Ahmedabad University

ECE501- Digital Image Processing
Weekly Report 1

Section 1

Submitted to faculty: Prof. Mehul Raval

Topic: Content-Based Image Retrieval (CBIR)

Week Duration: 28th Sep - 04th Oct

Group no.: 6

Enrollment No.	Name	Name of the Program
AU2340030	Dhriti Gandhi	Btech: Computer Science And Engineering
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2025-2026 (Monsoon Semester)

Objective

To design a **Content-Based Image Retrieval (CBIR)** system capable of retrieving visually similar images from a custom dataset using classical Digital Image Processing techniques such as colour histograms, texture analysis, and edge detection.

Input: Query image and dataset

Output: Ranked list of most similar images

Work Done This Week

- Understanding the problem statement by exploring different papers in IEEE Xplore, repositories/datasets, and articles regarding its usage.

- Reviewed basic concepts of image representation and measures that may be used. Also, we have made a Google Drive of all these resources for easy access.

- Planned a rough timeline of events.

Next Week Plan

- We have gathered research papers on Content-Based Image Retrieval, which we will review in detail.

- Collecting datasets and implementing basic features like color and texture for extraction and image retrieval.

Challenges Faced

None so far, as we have just done the planning and topic selection in the past week. Upcoming challenge we might face is to decide a real-world scenario to centralize our project.