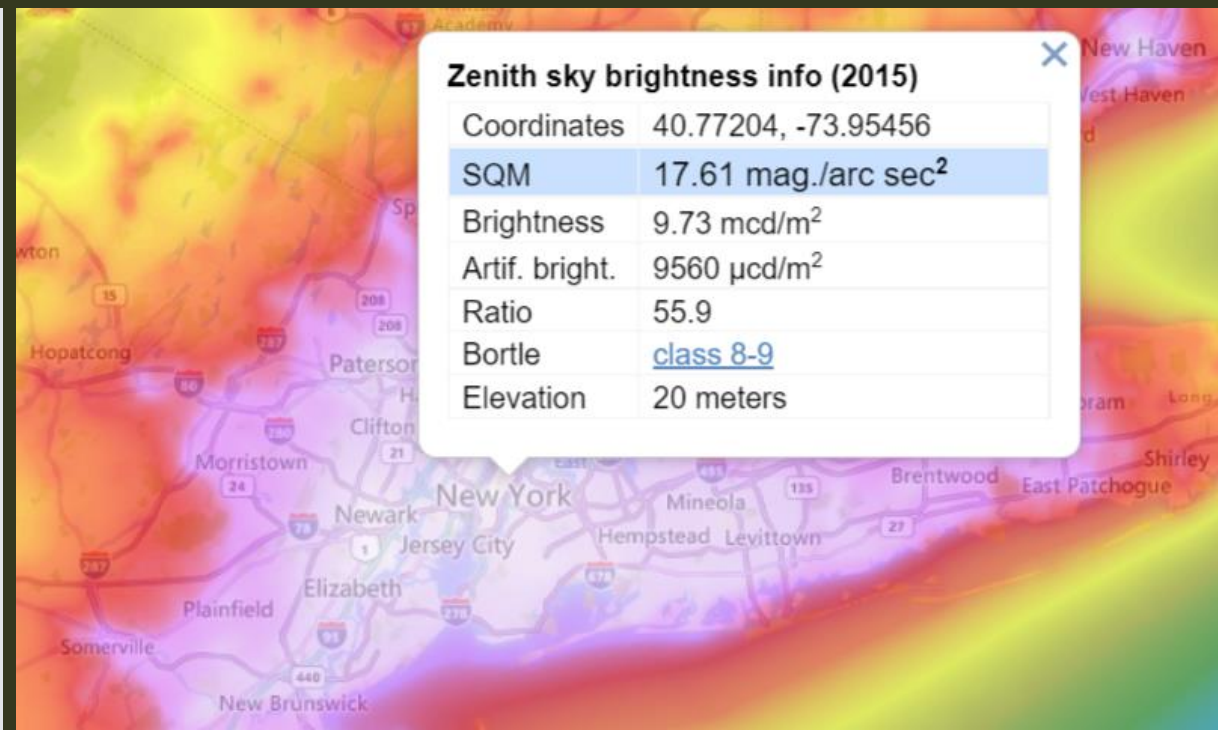
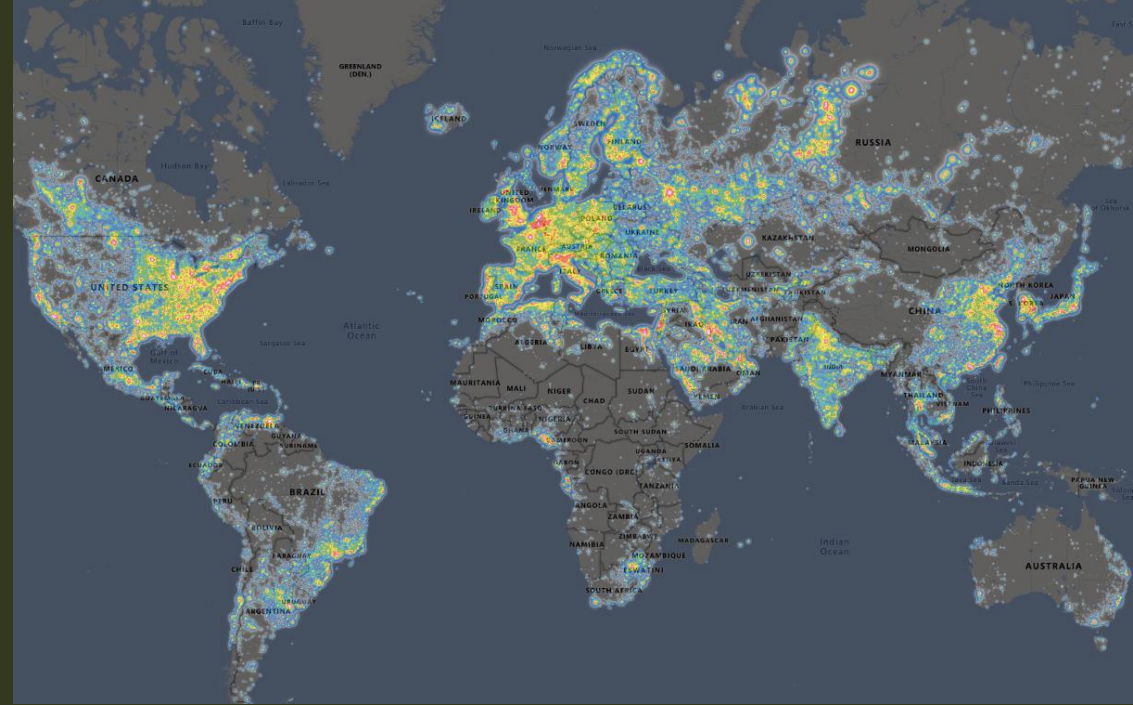




DE-LIGHT INITIATIVE

- Harshal Utekar (Project Manager)
Harsh Pratap Singh
Devendra Gaud
Pradnya Tipare
Bhagyashree Parkar
Yashasvi Sharma

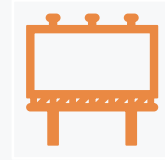
WHY LIGHT POLLUTION?



