CS 663 : Project Report

Student Roll Number	Names
170050020	Kiran Dapkar
180260001	Aakash
180260028	Ramakant Pal

Paper Name:- **Histogram Refinement for Content-Based Image Retrieval**
(https://ieeexplore.ieee.org/document/572008/references#references)

Aim:- Imposing additional algorithms on histogram based matching for Image Retrieval.

Algorithms Implemented:- 1) Color coherence vectors (CCV)
2) Centering refinement

Dataset:- Filtered and extracted 180 dataset images from dataset of 10,000 images.
(" http://wang.ist.psu.edu/docs/related/ ")

Structure Of Dircetory:-

```
|--CS663_Project_170050020_18026001_180260028
        |
        |--CCV
              |--CCV.m
        |--Centering Refinement
              |--centeringrefinement.m
        |--data
        |--Report
              |--CCV report
              |--Centering Refinenment report
```

Discreption of the code:-

different functionalities implemented:-

---Listing Images from Database

---Looping through the queries

---Calculating CCV/Centering_Refinement of an image

---Discretizing the Image

CCV and Result:- Color Coherence Vector is implemented with color histogram. For every CCV calculated for an image is ranked using Color Histogram rank (or CCV rank). In 8 of the 10 cases, CCV's produced better results, while in 2 cases they produced worse results. In those 2 cases color histogram does better than CCV.

Centering Refinement and result:- Applied refinenment on 75% and 100% of image section. Considering computational constrainsts we applied it on lesser dataset.