**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) = Σ 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.