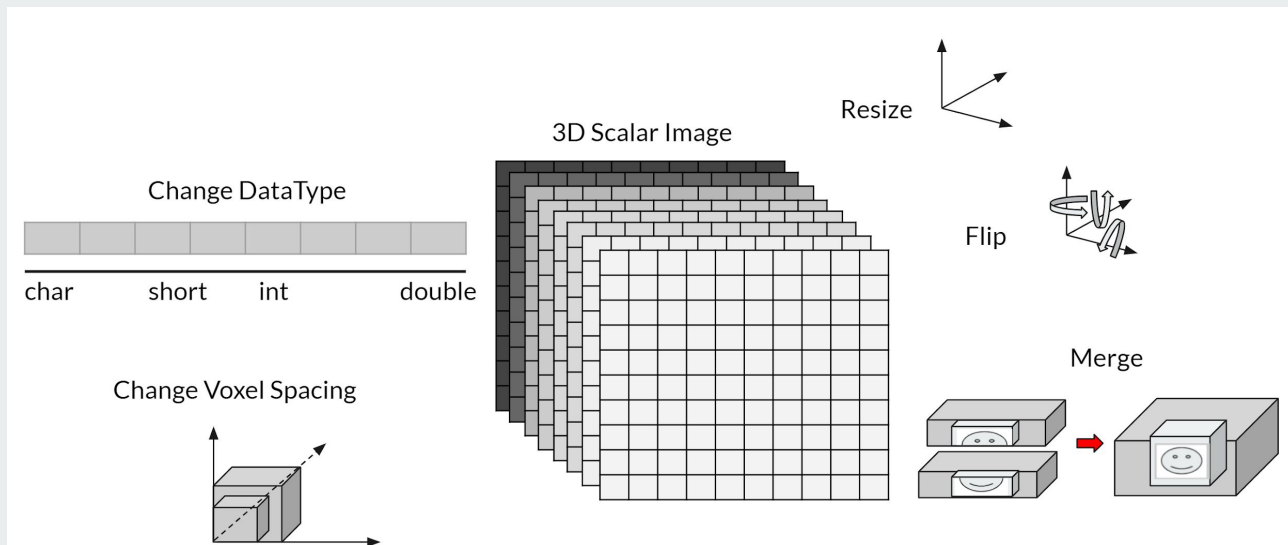




# ImageModi Project



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# Project Overview

## What is ImageModi?

- A program which modifies an attribute of 2D/3D Scalar Image.
- Modify Image Size, Voxel Type, Voxel Spacing, Image Origin, Image Axis, Image Dimension.

