**Face Sorter**

Software Architecture

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# 1. Introduction

This document provides a comprehensive overview of the implemented architecture for the Face Sorter software

# 2 High Level Architecture

The software architecture that will be used is implicit invocation. This system is based on event triggering.

## 2.1 GUI

The graphical user interface will ask the user if they would like to update the training set or upload photos.

### 2.1.1 Training Set

If they choose to update the training set, after they will be asked to upload photos.

### 2.1.2 Upload Photos

If they choose to upload photos, the old training set will be used.

## 2.2 Update Training Set

The training set will receive photos of people and pair them with their facial encodings.

## 2.3 Upload New Photos

In this module, new photos will be uploaded and ready to be used for the face matcher

## 2.4 Match Faces

The facial encodings provided by the Update Training Set module will be used to compare and match faces from the Upload New Photos module.

## 2.5 Distributer

The distributer will group the matched photos to their correctly destined folder. Each folder will contain the photos of 1 particular face. There will also be an undefined folder holding all the faces that did not match with the training set.

A picture containing computer

Description automatically generated

**Figure 1:** Implicit Invocation Architecture