Prerequisites

* A linux distribution : Preferably Ubuntu
  + Install some packages from the terminal  
    sudo apt-get install libjpeg libjpeg-dev libfreetype6 libfreetype6-dev zlib1g-dev  
    (In my case libjpeg installation was showing an error, so just remove it from the line and try again)
  + Install PIL for python  
    pip install PIL (if pip is not installed, install it by easy\_install pip)
  + OpenCV  
    pip install cv2

Instructions for use:

1. For the final parts (last row of illustration image), make sure that all the images are taken in 1:1 aspect ratio (exact size may vary, it will be scaled accordingly). Not having 1:1 images will result in shrinking of the image in a direction.
2. The order of taking the image should be top, front, side, isometric. There should not be random images in between. In a similar way take the images of all the parts.
3. Create a .csv file containing the order of parts that appear when the images are arranged according to their image name. The csv file can simply be created using a text editor, add part name in separate lines and save it as “names.csv” in the same directory. Ensure that there are no unnecessary images there. In short no(images)=4\*entries in text file.
4. Execute organize.sh script as below: (do not forget to make it executable chmod +x organize.sh)  
   organize.sh src destination {image names}   
   Image names can be generated using find command: find ./test1/\*.png -printf "%f\n"  
   Sample complete command:  
   ./organize.sh ./test1/ ./test1/new $(find ./test1/\*.png -printf "%f\n")
5. Go to the destination folder, it must contain all the folders for each part containing named views such as frontm.jpg (m for manufactured). The same process can be repeated for orthographic images with suffix in the program replaced to o from m. In rare cases where you have images with any other format such as png, use .png in the format variable.
6. Add all the other images such as of manufacturing processes in the corresponding folders.
7. At the end of this stage, a folder should be containing various folders named after the part.  
   Each part folder containing these files:  
   topo.jpg  
   fronto.jpg  
   sideo.jpg  
   isoo.jpg  
   topo.jpg  
   fronto.jpg  
   sideo.jpg  
   isoo.jpg  
   p1.jpg  
   p2.jpg  
   p3.jpg  
   It may contain P4 and P5 depending on the number of processes required for the part.
8. In the destination folder add a csv file named Information.csv with fields part-name,system, description (Do not add the headings, start from row 1). Also make sure that illustration templates are also present in the folder, name them 3.jpg,4.jpg and 5.jpg, depending upon the no of processes. Also add the script.py program in that folder.
9. Now, simply execute that python program as  
   python script.py
10. The same destination folder should now have all the generated images.