**PROJECT OVERVIEW**

**CAPSTONE TERM - II**

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**Real Time Facial Expression Recognition System**

**INTRODUCTION**

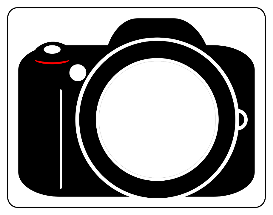
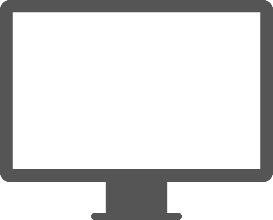
Sentiment analysis – otherwise known as opinion mining is being used in range domains for various purposes. The prime objective is to understand the attitude, opinions, and emotions of people towards a particular subject. This is being achieved by speech synthesis using NLP and, facial expression recognition using computer vision techniques. A clear such analysis of sentiments helps to determine the businesses to shape their strategies towards improvement.

Our idea is to develop an application to detect real-time facial expressions using computer vision for clothing showrooms. This system can identify the customer’s attitude towards the products and the arrangement mechanism in the showroom. This helps the businesses to understand the trends and interests of clothes and accessories plus the arrangement priorities of the showroom.

**POPULAR DATASETS**

1. Dataset Name: “Emotion Detection From Facial Expressions”  
   Source: Kaggle (<https://www.kaggle.com/c/emotion-detection-from-facial-expressions/data>)
2. Dataset Name: “Google facial expression comparison dataset”  
   Source: Google Research (<https://research.google/tools/datasets/google-facial-expression/>)
3. Dataset Name: “Facial Expression”  
   Source: Kaggle (<https://www.kaggle.com/ahmedmoorsy/facial-expression>)
4. Dataset Name: “CK+ dataset for facial expression recognition”  
   Source: Kaggle (<https://www.kaggle.com/shawon10/ckplus>)

**SYSTEM OVERVIEW**

Camera facing from product display

**OUR SYSTEM**