Causes



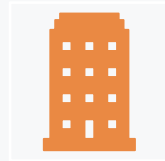
Building exterior and
interior lighting



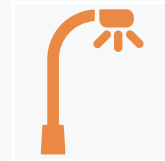
Advertising



Commercial
properties



Offices

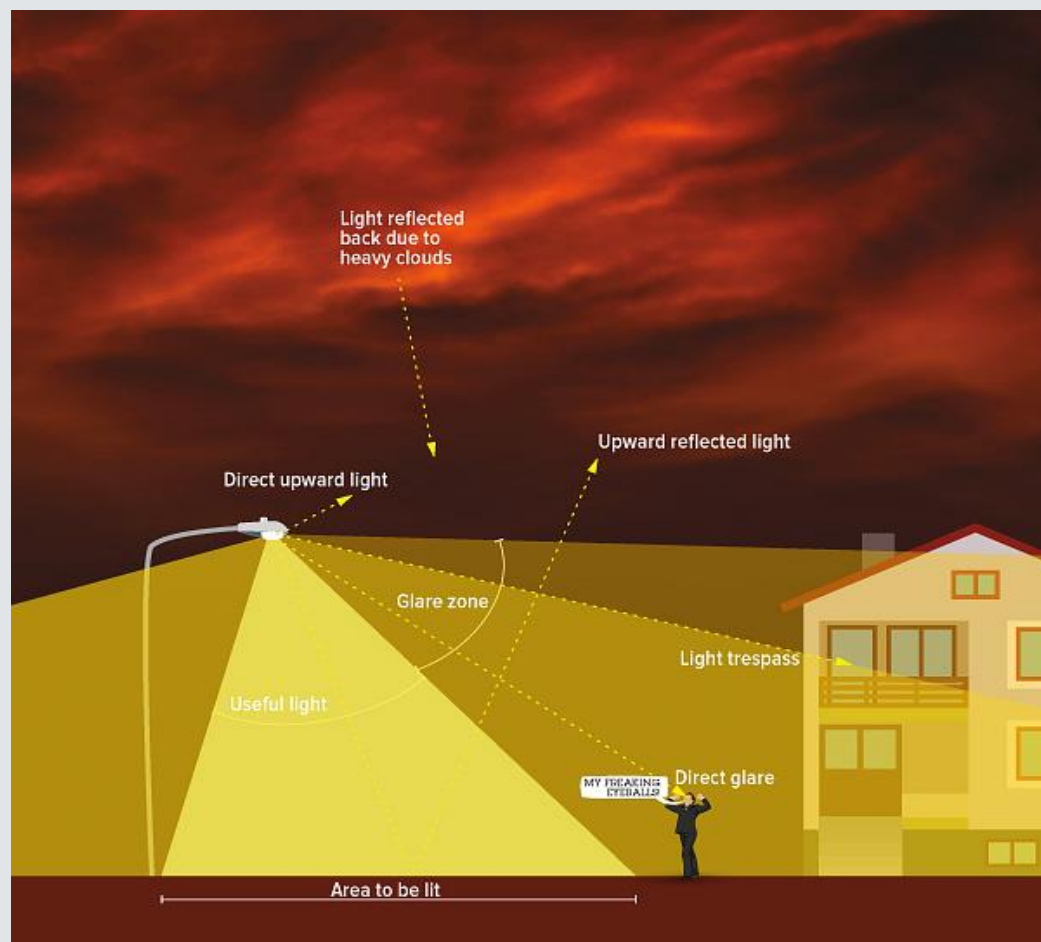


Streetlights



Illuminated sport
venues

Effects



Components

Health Effects of Light Pollution

Humans

- ★ Interferes with melatonin production which regulates daily cycle of systemic activities
- ★ Glare reduces contrast sensitivity, and color perception

Birds

- ★ Artificial lights can cause migrating birds to wander off course and never reach their natural destination

Reptiles

- ★ Decrease in mating, resulting in diminished populations
- ★ Increased vulnerability to natural predators and unusual ones like cars and humans

Mammals

- ★ Difficulty foraging for food due to too much light
- ★ Exposure to predators that would otherwise be unable to see them

