CRIME DETECTION SYSTEM (IMPORTANT TERMS)

Type of algorithm:

- The main algorithm used in project crime detection system is **ADABOOST** algorithm.
- The algorithm firstly extracts the features of the face (like x,y coordinates) and uses the algorithm as face detector.
- This algorithm is most widely used algorithm and it can adapt to any illuminate spaces.
- The algorithm’s accuracy is high.
- The algorithm uses mathematical formula to detect the face.
- Open CV uses this algorithm to solve the case.

$g(x, y) = \Sigma f(x', y'). f(x,y). x'sx,y'sy$
Calculated by the following formula, it is
$s(x, y) = s (x, y - 1) + f (x, y),$
$g(x, y) = g(x - 1, y) + s (x, y),$

where $s(x,y)$ is the cumulative value for each row, the initial value of $s(x,-1)=0$, and $g(x,y)$ is the initial value of $g(-1,y)=0$.

Type of architecture:

- The type of architecture used in this project is layered pattern and client-server pattern.
- Layered pattern – The project is divided into sub tasks and layers; each layer has a specific purpose.
- Each layer is used in various scenarios.
- If there is a change in 1 layer the other layers won’t get disturbed.

Type of methodology:

- We have chosen the methodology as DevOps Deployment methodology.
- As the name suggests the project needs continuous updating and testing.
- As this project main domain is computer vision so Dev Ops methodology is suitable for this project to succeed.