PUSL 2021 – COMPUTING GROUP PROJECT
PROJECT PROPOSAL
GROUP A-09

Mobile Application for Photography
Submission Date – 10.25.2023

Group members

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Introduction

This mobile application system is mainly for people who work in the photography industry and beginners. It will help photographers with their day-to-day photography activities. Nowadays there are so many applications released for photographers but so many applications are more expensive and specialized for a single purpose or a single task. Because of that, this application is free and contains all the tasks that are useful for a photographer's day-to-day photography activities. This application covers all the photography categories such as Astrophotography, Landscape photography, long exposure photography, Portrait photography, Lighting Photography, and Wildlife Photography, and this application will be able to calculate all the calculations that are related to photography. As an example, in astrophotography, photographers need to calculate the shutter time or exposure time and at that time they must use the 500 rule and further calculations. because of that, photographers can calculate the exposure time way more easily and very quickly by using this application. Also, Astro photographers need a proper pre-plan to capture Astro events such as the Milky Way, Meteor showers, supermoons, Lunar eclipses, Solar eclipses, etc. For that, this application will provide a sky map, light pollution details, an Astro calendar, etc. Likewise, in daytime long-exposure photography, Photographers use 3 stops, 6 stops, or 10 stops neutral-density filters (ND filters) to reduce the light that comes to the camera sensor, same as the above example, photographers need to calculate the exposure time. this application will calculate the exposure time according to the Neutral density filter stop value, Aperture value, and ISO value. In addition, this application will provide a camera app for finding better compositions, a map for traveling and finding places, planning facilities for pre-plan photography events, a To-Do list for maintaining camera equipment and tasks, handling portfolio for managing their business, Tips, and tricks for improving skills and all other calculations such as Focal length and the 100 rule, etc.

Objectives

- To calculate all the calculations according to the long exposure photography, to make better images with proper lighting.

- To be an indispensable tool for astro photographers, helping them locate, plan, and capture the best Astro events.

- To provide real-time weather information and all other information related to photography, for pre-plan the outdoor photography event without any issues.

- To offer tips and tricks for beginner photographers, to improve their knowledge and skills.

- To enable users to identify the better compositions, best camera settings, and direction of both indoor and outdoor lighting setups.

- To inform photographers about upcoming and unique photography related events.

- To manage the user's career path while handling their portfolio and customer base.

Target Users

- Beginner photographers - Aspirants and newbies looking to enter the field of photography.
- Industrial photographers - People already working in the photography industry.
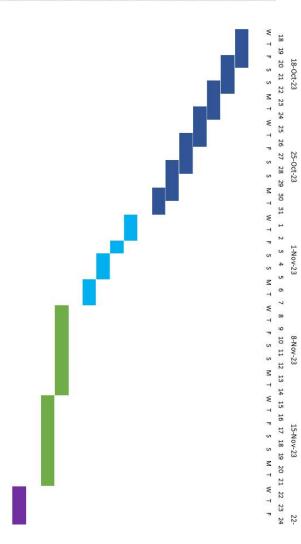- People who choose photography as their hobby.