Amphibians

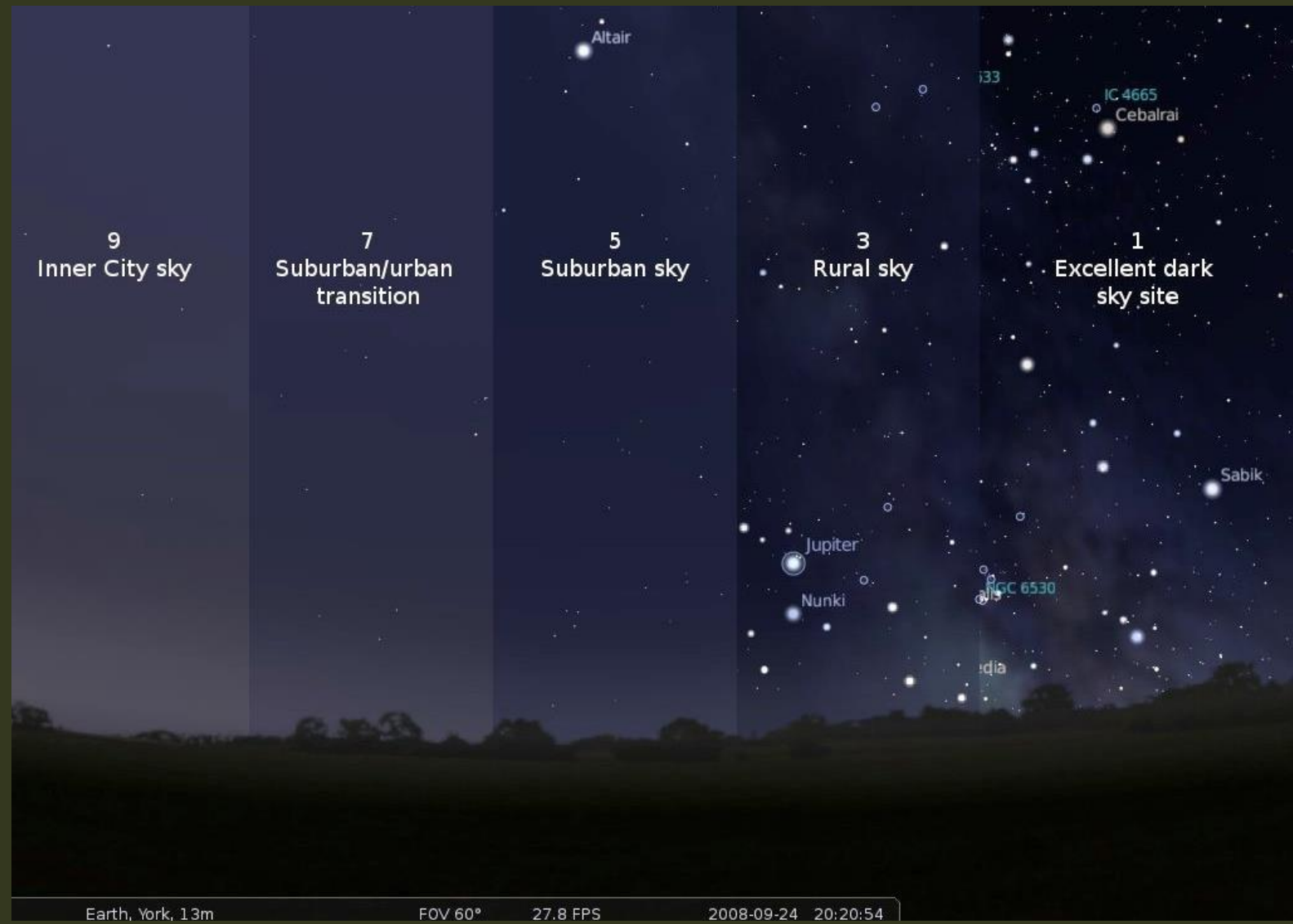
- ★ A decrease in reproduction, resulting in lower populations
- ★ Confusion of natural instincts that protect against predators

References

Chesztule, Ron. "Missing the Dark: Health Effects of Light Pollution." *Environmental Health Perspectives*. Volume 117, Number 1, January 2009