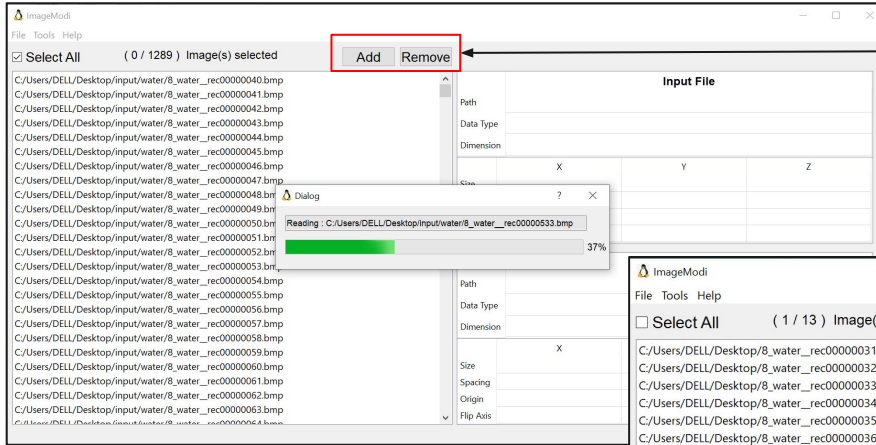
# Open (Read) Images

1. Click [File] > [Open Images]

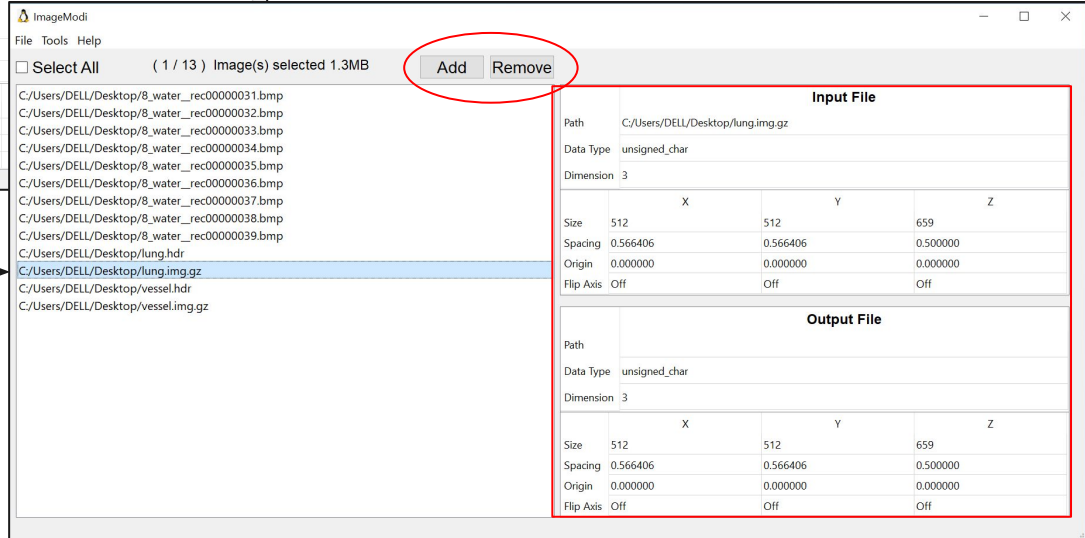
2. Select image files to open.

# Open (Read) Images

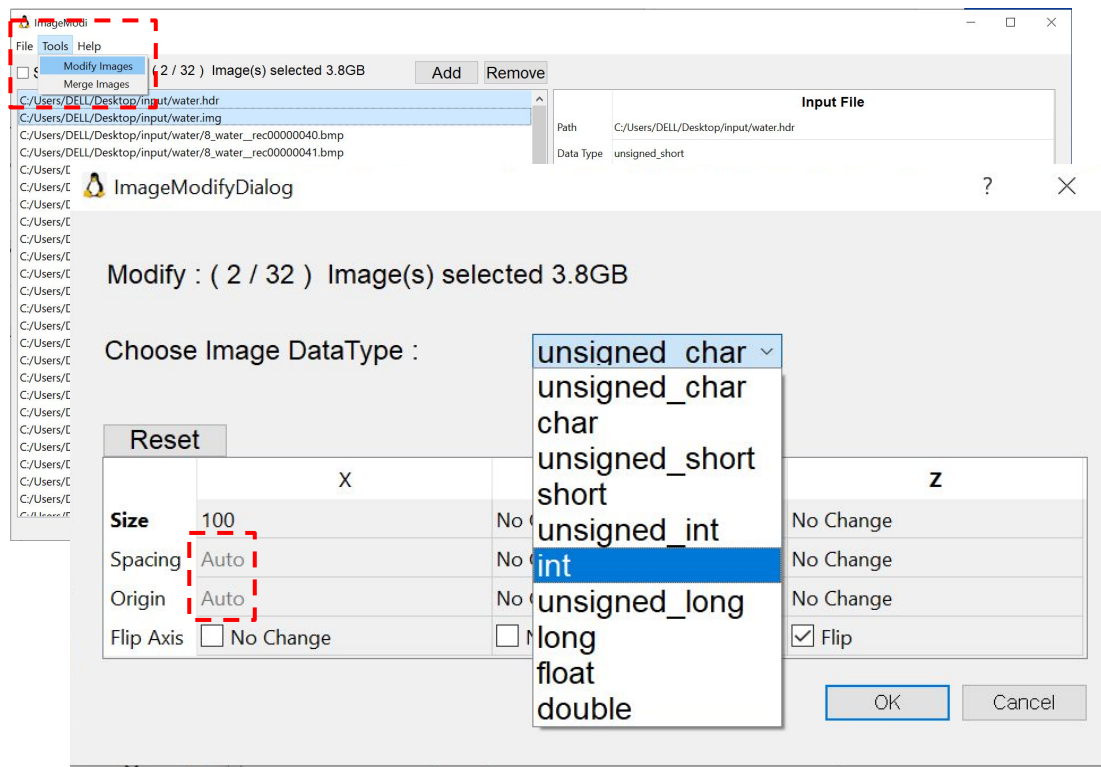
3. Add/Remove image files from list.



