSV file (necessary to prevent wrong separation if a cell contains the delimiter in its text.

- **Media options**: after a specified number of displaying images you can play multimedia files before test continues.

  - **Play media file**: enable/disable playing media files;

  - **Play at every n^{th} image**: if you have watched n-1 pictures before watching the nth picture the built-in media player will start playing the specified media file. If the media file is audio-only then showing the nth picture and playing the audio file will happen simultaneously;

  - **Media file**: the media file you want to play;

- **Buffer options**: when image buffer is enabled the program will try to load more than one picture in the system memory so it may speed up the access of the images, however the speed of access strongly depends on the size of the pictures you want to display;

  - **Use image buffer**: enable/disable image buffer;

  - **Buffer size**: determines how many images can be stored in the system memory at the same time. At lest 1 picture must be set.

3.3. Running test

You can run test either by the 'Run Test' menu or pressing shortcut 'F9'. If one or more image has been opened in your project then test-window will appear (figure 7.).
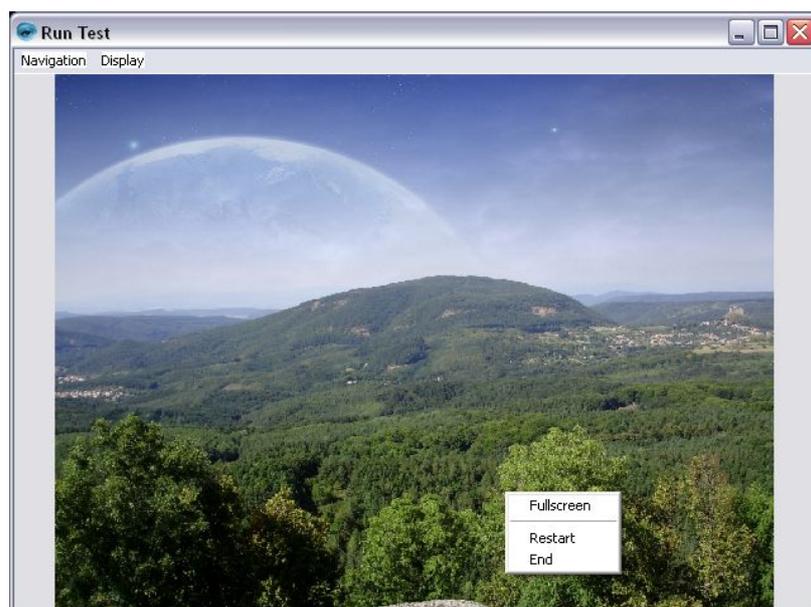

figure 7. The run-window

By default, the run-window will open in maximized, windowed mode, where you can see another menu on the top. A pop-up menu is also shown on figure 7. This menu will appear if you right-click the displayed image. The content of the pop-up menu and the one on the top is the same, except that the menu on the top has shortcuts.

These menus have the following options:

- **Fullscreen**: toggle fullscreen mode making window border appear/disappear;

- **Restart**: jump to first image and restart test;

- **End**: close test-window and finish test.

While running test the reaction time in the project table is being filled. Either closing the test-window or finishing the test regularly you will see the changes in the table.

3.4. PROJECT TABLE

Back on figure 1 you can see the project table. This is the largest field of the main window. The table is read-only to prevent accidental changes and only row-by-row selection is enabled. You can change the contents of this table using the previously described menu system.

If you select one or more rows and copy them to the clipboard, then the content on the clipboard will be represented as a tabulator-delimited text, where every new line means another row in the selected context. By this, you can easily paste this content to another application (like MS Excel, OpenOffice, LibreOffice, etc.), but copying cells from another table and pasting it to ReactImages project table is not supported yet. If you want to change the project table using external applications then you must save it as a CSV file and import it in that application. Be careful when editing the table, do not add or delete other columns otherwise the table can no longer be opened by ReactImages program! Also take care of the delimiter and the quoting character! This two characters must be the same in your office application and in ReactImages, so you must set these fields correctly!

ReactImages uses Windows-1250 character encoding when saving the project table, so you must set this character encoding in your office application when importing the table.

In the "Demo" subfolder of ReactImages program you can find demo projects with media files, which will help you getting familiar with the program. These demo project lists have been modified (absolute links to media files have been replaced with relative links) so you should be able to run these projects anywhere you have installed ReactImages program. You will find this "Demo" subfolder in ReactImages program installation directory.

3.5. BUFFERED CONTENT

This read-only field can be found on the bottom of the main window. This field is automatically handled by the program when running test and you cannot edit its content, however it is only an output field, the program never tries to read anything from it. This field has been implemented to make it easier to check the contents of the image buffer and help fixing possible bugs in the program.

CHAPTER 4.   LICENSE

This program is freeware, which means you may install and use it on any number of computers. Including this program into larger applications (even commercial applications) is also permitted by crediting the original author. Selling the program itself (not including it in larger applications), reverse-engineering or modifying it any way without the written permission of the author is STRICTLY FORBIDDEN!

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