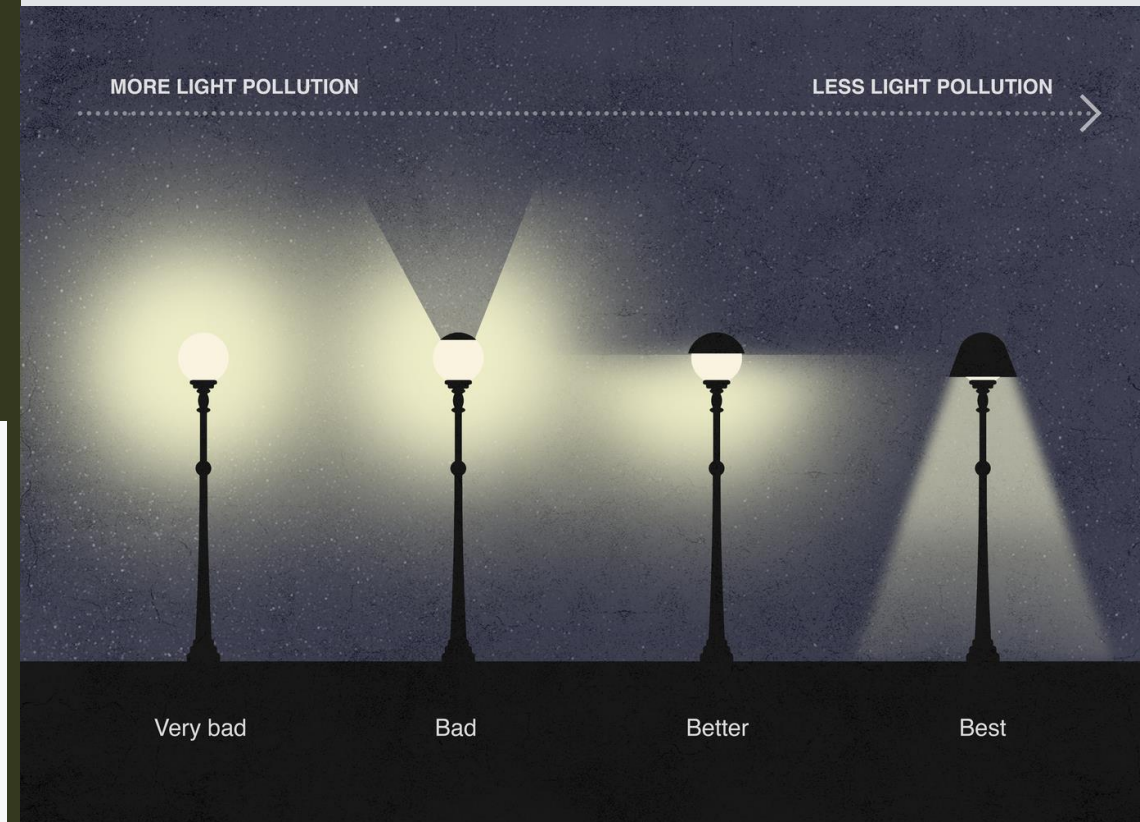
AIM AND OBJECTIVE

- Pitch project idea
- The goal for 1st year
- Minimize High-intensity lights
- Spread Awareness
- Laws and policies
- Lights fixtures(CRI)
- Reduce adverse Health effect
- Illuminating natural night sky



WAYS TO MINIMIZE LIGHT POLLUTION

- STREET-LIGHTS FIXTURE
- ECO-FRIENDLY LIGHTS
- REDUCE UNNECESSARY LIGHT USAGE
- ADVANCE NOTICE FOR THE CORPORATIONS
- PUBLIC AWARENESS



1. Spreading awareness through
online and social campaigns



How?