4. Click item to see file info



# Modify Images



ImageModi modifies datatype, size, spacing, origin, axis of image.

Select Files to Modify and click [Tools] > [Modify Images]

If user attempts to resize an image, spacing and origin will be automatically recalibrated by a program. User input for "Spacing" and "Origin" are set to "Auto".

# Save (Write) Images

1. Select Files to Save and Click [File] > [Save Images]

3. Select a folder to save

2. Choose OK or Cancel

ImageModi

File Tools Help

Open Images Save Images ( 10 / 27 ) Image(s) selected 15.2MB Add Remove

Input File

Path	C:/Users/DELL/Desktop/input/water/8_water_rec00000051.bmp	
Data Type	unsigned_char	
Dimension	2	
Size	X 1264	Y 1264
Spacing	1.000000	1.000000
Origin	0.000000	0.000000
Flip Axis	Off	Off

Output File

Path		
Data Type	unsigned_char	
Dimension	2	
Size	X 1264	Y 1264
Spacing	1.000000	1.000000
Origin	0.000000	0.000000
Flip Axis	Off	Off

Select a folder

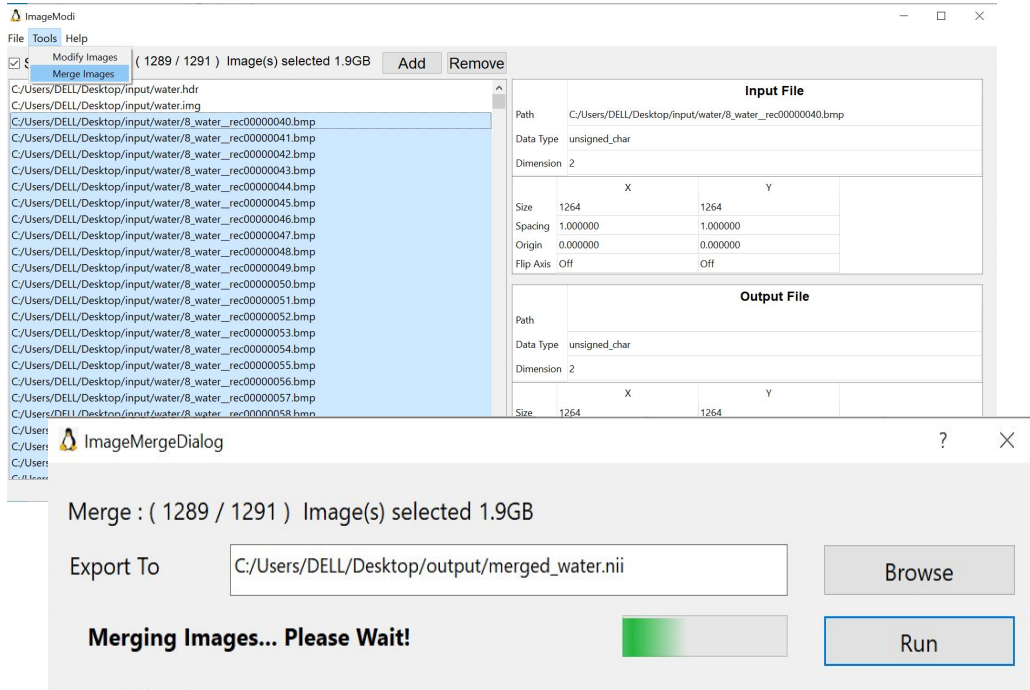
Folder: output

Select Folder Cancel

Save 10 Image Files ?

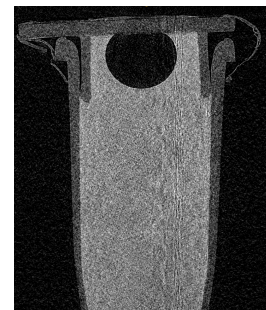
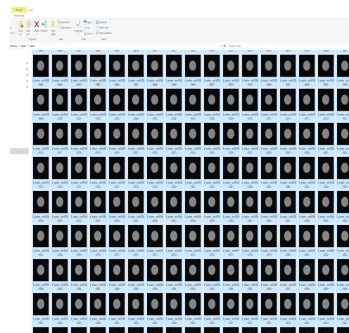
OK Cancel

# Merge Images



ImageModi merges 2D images (png, tiff, bmp, jpeg) to 3D volume image, or 3D images to bigger 3D images.

