KSuse
Detective

v 1.0.7

Content

System requirements

Compatibility: Windows 10, 11 x64.

Minimum requirements: Intel i5 (8th Gen and above), SSD, 8GB of RAM, nvidia GTX 1050 4GB.

Recommended requirements: Intel i7 (8th Gen and above), SSD, 16GB of RAM, nvidia RTX 2060 8Gb.

Required software:

1. .NET 6.0 Desktop Runtime (v6.0.1) - Windows x64
   https://dotnet.microsoft.com/download/dotnet/thank-you/runtime-desktop-6.0.1-windows-x64-installer

2. Nvidia CUDA Toolkit 11.2
   https://developer.download.nvidia.com/compute/cuda/11.2.2/network_installers/cuda_11.2.2_win10_network.exe

Settings
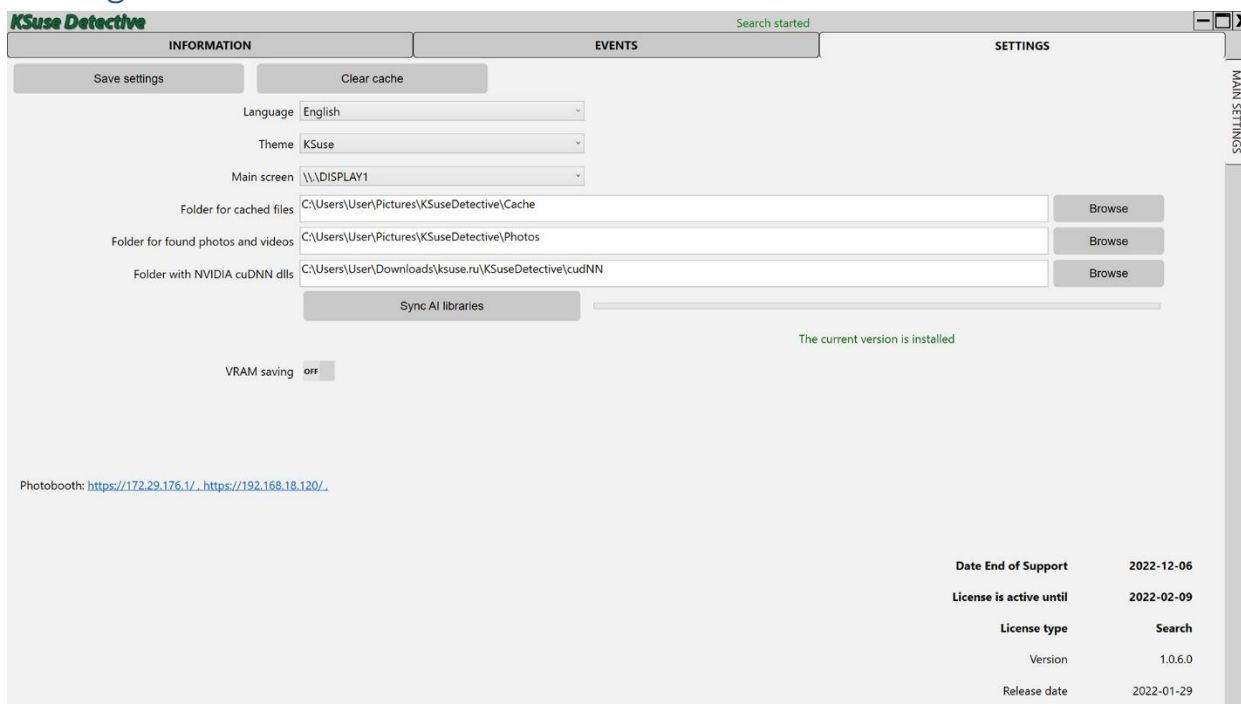
Before you start, you need to install Nvidia CUDA Toolkit 11.2!

https://developer.download.nvidia.com/compute/cuda/11.2.2/network_installers/cuda_11.2.2_win10_network.exe

Be sure to synchronize the AI libraries.

If you constantly have CUDA errors in the log, then you need to enable the "VRAM saving" mode. This will remove CUDA errors when searching for faces, but will reduce the accuracy of the determination.

