**Training through webcam**

**Input parameters:**

* Unique Id of the person
* Name of the person

**Processing:**

* Takes five sample images from the video
* Saves the encodings of the images for face recognition library
* Trains the model for LBPH

**Output:**

* If the program isn’t able to get proper encodings of more than two images, it will try to take the samples again.

Message displayed: Not able to get face samples properly please try again

* In case of three unsuccessful attempts, the program will stop
* If successful

Message displayed: Face samples taken successfully

**Recognition through webcam**

**Input parameters:**

* Unique Id of the person

**Processing:**

* Matches the encodings through face recognition and tries to predict through LBPH

**Output:**

If it is a known face:

* Status of the person i.e. known or unknown
* Name of the person
* Unique Id of the person

If it is an unknown face:

* Status of the person i.e. known or unknown

**Training through a video file**

**Input parameters:**

* Unique Id of the person
* Name of the person
* Video file (.mp4/.avi/.mkv)

**Processing:**

* Takes five sample images from the video
* Saves the encodings of the images for face recognition library
* Trains the model for LBPH

**Output:**

* If the program isn’t able to get proper encodings of more than two images, it will ask you to take the samples again.

Message displayed: Please upload the video with the face pointing towards camera

* If successful

Message displayed: Face samples taken successfully

**Recognition through a video file**

**Input parameters:**

* Unique Id of the person
* Video file (.mp4/.avi/.mkv)

**Processing:**

* Matches the encodings through face recognition and tries to predict through LBPH

**Output:**

If it is a known face:

* Status of the person i.e. known or unknown
* Name of the person
* Unique Id of the person

If it is an unknown face:

* Status of the person i.e. known or unknown

**Delete records**

**Input parameters:**

* Unique Id of the person
* Name of the person

**Processing:**

Deletes the encodings from the dictionary and the faces and records from the LBPH training directory

**Output:**

If deleted:

Message displayed: deleted successfully

If not:

Message displayed: Face not found