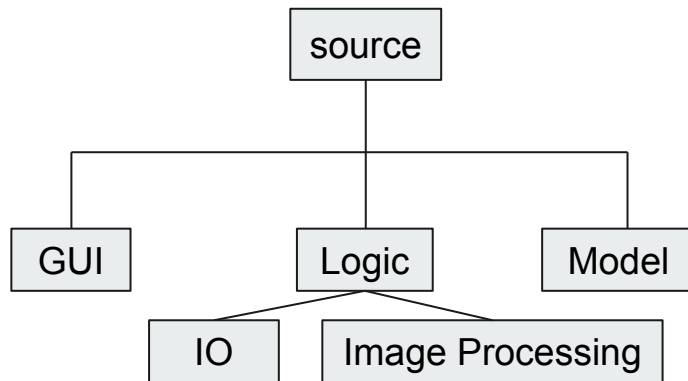
Select Files to Merge and click [Tools] > [Merge Images]



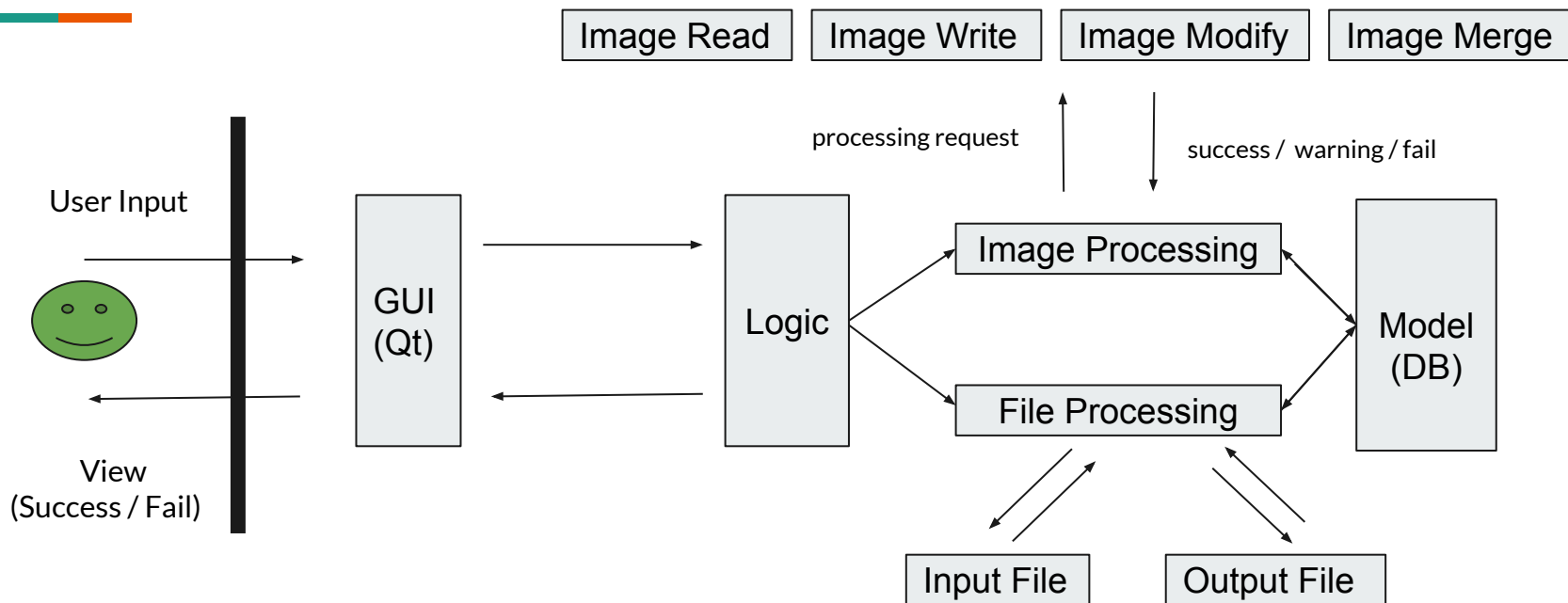
TIFF 2D images to 3D image  
(Water in PCR tube, Korea Institute of Toxicology)

# Development

- Source Code : <https://github.com/minseobi93/ImageModi>
- Written in C/C++
- MVC Design Pattern
- Multithreading while reading/writing files.
- Uses QT framework for GUI, ITK for Image Processing.









The End