In the folder for found files, a folder for each event is automatically created in the process of work, in which there are separate folders for each target person. The contents of these folders can be automatically uploaded to the cloud.

This link opens a page where a person can take a selfie that will be used as a search target.

When you open the page, the browser will report an invalid certificate. You must ignore the warning.

When taking a selfie, only one person should be in the frame!

The program takes three pictures in a row. It is recommended to take pictures with different facial expressions for better identification. You can take several shots of one person to expand the comparison base, so that the program accurately combines these shots as shots of one person, it is necessary that in each series of three shots there is one photo with a similar facial expression and shooting angle.

At the end of shooting, a QR code is displayed on the screen. The link in it leads to an intermediate site. Once a persona folder is created in the cloud, this link will automatically redirect to that folder.

QR codes of different pictures of one person refer to the same folder.

It is strongly recommended that you use an Android device to shoot. On a number of devices in the Firefox browser, auto exposure correction works. And the Chrome browser allows manual exposure correction.

Events
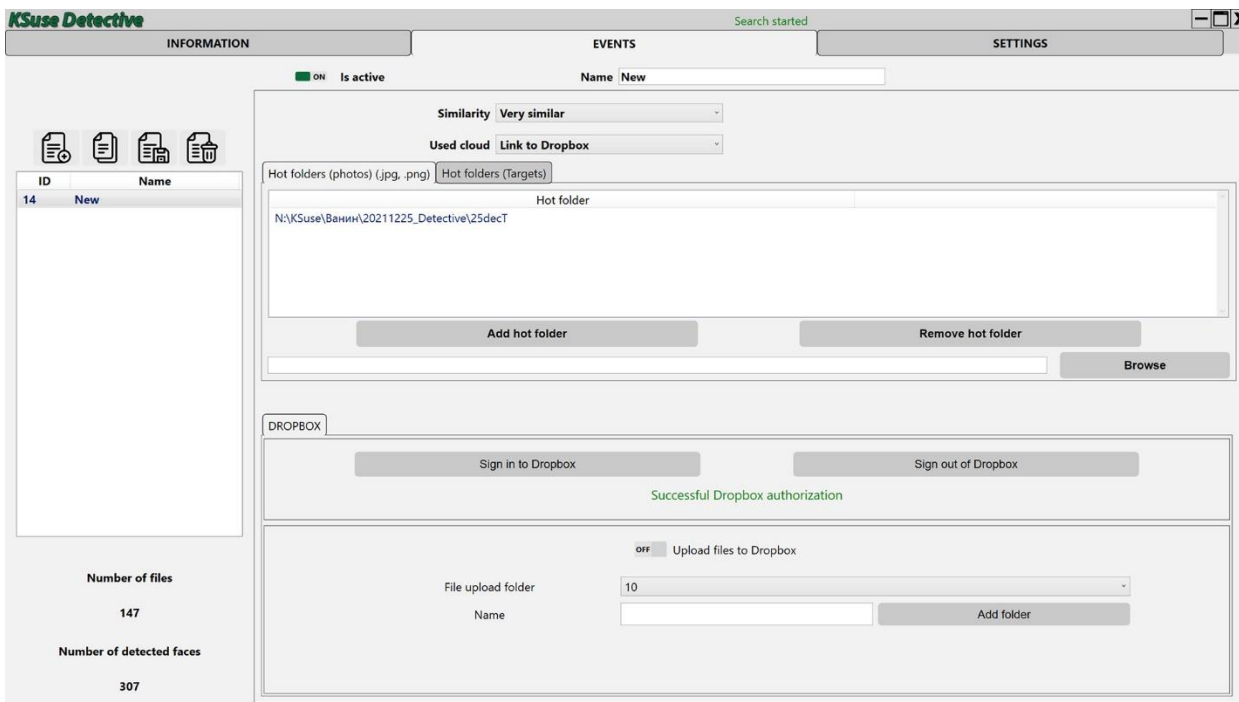
In the "Hot folders (photos)" block, folders are set into which you will upload photos in which you want to identify people.