2. Contacting supplier for
E-light fixtures

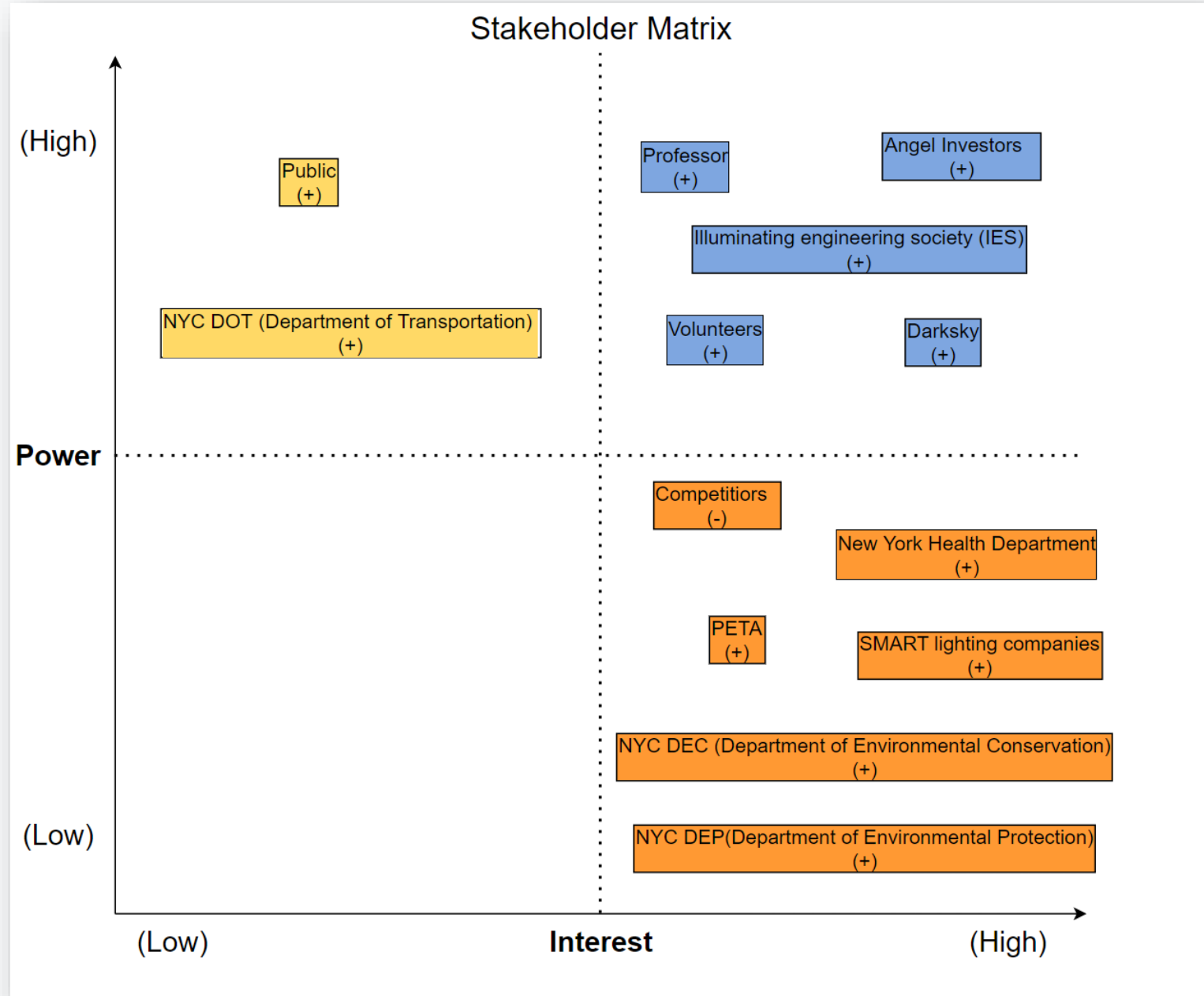


1. PROJECT CHARTER

Project Title: De-Light Initiative	
Start Date: 01/19/2022	Finish Date: 04/27/2022
Budget: \$5,670.00	
Project Manager: Name: Harshal Utekar Responsibilities: <ol style="list-style-type: none">1. Monitor weekly progress2. Time Management3. Schedule Meetings4. Coordinate project activities5. Team motivation6. Conflict resolution Authority: <ol style="list-style-type: none">1. Change request approvals2. Define budget for tasks3. Allocate tasks to resources	
Project Objectives: <ol style="list-style-type: none">1. To receive 100% funds from Angel Investors for non-profit.2. To present non-profit idea in front of investors.3. Fixing the design fixtures of city lights by at least 10% after receiving funding by the 1st year.4. Targeting 20% skyscrapers, commercial, and corporate buildings to minimize the high intensity lights and encourage energy efficient LEDs/eco-friendly lights and light-resistant windows.5. Making the NYC people aware on the devastating effects of light pollution by holding campaigns and support advertisements.6. File and support for new light pollution control policies and currently withstanding laws/policies by collaborating with government entities.7. Evaluating light intensity of building fixtures based on Color Rendering Index(CRI) scale.8. Reduce health effects on humans such as sleep disorders, breast cancer, eyesight.9. To have an illuminating night sky rather than an artificial light night.	

Deliverables: <ul style="list-style-type: none">• Deliver all 12 project management documents asked by Professor Leon Herszon.• Presentation highlighting the goal and purpose of non-profit in-front of panel and professor.• Promote the established and pursued policies by marketing and advertising to spread awareness and gain public support.• Install model outdoor lighting in at least 5 NYC parks and encourage darksky programs to visitors.• Increase the energy efficiency grade of at least 20% buildings from D-grade to at least B-grade and boost the current B-grade efficiencies towards A-grade in NYC.• Educate and promote lighting designers, manufacturers to manufacture lights with CRI of 85 or above.• Establish guidelines with assistance of government for Turtle friendly light fixtures which point downward.
Success Criteria: <ul style="list-style-type: none">• Receiving 70-100% of the funding for the non-profit.• Completing the project plan and documents• Successfully presenting the project plan and presentation in front of investors and professor.
Risks: <ul style="list-style-type: none">• Unable to secure funds• Improper documentation• Insufficient research and factual data• Scope creep
Sponsor's name and signature, date: Mr. Joseph Vocaturo, 04/27/2022 Mr. Americo Pinto, 04/27/2022

2. STAKEHOLDER MATRIX



3. LIST OF REQUIREMENTS

A. DarkSky/IES

Obtaining Sky Quality Index, Classify Bortle-Scale, Policies, and Standards of Light Illumination

B. Volunteer

Carry out all the activities for the Non-Profit Organization

C. Angel Investors

Present 100% detailed project plan and obtain sponsorship from the Angel Investors to run the campaign

D. Public

Educate them about Light Pollution, its Impacts, and the importance of eco-friendly lights.

E. Eco-friendly Light supplier

Sell eco-friendly lights to the Public and provide samples to volunteers

F. NYC Dot/NYC Dec/ NYC Dep

Providing necessary legal information, insights and contribute to awareness campaigns.

G. PETA

Provide evidence-based information about the adverse effect of light pollution on animals, fishes and marine life.

H. New York Health Department

Provide evidence-based information about the adverse effects of light pollution on humans.

