

Project Development and Completion Tracker									
Project ID	Project Name	Phase	Start Date	End Date	Progress (%)	Status	Assigned To	Priority	Comments
P001	Website Redesign	Planning	2023-01-15	2023-02-15	100	Completed	John Doe	High	Initial requirements gathered.
P002	Mobile App Development	Design	2023-03-01	2023-04-01	75	In Progress	Jane Smith	Medium	UI/UX design in progress.
P003	Database Migration	Testing	2023-04-15	2023-05-15	50	In Progress	Mike Johnson	High	Performance testing ongoing.
P004	Marketing Campaign Launch	Execution	2023-05-01	2023-06-01	20	On Hold	Sarah Lee	Low	Waiting for budget approval.
P005	Hardware Refresh	Procurement	2023-06-01	2023-07-01	10	On Hold	David Kim	Medium	Vendor selection in progress.
P006	Security Audit	Analysis	2023-07-15	2023-08-15	0	Not Started	Emily White	High	Initial scope definition.
P007	Cloud Migration Phase 2	Deployment	2023-08-01	2023-09-01	30	In Progress	Chris Brown	High	Partial migration completed.
P008	Internal Tool Development	Development	2023-09-01	2023-10-01	15	On Hold	Alex Green	Low	Requirements gathering.
P009	Customer Feedback Analysis	Reporting	2023-10-01	2023-10-31	0	Not Started	Mia Black	Medium	Survey distribution.
P010	Annual Report Generation	Final Review	2023-11-01	2023-11-30	0	Not Started	Noah Grey	Low	Final data collection.

Project ID:	TYAIA212	Class	TY-AI 2	Percentage of Project Completion:	98%	Copyright Status:	NA	Technology Transfer:	NO	<a href="https://docs.google.com/document/d/1mmtC">https://docs.google.com/document/d/1mmtC</a>	
Project Domain	Machine Learning & AI	Specialization	AI	Map Sustainable Development Goal:	11 Sustainable Cities and Communities	Paper Publication Status:	Submitted	Achievements:	Type Your Answer_ 1. 2.		
Problem Statement						Urban traffic congestion is often worsened by outdated traffic light systems that fail to adapt to real-time conditions, leading to inefficiencies, increased travel times, and driver frustration.	GitHub Link:	<a href="https://github.com/Frostwalker3107/ITSS.git">https://github.com/Frostwalker3107/ITSS.git</a>	Meeting Count		12
	Enrollment Number	Name of Studnets	Class	Contact Number	Email ID	Review-1 Marks	Review-2 Marks	Review-3 Marks	Final Evaluation Marks (50)	Total Marks (100)	
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Project Guide Industry Mentor	Prof. Vaibhav Sawalkar										

	Reiview Date	Comment by Jury/ Mentor	Reiview Link	Technology Stack	1	2	3	4	5
Reiview-1	2/28/2025			Front-end (Client-side)					
Reiview-2	4/23/2025			Back-end (Server-side):					
Reiview-3	5/16/2025			Database Layer:					
				Development Tools:					
				Deployment and Infrastructure:					
				Specialization Inlinement:					
Epic:	As a Citizen, I should not have to wait for long time at the traffic signal.								
Story 1:	As a citizen, I want the traffic to get cleared as soon as possible.								
Story 2:	As a citizen, I don't want to wait at the traffic signal for a long time even if there are no vehicles on the other ways of the signals.								
Story 3:	As a citizen, I need the traffic signal to turn green immediately for an approaching emergency vehicle.								
Task1:	Train a ML model to detect vehicles like buses, motorcycles, cars, trucks, rickshaws.								
Task2:	Once vehicles are detected waiting at the traffic signal, start counting the number of vehicles at each side of signal.								
Task3:	Based on more number of vehicles, create a logic to give way to more densed way.								
Task4:	Once the whole software works properly, Go for the hardware implementation.								
Task5:	Check on real-time traffic.								
Task6:	Deploy the system for real intersections for improve the traffic flow.								
Acceptance Criteria									
1	The system must detect and count different vehicle types with ≥85% accuracy and update counts after every red signal cycle.								
2	Emergency vehicles must be detected within 2 seconds, turning their lane's signal green immediately while others turn red, with ≥90% accuracy.								
3	Signals must dynamically allocate 5–60 seconds of green time per lane based on traffic density, with smooth transitions and real-time re-evaluation.								
4	The system must log vehicle counts, emergency events, and signal timings in a database with real-time accessibility and traffic reports.								

