

# Ubiquitous Language

## Glossary

Term	Description
Face Attendance	<p>Face recognition is a biometric technique that determines whether the image of a person's face matches any of the face images stored in a database.</p> <p>The primary goal of this project is to build a face recognition-based attendance monitoring system for employees working in any organization in order to improve and upgrade the current attendance system to make it more efficient and effective than before. The employee should be in an area containing light so that the detection can be clearly made. The facial recognition feature embedded in the attendance monitoring system not only ensures accurate attendance but also eliminates flaws. Using a system to overcome defects not only saves resources but also reduces human intervention in the overall process by delegating all complex tasks to the system.</p>
Encodings	<p>This stage we have a list of images, we can iterate through those and create a corresponding encoded list for known faces. To do this I create a function. As earlier I first convert it into RGB and then find its encoding using the <code>face_encodings()</code> function. Then, append each encoding to our list.</p>
Find Matches	<p>We can match the current face encodings to our known faces encoding list to find the matches. I also compute the distance. This is done to find the best match in case more than one face is detected at a time. Once we have the list of face distances we can find the minimum one, as this would be the best match.</p>
Labeling Unknown faces	<p>This stage if the distance to our min face is less than 0.6 or not. If it's not, then this means the person is unknown so we change the name to unknown and don't mark the attendance.</p>
Marking Attendance	<p>First, we open our Attendance file which is in csv format. If the user in the camera already has an entry in the file then nothing will happen. On the other hand if the user is new then the name of the user along with the current time stamp will be stored. We can use the <code>datetime</code> class in the date time package to get the current time.</p>
Admin	<p>A user with additional rights who is in charge of the administration of the software and the platform. So, she/he provides updates for the software as well for the technical part of the platform.</p>