I. Professors

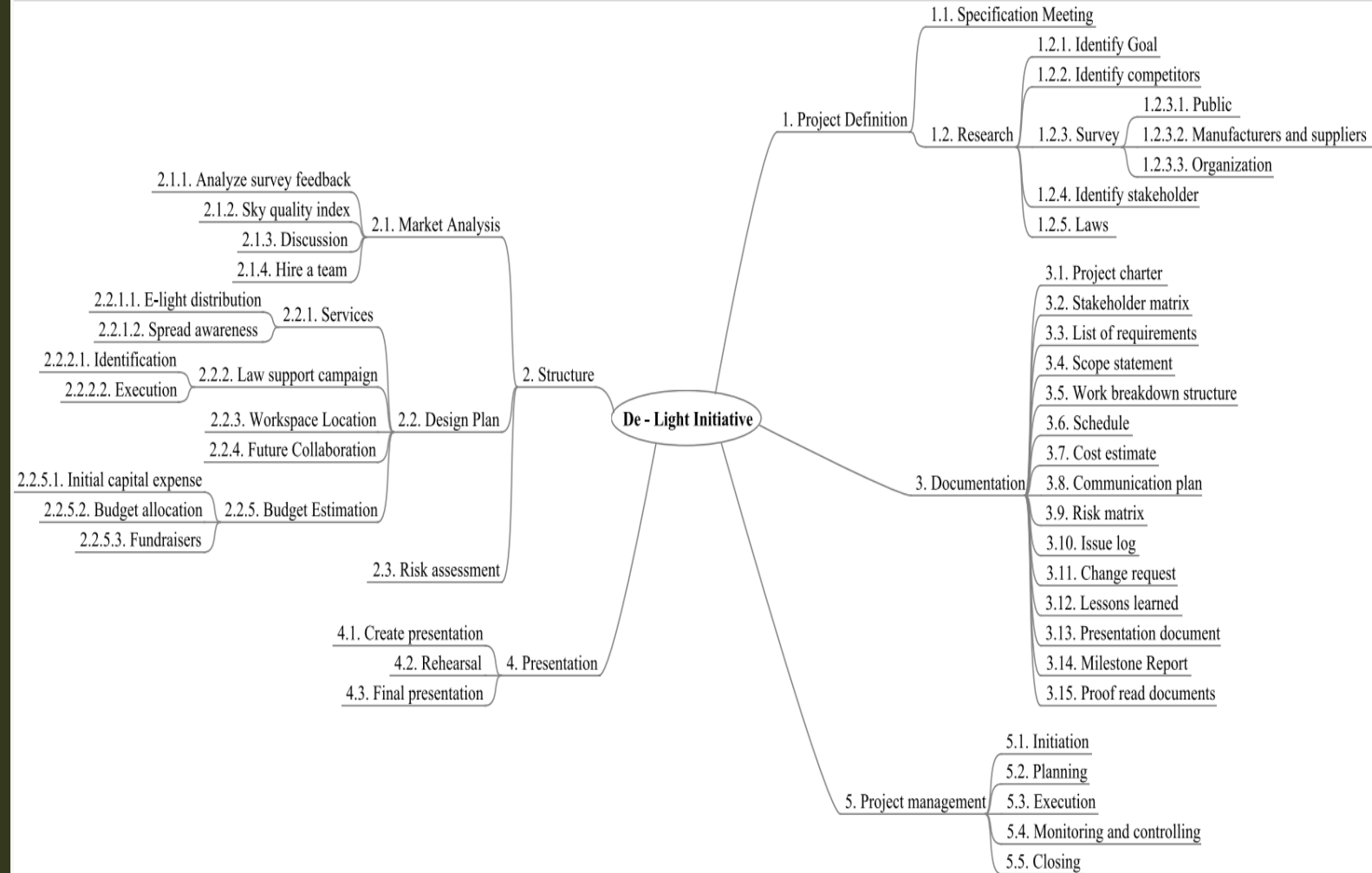
Create 13 Project Management documents. Create a presentation and present it on 27th April 2022.

J. Competitors

Future collaboration should be considered in order to get a bigger audience and reach goals.



5. WORK BREAKDOWN STRUCTURE



4. SCOPE STATEMENT

PRODUCT SCOPE

Scope of the Product:

A. DarkSky/IES

A.1. Sky quality index of the highly affected cities.

A thorough sky quality survey is essential to successfully applying to the International Dark-Sky Places Program. A synthetic index derived from the distribution of sky luminance values in the artificial sky glow mosaic. Dark Sky provides this value using the SKY Quality Meter, which ranges from 0 to100, where 100 is a sky free of artificial sky glow.

A.2. Details for existing programs in those major cities.

Maintain a 100% detailed list regarding all the programs, campaigns, and other non-profit organizations in the major cities on which projects will be implemented; it should provide timelines for those programs.

PROJECT SCOPE

Scope of the Project:

1. Project Definition:

1.1. Specification Meeting

We began with group action and a team meeting will be called. The meetings will be scheduled over a period of time depending on the availability of the team. The team can discuss the research findings in the meeting and can provide their suggestions. The team members can also add new requirements or roadblocks that they think should be considered while working on the project. This may facilitate us in reducing the time needed to finish the project together with any issue or obstacles.

1.2. Research:

1.2.1. Identify Goal

We started with brainstorming or researching the requirements for the project. This includes the requirements for all the possible stakeholders. All the requirements were noted down before they