Print No.	Task Name	Sub Tasks	Task Status	Assigned To	Assigned Date	Deadline	Start Date	Completion Date	Completion Status
<b>Sprint 1</b>	Train ML model to detect vehicles	Research and download dataset	Complete	Ishan, Omkar	2025-02-25	2025-03-15	2025-03-03	2025-03-11	100%
25-02-2025		Train the model	Complete	Ishan, Omkar	2025-02-25	2025-03-15	2025-03-03	2025-03-11	100%
21-03-2025	Count number of vehicles using camera	Detect vehicles using camera	Complete	Arnav, Samiksha	2025-03-16	2025-04-03	2025-03-17	2025-03-21	100%
		Improve accuracy if needed	Complete	Arnav, Omkar	2025-03-16	2025-04-03	2025-03-17	2025-03-21	100%
<b>Sprint 2</b>	Improve Accuracy	Train the model for every type of vehicle	Complete	Ishan, Samiksha	2025-04-02	2025-04-15	2025-04-03	2025-04-26	100%
01-04-2025		Different environmental testing	Complete	Omkar, Samiksha	2025-04-20	2025-04-30	2025-04-22	2025-04-29	100%
29-04-2025	Apply logic for traffic light switching	Implement code for the logic	Complete	Arnav, Ishan	2025-05-02	2025-05-08	2025-05-04	2025-05-11	100%
		Visual representation on simulation software	Overdue	Arnav, Samiksha	2025-05-07	2025-05-14	2025-05-07		80%

Publication Details									
Sr. No	Paper Title	Name of Journal	Year	Authors	URL	DOI	Volume	Page no.	Publisher
1	Smart Traffic Light Control System	International Journal of Scientific	2024	Arnav Sohani, Ishan Gaikwad	<a href="https://ijsrem.com/volume08issue11">https://ijsrem.com/volume08issue11</a>	<a href="https://doi.org/10.55041/IJSREM39220">10.55041/IJSREM39220</a>		8	11
2									IJSREM
Patent Details									
Sr. No.	Title	Inventors	Application No.	Patent Number	Filing Country	Subject Category	Filing Date	Publication Date	Publication Status
1									
Copyright Details									
Sr. No.	Title of work	Name of Applicants	Registration No.	Dairy Number	Date	Status			
1									
Event and Participations Details									
Sr. No.	Name of Event	Type of Event	Date	Type of Participation	Details of Prize won				
1									
2									

**Add Weekly Meetings Details [ Minimum 12 meetings ]**

Date	Attendees with commas	Agenda points with commas	Action Items	Assigned to	Status (click if completed)		
04-02-2025	Everyone	Discussion about the idea of project and implementation	Research about many more ideas	Whole group	<input checked="" type="checkbox"/>		
2/12/2025	Everyone	Discussion about improving the method	Decided to train our model	Whole group	<input checked="" type="checkbox"/>		
02/18/2025	Everyone	Choosing model for detecting vehicles	also used yolov8 to improve accuracy	Whole group	<input checked="" type="checkbox"/>		
3/4/2025	Everyone	Discussion on improving the model	created own dataset to improve accuracy	Whole group	<input checked="" type="checkbox"/>		
3/11/2025	Everyone	Improving Accuracy	Trained one more model	Whole group	<input checked="" type="checkbox"/>		
3/18/2025	Everyone	Creating visual representation	Checked for logical softwares	Whole group	<input checked="" type="checkbox"/>		
3/25/2025	Everyone	Visual Represenation designing	Used AnyLogic Software to create representation	Whole group	<input checked="" type="checkbox"/>		
4/1/2025	Everyone	Building logic for traffic signal	Checked for what will be efficient	Whole group	<input checked="" type="checkbox"/>		
4/8/2025	Everyone	Trying different conditions	Checked for different videos	Whole group	<input checked="" type="checkbox"/>		
4/22/2025	Everyone	Emergency Vehicle detection	Trained model for Emergency vehicles	Whole group	<input checked="" type="checkbox"/>		
4/29/2025	Everyone	Reports and paper publishing	Completed as per the discussion	Whole group	<input checked="" type="checkbox"/>		
5/13/2025	Everyone	Final check of documents	All documents were kept cleared	Whole group	<input checked="" type="checkbox"/>		