**VIDEO BASED DYNAMIC FACE RECOGNITION**

The issue of security using CCTV cameras fixed for spying in most of the public places like supermarkets, malls, offices, etc., it becomes quite tedious to identify each person in the case of any emergency during entry / exit into restricted places inside the building. So, in our system we register pictures gathered from the videos of authorized people during enrollment and we assume those to be our data sets.Any other persons whose video is not present is identified to be an unknown and alerted immediately for trespassing/unauthorized entry. Built using Python, we establish the unknown faces in the form of suspects. Since the known faces are already registered in the database, we need to skip them and find those who are new to our camera technically. If a new person is found new to our system, he can also enrol himself in the system using keyboard input ‘e’. We detect faces by splitting the video file into frames and multiple snaps which are dynamic and are stored for each person by the system from daily entries. Although, face recognition provides enough information to retrieve for further moves based on the domain’s requirements, it is vivid that it recognizes only registered faces and doesn’t alert or provide warning based on new entries. The database, built-in libraries and facial cameras are coupled to provide an optimized visualization of a human’s face with an optimal number of snaps. Thus, we propose this application to provide more authenticated tracking of humans to ensure safety and security for both the commoners and officials.

**GROUP MEMBERS:**

1. Thamarai Selvam D – 1731054 (Leader)
2. Ajay R – 1731002
3. Veno D – 1731057
4. Jeyasri J – 1731018
5. Keerthi Malini S – 1731061
6. Swarnalakshmi G B - 1731052