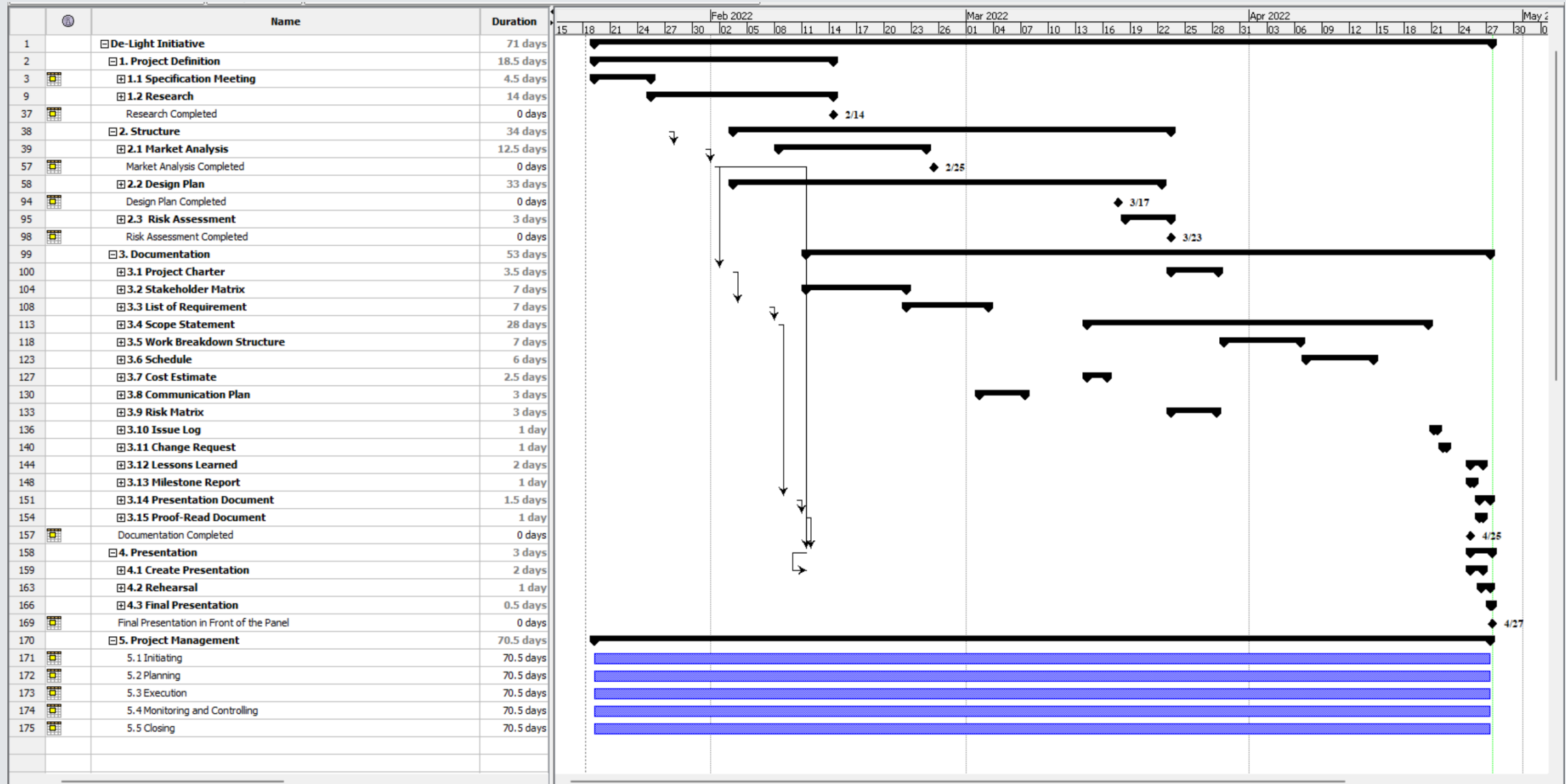
Project Assumptions:

- The project would be within budget.
- We would finish the project on time.
- We would secure at least 80% of the funding.
- We would receive at least 75% of grants and funds from multiple organized fundraisers.
- Our program would educate and make at least 50% of the NYC population aware about the impacts

Out of Scope:

- Creating light supplies that have CRI scale of 90 and above
- Providing healthcare assistance for light pollution related health effects.
- Expanding the target location beyond NYC.
- Compensation for volunteers on E-light supplies

6. SCHEDULE



Sr No.	WBS Item	# hours	# people	\$/h	Total Labor	Non-Labor	Total Cost
2.2.5.3	Fund Raiser	3	4	10	120	30	150
2.3	Risk Assessment	3	6	10	180	30	210
3	Documentation						
3.1	Project Charter	3	4	10	120	10	130
3.2	Stakeholder Matrix	4	6	10	240	40	280
3.3	List of Requirements	3	6	10	180	30	210
3.4	Scope Statement	8	2	10	160	20	180
3.5	Work Break Down Structure(WBS)	10	6	10	600	80	680
3.6	Schedule	8	2	10	160	20	180
3.7	Cost Estimate	3	5	10	150	0	150
3.8	Communication Plan	2	3	10	60	0	60
3.9	Risk Matrix	3	6	10	180	0	180
3.10	Issue Log	3	2	10	60	0	60
3.11	Change Request	3	2	10	60	10	70
3.12	Lessons Learned	3	6	10	180	30	210
3.13	Milestone Report	1	2	10	20	0	20
3.14	Presentation Document	1	6	10	60	10	70
3.15	Proof Read Documents	2	6	10	120	20	140
4	Presentation						
4.1	Create Presentation	3	2	10	60	0	60
4.2	Rehersal	2	6	10	120	30	150
4.3	Final Presentation	1	6	10	60	0	60
	Total Cost				4920	770	5690