There are two options for getting search targets:

• Taking a selfie on a web page

• Upload photos to "Hot folders (targets)"

Only one person must be present in the photo in the Hot Folders (Targets) folder!

There are three levels of search accuracy:

• Very similar - Some of the photos will not be found, other people's photos will not get into the folder.

• Likely similar

• Approximately similar - Almost all photos will be found, possibly a large number of other people's photos

The younger the person, the greater the number of errors. The algorithm determines the faces of children rather poorly.

Authorization in Dropbox is carried out in the same way as it is done in the KSuse Sender program. After authorization, you need to create a folder for downloading, enable downloading and save the preset.

Information
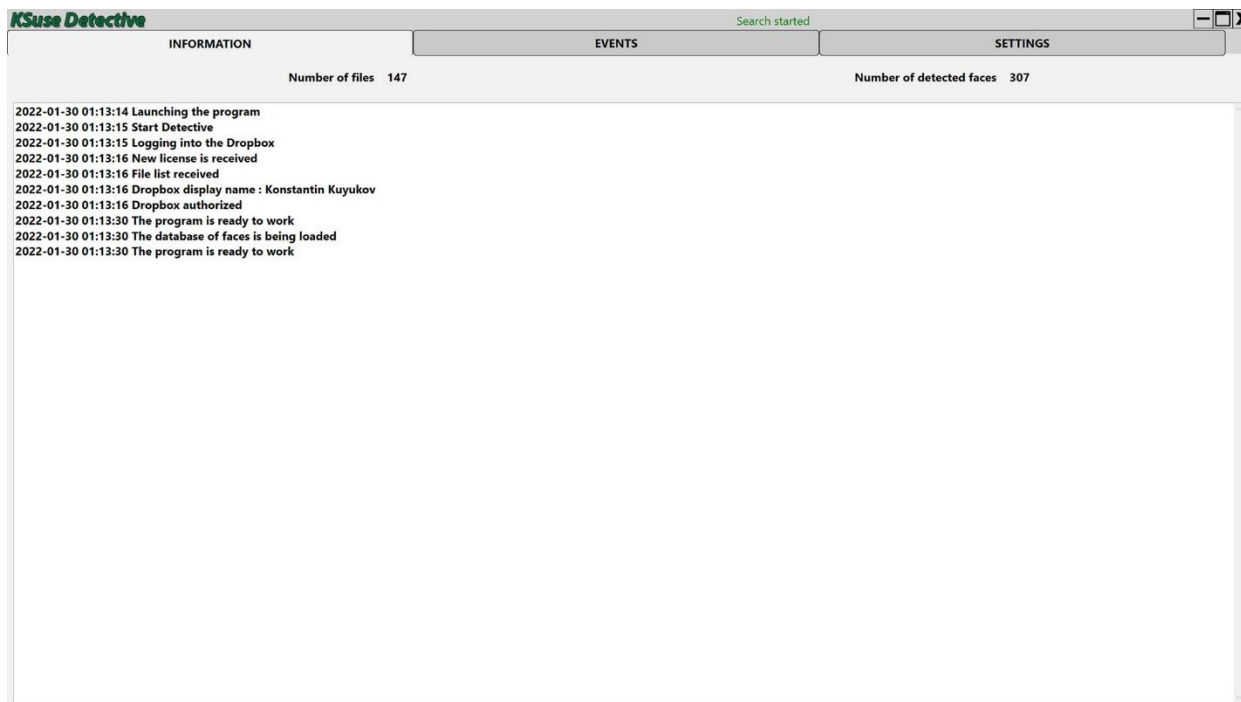
This window displays the entire log of the program.
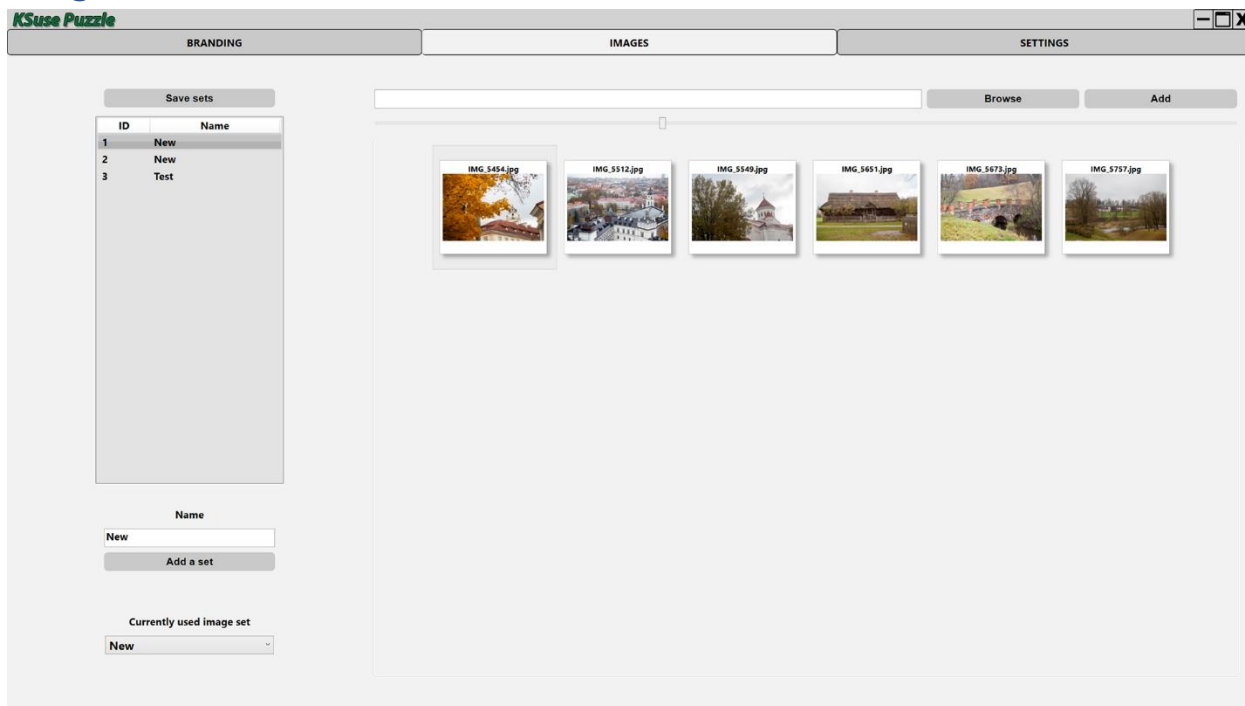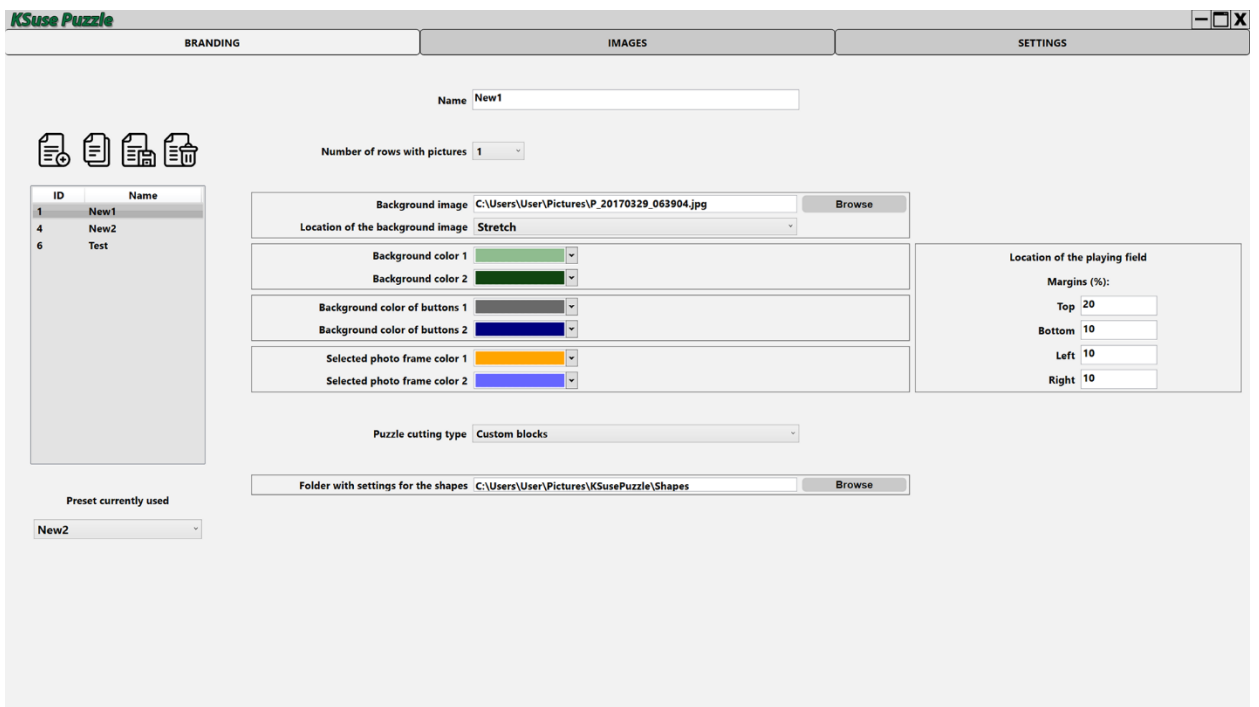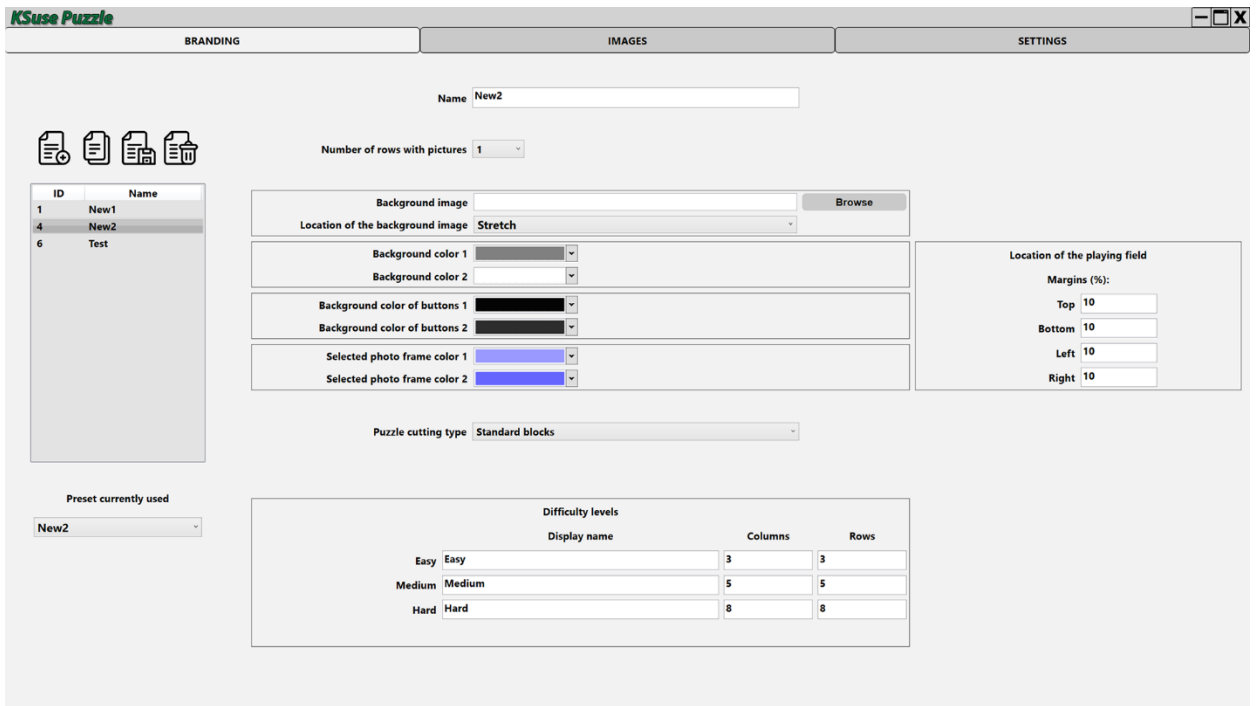
Image sets

