

## Live Facial Recognition

Conducts facial recognition on live camera feed. If a person's face is not recognized then a box with 'Unknown' will appear on their face. Otherwise a box with 'the name of the known face' will appear on their face. Creates a new personal folder named by the user upon 'f' key press. Takes and saves a new picture of the person on camera in a user designated personal folder upon 'p' key press, to be used for facial recognition. Deletes the last picture of the person designated by the user from their personal folder upon 'd' key press, unless there are no pictures. Terminates the program upon 'esc' key press.

### Key press options:

'f' key - Create a new personal folder

'p' key - Take and save new picture, of person on camera, in personal folder

'd' key - Delete the last picture of person from personal folder

'esc' key - Terminate the program

### 'f' key press description:

Upon pressing, the message "Enter the name for the folder: " is displayed on the i/o field waiting to receive input from the user. If the 'user input' (input from the user) is of an existing folder the message "The folder for 'user input' already exists" is displayed on the i/o field. If the 'user input' is the 'enter' key without input (blank) the message "The folder for 'blank' can not be created" is displayed on the i/o field. If the 'user input' is of a non existing folder then the new folder is created and named as the 'user input'. When the new folder is created the message "The folder for 'user input' was created successfully" is displayed on the i/o field and a txt file named count.txt is created within said new folder. Within the count.txt file the number '0' is written and saved.

### 'p' key press description:

Upon pressing, a picture is taken and the message "Enter the person's name: " is displayed on the i/o field waiting to receive input from the user. If the 'user input' is either 'blank' or of a non existing folder the message "The folder for 'user input' does not exist." is displayed on the i/o field and the picture is discarded. If the 'user input' is of an existing folder then the number written in the count.txt file, from the accessed folder, is read. After reading the number, the number is incremented, the picture is named and saved as said incremented number in the accessed folder and the message "Picture saved." is displayed on the i/o field. Additionally the incremented number is written and saved in the count.txt file in the accessed folder.

**'d' key press description:**

Upon pressing, the message "Enter the person's name: " is displayed on the i/o field waiting to receive input from the user. If the 'user input' is either 'blank' or of a non existing folder the message "The folder for ' 'user input' ' does not exist." is displayed on the i/o field. If the 'user input' is of an existing folder then the number written in the count.txt file, from the accessed folder, is read. If the number from the count.txt file, from the accessed folder, is '0' the message "There are no pictures in the folder." is displayed on the i/o field. If the number from the count.txt file is greater than '0' then the picture named as said number is deleted from the accessed folder, the number is decremented, and the message "Picture deleted." is displayed on the i/o field. Additionally the decremented number is written and saved in the count.txt file in the accessed folder.

**'esc' key press description:**

Upon pressing, both the i/o field and the camera feed close and the program terminates.