Application features
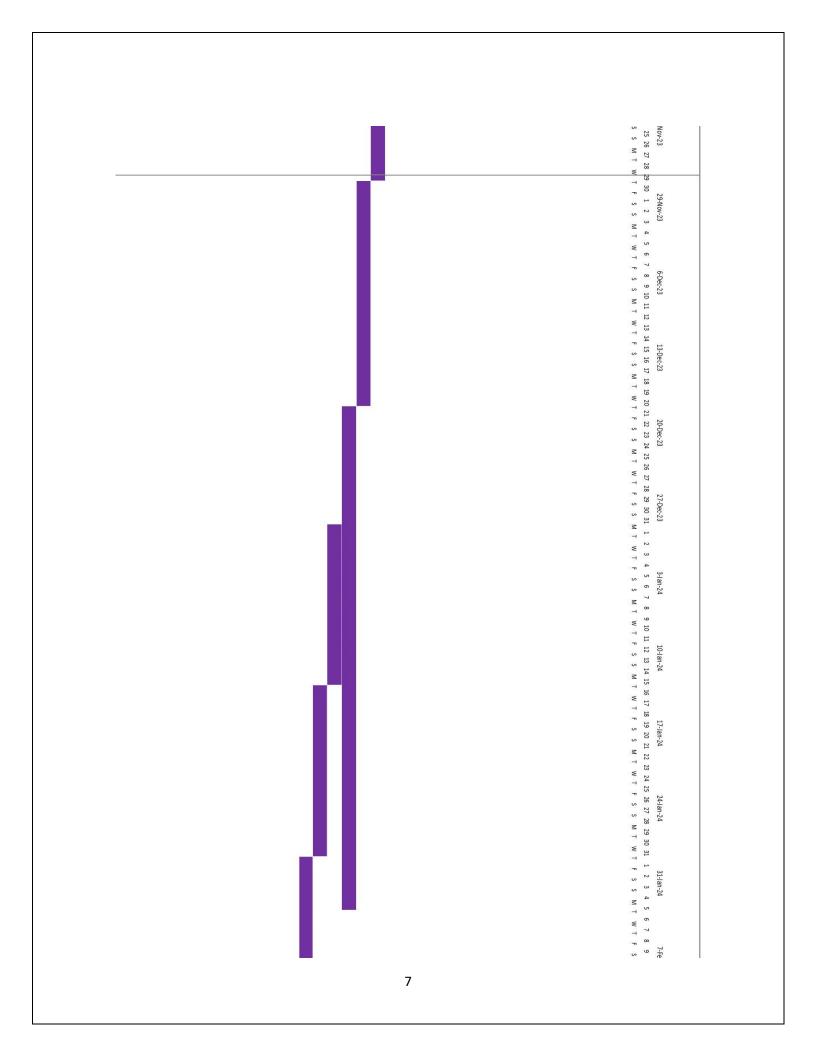
- **User Login** – This feature allows users to create and manage their own accounts and interact with application features.

- **Photography Calculator** –This tool will be including number of calculations such as exposure time and focal length, etc.

- **Weather tool** – This tool helps to Stay informed about current and upcoming weather conditions in your photography locations.

- **Pre-Plan tool** – It enables them to schedule their photo shoots, set reminders and manage equipment and location details, reducing unexpected issues during a photo session.

- **Sky map** – This tool is specially designed for astrophotographers, the Sky Map helps identify celestial events and objects in the night sky.

- **Road map and compass** – This feature helps you find your way to photography locations using the road map and compass tool and it also provides navigation support.

- **Composition tool**- This feature works with real-time camera view that allows photographers to find better compositions in creative frames.

- **Leaning tips tool** – This tool provides resources, articles, tutorials, and tips from experienced photographers, helping users enhance their skills and creativity.

- **Career management tool** – This tool is for aspiring or professional photographers who can manage their photography career using this feature. And it helps in handling their portfolio.