The program allows you to create sets of images that will be used in puzzles. And allows you to select the currently used set.

Branding

KSuse Puzzle — BRANDING | IMAGES | SETTINGS

Name: New2

Number of rows with pictures: 1

ID	Name
1	New1
4	New2
6	Test

Background image: [ ] Browse
Location of the background image: Stretch

Background color 1:
Background color 2:
Background color of buttons 1:
Background color of buttons 2:
Selected photo frame color 1:
Selected photo frame color 2:

Location of the playing field

Margins (%):

Top: 10
Bottom: 10
Left: 10
Right: 10

Puzzle cutting type: Standard blocks

Preset currently used: New2

Difficulty levels

	Display name	Columns	Rows
Easy	Easy	3	3
Medium	Medium	5	5
Hard	Hard	8	8

KSuse Puzzle — BRANDING | IMAGES | SETTINGS

Name: New1

Number of rows with pictures: 1

ID	Name
1	New1
4	New2
6	Test

Background image: C:\Users\User\Pictures\P_20170329_063904.jpg Browse
Location of the background image: Stretch

Background color 1:
Background color 2:
Background color of buttons 1:
Background color of buttons 2:
Selected photo frame color 1:
Selected photo frame color 2:

Location of the playing field

Margins (%):

Top: 20
Bottom: 10
Left: 10
Right: 10

Puzzle cutting type: Custom blocks

Folder with settings for the shapes: C:\Users\User\Pictures\KSusePuzzle\Shapes Browse

Preset currently used: New2

The interface elements are painted with a gradient. In branding, two colors that form a gradient are established for each group of elements.

It is possible to set the background image of the page and set the indentation of the block of elements so as not to cover the background image.

The puzzle has three levels of difficulty with standard cuts. It is necessary to set the number of puzzle pieces for each difficulty.

It is also possible to create non-standard slicing. To do this, a file is created for each picture, with the same name as the name of the picture, only with the addition of the json extension. For example, 1.jpg and 1.jpg.json. An example is in the example folder.

To get curves in this format, you need to save them in svg format, and then copy the necessary blocks from this file.

The main problem with using a curve file is overloading. In fact, each piece of the puzzle in this case contains a complete copy of the image. And accordingly, the more elements and the larger the size of the original image, the higher the load on the computer. Not recommended for use.

Program activation

If you do not have a license, then the operation of the program is not limited, but allows you to identify no more than 3 persons.

Demo version limitations:

1. Only one image is displayed.
2. All difficulty levels are identical.

Attention! The program is tied to the computer. One license is valid for one computer.

License management is carried out through KSuse Manager.

Program activation

Used libraries

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http://creativecommons.org/licenses/by/3.0/

Microsoft - https://dotnet.microsoft.com/

BSD 3-Clause License:

NLog - https://nlog-project.org/

The MIT License:

SQLite-net - https://github.com/praeclarum/sqlite-net

Portable.BouncyCastle - https://www.bouncycastle.org/csharp/

MimeMapping - https://github.com/zone117x/MimeMapping

Http Multipart Parser - https://github.com/Http-Multipart-Data-Parser/Http-Multipart-Data-Parser

QRCoder - https://github.com/codebude/QRCoder/

QRCode.js - https://github.com/davidshimjs/qrcodejs

jQuery - https://jquery.com/

dropbox-sdk-dotnet - https://github.com/dropbox/dropbox-sdk-dotnet

Json.NET - https://www.newtonsoft.com/json

SendGrid - https://sendgrid.com/

Apache License:

OpenCvSharp4 - https://github.com/shimat/opencvsharp

Google.Apis.Drive.v3 - https://github.com/googleapis/google-api-dotnet-client

Magick.NET - https://github.com/dlemstra/Magick.NET

NPOI - https://github.com/tonyqus/npoi

Microsoft Public License (MS-PL):

Extended.Wpf.Toolkit - https://github.com/xceedsoftware/wpftoolkit

BSL-1.0 License:

dlib C++ library - https://github.com/davisking/dlib

CC0-1.0 License:

Face Recognition Models - https://github.com/ageitgey/face_recognition_models