7. COST ESTIMATE

8. COMMUNICATION PLAN

Sr No.	Stakeholder	What	When	How	Who	Where
1	Darksy	Obtaining sky quality index from Darksy organization	Monthly During Market Research phase	Online/Email	Team Aces	Email, Zoom, Webex
		Details regarding eco-friendly lights, outdoor/indoor lights	Once During Survey phase	Online/Email	Team Aces	Email, Zoom, Webex
		Guidelines & Policies regarding Light Pollution	Once During Survey phase	Online/Email	Team Aces	Email, Zoom, Webex
2	Eco-friendly light suppliers	Discussing Potential Partnership	Monthly Post-Market Research phase	Online/Phone-call	Team Aces	Zoom, Webex, Office
		Contract Signing after getting funds	Once after Post-funding phase	In-person	Team Aces	Office
3	Professor	Status of the Project	Monthly from kick-off to closing	Online/In-person	Team Aces	Zoom, Email, Classroom
		Issues during project	Weekly till 22nd April 2022	Online/In-person	Team Aces	Zoom, Email, Classroom
		Feedback regarding project documentation	Bi-weekly till 27th April 2022	Online/In-person	Team Aces	Zoom, Email, Classroom
4	Public/Citizen	Interaction during survey	Daily During Public Survey phase	Online	Team Aces	Zoom, Email
		Awareness about Light Pollution and Eco-friendly light usage	Post-funding phase	Online/In-person	Team Aces	Zoom, Webex, Email, Campaign
5	Angel Investors	Presenting the Project Idea	On 27th April,2022	In-person/Online	Team Aces	Zoom, Classroom
		Discussing Capital Investment	On 27th April,2022	In-person/Online	Team Aces	Zoom, Classroom
6	Competitors	Survey feedback regarding Light Pollution and impacts	Once During Survey phase	Online	Team Aces	Zoom, Webex, Email
		Discussing future collaboration	Once during Design Plan	Online/In-person	Team Aces	Zoom, Webex, Office, Email
7	PETA (Animal Right Association)	Information on impacts of Light Pollution on Animals and Fishes	Once During Survey phase	Online	Team Aces	Zoom, Webex, Email
8	NYC DOT (Department of Transportation)	Survey feedback regarding street light installation	Once During Survey phase	Online	Team Aces	Zoom, Webex, Email
		Information about future outdoor e-lighting plans	Once During Market Research phase	Online	Team Aces	Zoom, Webex, Email

9. RISK MATRIX

Risk List	Probability (1-5)	Impact (1-5)	Severity (P*I)	Action Plan	Contingency Plan
Insufficient Research and Factual Data	2	4	8	Mitigate: Research thoroughly on the internet or contact the Government departments for legal documents.	Contact pre-existing organizations serving the same purpose.
Poor Time Management	2	4	8	Mitigate: Establish clear goals and expectations with timelines	Re-design plan and schedule follow-up meetings
Peer Competitors	3	4	12	Mitigate: Design & deliver the best project plan	<ul style="list-style-type: none"> • Collaborate with parent NGOs like Darksy • Propose plan to other investors
Unanticipated requirement changes	2	3	6	Accept	Understand the requirement change, discuss among the team members to analyze the impact, then create a change request form that to be approved by the stakeholder

10. ISSUE LOG

Issue	How it could have been prevented?	How to address this issue?
Cancelled planned meeting	Manage other work in regulation with planned meetings.	Hold virtual meeting whenever in-person meetings not feasible. Reschedule meetings as per team's availability.
Scope creep	Work with stakeholders to clearly identify requirements Set goals according to identified requirements	Updating the stakeholders regularly in regards with the progress of the project
Did not meet set Milestone deadlines	Frequent follow-up meetings Regular monitoring of deadlines by project manager	Discuss and review with the team and set realistic deadlines.
MS Project software configuration issue	Not applicable	Install alternate softwares such as Project Libre

11. Change Request



Added Milestones in the Schedule.



Removed sub-levels from WBS.



Modify the Requirement matrix with code names.



Modify the Risk matrix probability and impact for identified issues.

12. LESSONS LEARNED

Progress Group	Start Doing	Stop Doing	Continue Doing
Initiating	Establish roles and responsibilities within the project team. Conduct meetings on time. Brainstorm with team meetings to get better output. Set a target for each meeting.	Procrastination. Identify and filter stakeholders ahead of the scope.	Research with intent helps understand the process better. Respect everyone's opinions on the team. Research and collaborate on tasks.
Planning	Set a realistic deadline for each task	Miss deadlines. Leave work incomplete	Regular team meetings to brainstorm ideas Follow-up about the progress with respective team members Create and set milestones
Executing	Assign team member responsibilities Maintain documentation for brainstormed activities	Expect to complete a document in one stretch Divide work unevenly	Follow WBS Keep stakeholders updated on progress Be mindful of change requests Proofread and verify content with the professor
Monitoring & Controlling	Ask for feedback from stakeholders	Operate outside the project scope	Regularly seek feedback from stakeholders
Closing	Verify that all requirements were met	Don't assume project completion	Officially closeout project with stakeholders

- Support campaigns and marketing.
- Signing deals with the manufacturers and suppliers.
- Distribution of e-lights.
- Collaboration with Government Entities.
- Collaboration with competitors.
- Organizing Fundraisers

Future Scope:

THANK YOU!

Questions?