Time Frame

Project Start 18-Oct-23
Project End 20-apr-24

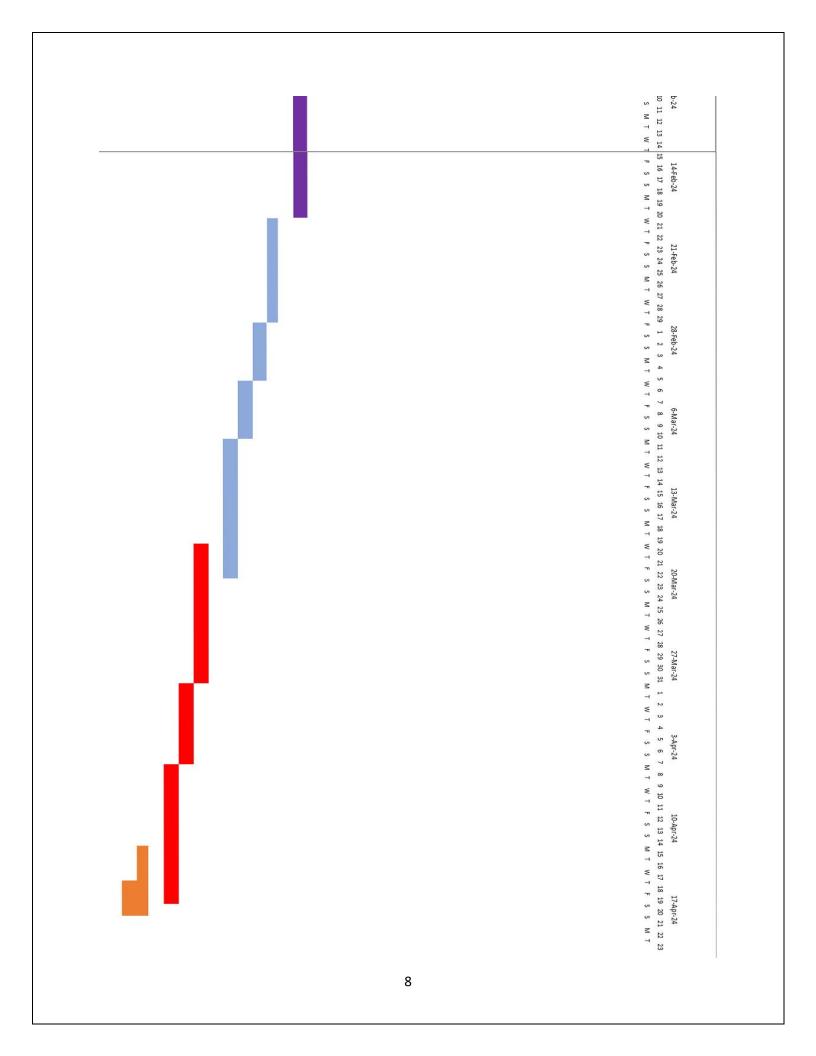| TASK ID	TASK DESCRIPTION	TASK DURATION	START DATE	END DATE
A	**Define the Project**	0		
1	project objectives	3	10/18/2023	10/20/2023
2	key features and functionalities	3	10/20/2023	10/22/2023
3	photography categories covered	3	10/22/2023	10/24/2023
4	calculation and planning tools	3	10/24/2023	10/26/2023
5	business management and portfolio	3	10/26/2023	10/28/2023
6	monetization strategy	3	10/28/2023	10/30/2023
7	technology and compatibility	3	10/29/2023	10/31/2023
B	**Requirement Gathering**			
1	stakeholder interviews	2	11/1/2023	11/2/2023
2	survays and questionnaires	1	11/3/2023	11/3/2023
3	market research	2	11/4/2023	11/5/2023
4	use cases and user stories	2	11/6/2023	11/7/2023
C	**Design the Architecture**			
1	interface design	7	11/8/2023	11/14/2023
2	architecture design	7	11/15/2023	11/21/2023
D	**Project development**			
1	user interface development	8	11/22/2023	11/29/2023
2	feature modules and algorithms	21	11/30/2023	12/20/2023
3	tools implementation	47	12/21/2023	2/5/2024
4	geolocation and mapping	15	1/1/2024	1/15/2024
5	educational content and tips	16	1/16/2024	1/31/2024
6	user accounts and data storage	20	2/1/2024	2/20/2024
E	**Quality Assurance**			
1	functionality and compatibility testing	9	2/21/2024	2/29/2024
2	performance testing	5	3/1/2024	3/5/2024
3	security testing	5	3/6/2024	3/10/2024
4	feedback	12	3/11/2024	3/22/2024
F	**Testing the project**			
1	bug fixing	12	3/20/2024	3/31/2024
2	optimization	7	4/1/2024	4/7/2024
3	updates and maintenance	12	4/8/2024	4/19/2024
G	**Finalize the project**			
1	final report	6	4/15/2024	4/20/2024
2	launch	3	4/18/2024	4/20/2024

18-Oct-23 · 25-Oct-23 · 1-Nov-23 · 8-Nov-23 · 15-Nov-23

b-24 14-Feb-24 21-Feb-24 28-Feb-24 6-Mar-24 13-Mar-24 20-Mar-24 27-Mar-24 3-Apr-24 10-Apr-24 17-Apr-24

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Conclusion

In essence, this app is designed to help photographers improve the creativity of their own products. Offering a wide range of features across different photo categories, it addresses common challenges that photographers face in their day-to-day activities. Moreover, these app features will be cost-free.