**Application short Info**

# Project Title:

Gender and Age Detection Application

# Project Manager:

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1. Introduction

# Purpose of Document

This document aims to explain the concept and description of a Gender and age detection (GAAD) application. This document includes the system requirement specification (SRS) of the GAAD application and describes an overall description of the system, external interface requirements, functional requirements, and non-functional requirements.

**Intended Audience:**

This document intends for the following personnel:

***The System Design and Architect Team:***

* The project manager will manage the project and the project team.
* Architects, whose general architecture must meet the requirements specified in this SRS.
* Designers who will meet the design specifications in this SRS.
* Programmers who will implement the functional and non-functional requirements specified in this SRS.
* Testers will test the functional and non-functional requirements specified in this SRS.
* Project checking and evaluating team

***Users*:**

* People who will be the end-user of the system

# Project Overview

# This section provides a high-level overview of Gender and Age Detection, including the definition, business goal, and business objectives.

***Definition:***

Gender and Age detection is the process of automatically discerning the gender and age of a person solely from a photo of their face.

***Business Goal:***

The business goal of the Gender and Age Detection Application is to take advantage of Artificial Intelligence and Deep Learning to allow people to know about gender and age. Many companies use these kinds of tools for different purposes, making it easier for them to work with customers, cater to their needs better, and create a great experience. In addition, It is easier to identify and predict the needs of people based on their gender and age.

**METHODS:**

***Image Recognition:***

We’d upload the first image to the system. Then it will automatically detect the image based on different algorithms, as we’ll discuss later in the document. After detection, it’ll go to the next part that is classification.

***Classification:***

It specifies which data elements belong and use when the output has two classifications Gender classification and age detection.

***Benefits:***

After completing the project, one can quickly determine the age and gender of a qualified person.The developed machine or model will be helpful for companies as it can utilize in different educational institutions, including online training institutes.Moreover, the model can also be helpful for the improvement of the skills of non-qualified students.

# Scope

Our machine will be capable of predicting unfiltered pictures with the help of SAM features that may help find accurate results based on the given image.

● The Gender Classification and Age Detection algorithms can implement with an increased number of facial image data set. Therefore it will increase the accuracy level of the output.

● The Proposed Models have been trained and tested on data sets using linear kernels. However, it can perform a similar evaluation using other Kernels of SVM Classifiers like ‘RBF kernel,’ ‘quadratickernel,’ etc.

● Gender Classification is performed based on the extracted feature’ lip.’  The same can implement the algorithm on other components(s) like eyes, nose, or a combination of more than one feature in a human facial image.

● We will train our machine on past data, It will only predict unfiltered pictures based on SAMS features and CNN, and after it, we will check the accuracy of predicted data (by the machine).