

# PROJECT PLAN DOCUMENT

Project Title	<b>46</b>
Document	<b>DASS Project Plan</b>
Creation date	<b>6<sup>th</sup> February 2024</b>
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Client	<b>Jaya Bharadwaj (JolyAI)</b>

## **Brief problem statement**

Auto photo editing filters for Color Correction of 100s of single event photos.

Photographers must tackle the tedious task of editing images manually. As the number of images is high and every image must be dealt with individually, the process is lengthy. The plan is to automatically edit 100s of photos at one time and perform color correction on all of them.

Project Objectives:

1. To go through any prior libraries or GitHub repositories in image processing and implement them into existing APIs of the project.
2. Find algorithms that calculate the factors/deltas which adjust the parameters such as brightness, contrast, and color tone of a given photo and apply these filters to 100s of photos.
3. Store the pre-computed parameters in an SQL database, inferred from already existing data sets like Adobe or datasets from photographers.
4. Use WebGL to retrieve the parameters and apply them to obtain the edited images. This is to ensure parallel computing happens instead of sequential.

## **Team Members**

(Weekly tasks change per team member and will be uploaded in the status tracker)

**Harsh Gupta**

**Ishan Gupta**

**Sujal Deoda**

**Deekshitha Yattapu**

**Abhinav Raundhal**

## Team Communication

Meet with client: Wednesday 5:00 – 7:30 pm  
Meet within team members: 11:30 – 1pm (Monday, Thursday)  
Regular Communication on WhatsApp group (with TA and client)

## Development Environment

Documentation: Google Docs, Word, Excel for regular updates regarding project, MOMs etc.  
IDE: VSCode (for coding)  
Programming Languages: Majorly python  
Libraries: opencv, cv2, numpy, pandas, matplotlib, pillow, sklearn, colour  
Version Control: Git

## Milestone Schedule

Milestone	Due Date	Release	Deliverable?
<i>Submit initial project documents (plan, synopsis etc.)</i>	14/02/24	R1	No
<i>Make SRS</i>	21/2/24	R1	No
<i>Research about parameters of editing photos</i>	March	R1	No
<i>Reverse engineer from pre-existing software</i>	March	R1	No
<i>Explore different tools for image processing (coding aspect)</i>	End of Feb	R1	No
<i>Contact photographers and collect datasets</i>	During the project	R1	No
<i>Create UI for testing</i>	March	R1	Yes

Note: (The project is more research oriented and does not involve regular releases. Majorly we will be exploring different resources about colour correction and image processing and finding algorithm that can do this for multiple photos simultaneously)