

Project Synopsis/Project Concept Document

| | |
|----------------|---|
| Project number | 46 |
| Project Title | Colour Auto Correction |
| Document | DASS Project Plan Document |
| Creation date | 7 th feb 2024 |
| Created By | Deekshitha Yattapu Sujal Deoda Abhinav Raundhal Harsh Gupta Ishan Gupta |
| Client | Jaya Bharadwaj |

Description:

When photographers capture 1000s of photos in events , they select 100s of good photos after which they perform editing of this photos. Editing 100s of photos manually is hard.The Aim of this project is to automatically perform editing on 100s of photos at one time and perform color correction on all of them at once.Here we need to implement the algorithms which calculates the factors by which we need to change or adjust the parameters such as brightness ,contrast and color tone of given photo and apply these filters to 100s of photos.

Profile of Users:

- Experienced photographers who cover events such as weddings can efficiently edit 100s of photos by performing specific colour editing techniques for all of photos at once
- Users can also access their photos after editing of that photos by photographers

Usage Model and Diagrams :

Initialisation:

- Users access the photo editing application through a web or desktop interface.

Image processing:

- The application analyzes each imported photo to identify areas requiring color correction and enhancement.
- Algorithms calculate the factors/deltas needed to adjust parameters such as brightness, contrast, and color tone based on the image analysis results.

Filter Application:

- Using the pre-computed parameters stored in the SQL database, the application applies appropriate filters to each photo.
- Filters are applied in a batch processing manner to efficiently handle multiple images simultaneously.

Parameter storage:

- Upon confirmation of the edited images, the application stores the calculated parameters in a SQL database for future reference.
- Parameters include the factors/deltas for adjusting brightness, contrast, and color tone, associated with each edited image.

