

PROJECT PLAN DOCUMENT

(Due: 31st January, 2024)

Project number	32
Project Title	Fixing expressions and stitching the best one
Document	Project Plan
Creation date	14/02/2024
Created By	Saketh Reddy Vemula - 2022114014 Yashas B - 2022113001 Saideekshith Vaddineni - 2022101110 P.V. Sakthidhar - 2022112005 Ishita B - 2022114004
Client	Jaya Bharadwaj – Joly AI

Brief problem statement

The Project aims to create an application for automatic eyes and smile correction in a photo. It requires to map out the region of interests in a given set of photos using key point detection on faces. The project aims to identify the ones with the best eyes and smile and stitch them onto a photo. In the process, the project requires to study and implement computer vision techniques to stitch and smoothen the output. It also requires us to deploy the application on the server so that the metadata and photos generated from the algorithm are saved. At the end of the project we are expected to:

1) Take the best elements from photos that we have and then combine them to make the best photo. 2) Find a metric to decide what makes any component of any photo the best. 3) Find the best photo from the given dataset of photos.

Team Members

Saketh Reddy Vemula – 2022114014; Role: Rule Based Approach

Saideekshith Vaddineni - 2022101110; Role: GANs Approach

Yashas B - 2022113001; Role: GANs Approach

P.V. Sakthidhar - 2022112005; Role: Rule Based Approach

Ishita B – 2022114004; Role: Exploring on different edge cases on scoring sytems.

Team Communication

We have decided to have an internal meet every Sunday.

We will have client meet every Wednesday evening unless decided to skip upcoming meet.

Development Environment

Programming Language: Python, HTML, CSS, JS

Collaboration tools: Github

Libraries or ML Models: OpenCV, GANs, Pipnet

Development environment: TBD

Milestone Schedule

Milestone	Due Date	Release	Deliverable?
<i>Exploring different Computer Vision libraries</i>	09/02/24	-	No
<i>Requirements Specification</i>	14/02/24	R1	Yes
<i>Identifying key points. Dataset collection and analysis (Portraits only)</i>	21/02/24	R1	No
<i>Develop scoring methods. Explore GANs (Portraits only)</i>	21/02/24	R1	No
<i>Identifying Best expressions and stitching them. (Portraits only)</i>	02/03/24	R1	No
<i>Refining the Edges using blends (Portraits only)</i>	09/03/24	R1	No