



T.C.

MARMARA UNIVERSITY FACULTY of ENGINEERING COMPUTER ENGINEERING DEPARTMENT

CSE4197 Engineering Project I Proposal

Title of the Project "FaceApp"

Group Members

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1. Aim of the Project

The aim of the project is to solve the privacy issue in group photographs. In large group events many photographs are taken, and they are usually shared using one group chat of a related application (WhatsApp, Telegram etc.). The problem here is every person do not exist in every photograph and they might not want to see the photographs which do not include them. Moreover, they might also feel uncomfortable about another person who never got together with them in a photograph gets access to their photograph.

These issues might seem not concerning but they are, especially in school groups. Some parents can get quite sensitive about this kind of subject, and we really cannot blame them. Protecting and securing your privacy can be quite hard in this digital era. Therefore, we aim to solve this issue and by doing so we plan to achieve two things:

- 1- A person will not see group photographs which do not include him/her and will not go through the process of deleting unwanted files.
- 2- A person's group photographs will not reach to an unrelated person so he/she will not be concerned about privacy.

2. Methodology

Our first goal will be to focus on the application, complete the chat section and enable users to share. When users first enter the application, they will add their profile photos to meet the necessary conditions. Afterwards, we will focus on facial recognition, which is the main part of the project. With the facial recognition system, people in photos will be classified appropriately. Finally, after identifying the people in the photos, we aim to protect personal data by sending the photos only to the people in that photo.

3. Software/Hardware Requirements

Since our project will run on the mobile platform, we will develop the chat application using Flutter and Dart technologies due to the convenience it provides. We will use Firebase for the database of the application. We will use the OpenCV library together with Python for the main feature of the project, which is facial recognition and distinguishing people.

4. Draft Time Plan

| Task Name | October | November | December | January | February | March | April | May | June |
|----------------|---------|----------|----------|---------|----------|-------|-------|-----|------|
| Establish | | | | | | | | | |
| Firebase | | | | | | | | | |
| connection | | | | | | | | | |
| Create | | | | | | | | | |
| functional | | | | | | | | | |
| login page | | | | | | | | | |
| Create profile | | | | | | | | | |
| page | | | | | | | | | |
| Implement | | | | | | | | | |
| chatting | | | | | | | | | |
| Add face | | | | | | | | | |
| recognition | | | | | | | | | |
| feature | | | | | | | | | |
| Edit interface | | | | | | | | | |