

1 Process flow

What we call process flow in this project is the main function of the project. Indeed in that function we have to manage almost all the others function, and more precisely features function, classification function, test and validation function, or create or manage the directory files. This program is make that we can change the different descriptors (SIFT C₂O) as we want. In this part we will present how works the sub-functions inside the process flow.

1.1 Workspace

The aim of the Process flow function is to allow at the user to choose his workspace, and choose where he want to write the results obtained by the software. Here we can see how the folder will be organize by using this function:

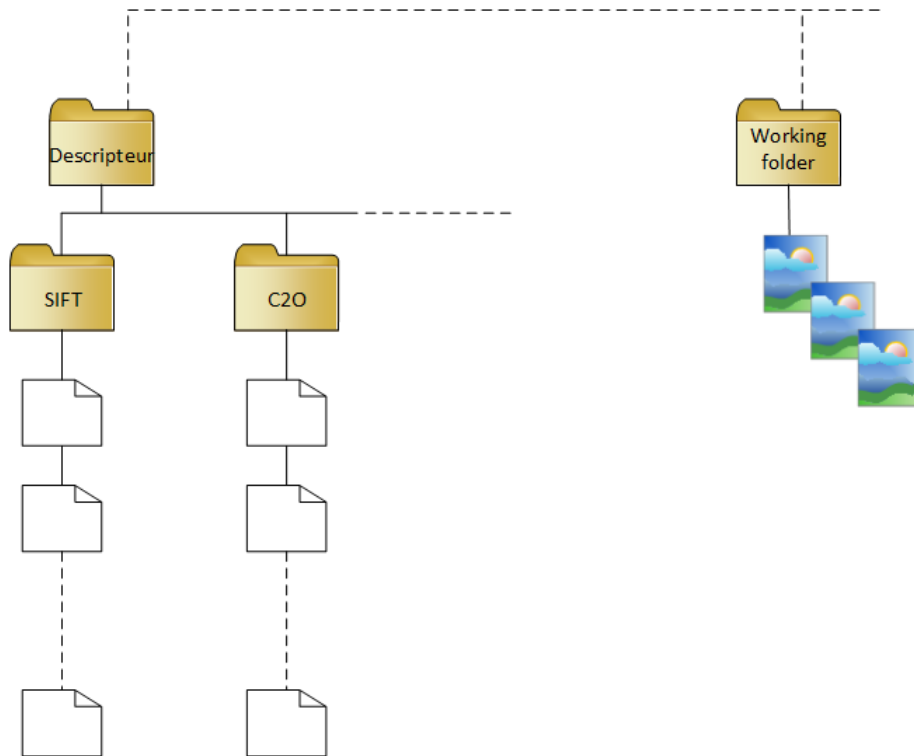


Figure 1: Organization of the workspace

Indeed we can see that we create a folder descriptor, if he is not create yet, in this folder we create as much folders as the user wants. For this he just has to enter the name he wants in the parameter *name_desc*. We can also see, the user can choose the work folder he wants.

1.2 processing

The second goal of this function is to compile the whole processing, so if the user wants to compile one particular function in the software he should not use the function *Process_flow*. In this function we will found this line-up:

- Creation of folders and path to the workspace
- Calculation of descriptors and link with IDs for the training database.
- Writing descriptors in text files.
- Calculation of K-means.
- Signature design for whole images.
- Classification of the test database using the K-NN method.