360° Panorama Generator

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360° Paronama Generator is a relative images stitcher written in C++. The program takes individual images as input and generates a stitched panorama picture as output. The program supports giving outputs in 5 formats i.e. Plane, cylindrical, spherical, fisheye, and stereographic.

System Requirements :

- The program has been developed on linux environment and has been successfully tested on the same. The instructions assume that the user is on any linux-distro or is able to apply the instructions on their respective OS of choice.
- The program has two components : Panorama Stitcher and Cropper. Stitcher joins individual images into one and Cropper crops the stitched image into a uniform rectangle. The second module, cropper, requires the system to have **ImageMagick** program installed.

Installation :

-- To install ImageMagick in ubuntu execute this :

```
sudo apt-get install imagemagick
```

-- Compilation requires **g++ compiler** and **opencv**

```
sudo apt-get install build-essential
sudo apt-get install libopencv-dev
```

Execution :

Compile the two files :

```
g++ stitcher.cpp -o pano `pkg-config --cflags --libs opencv`
g++ cropper.cpp -o cropp `pkg-config --cflags --libs opencv`
```

Run the executable :

```
./pano      /path/to/image.jpg
./cropp     resultimage.jpg
```

Done! Open the image with your image viewer!