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CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

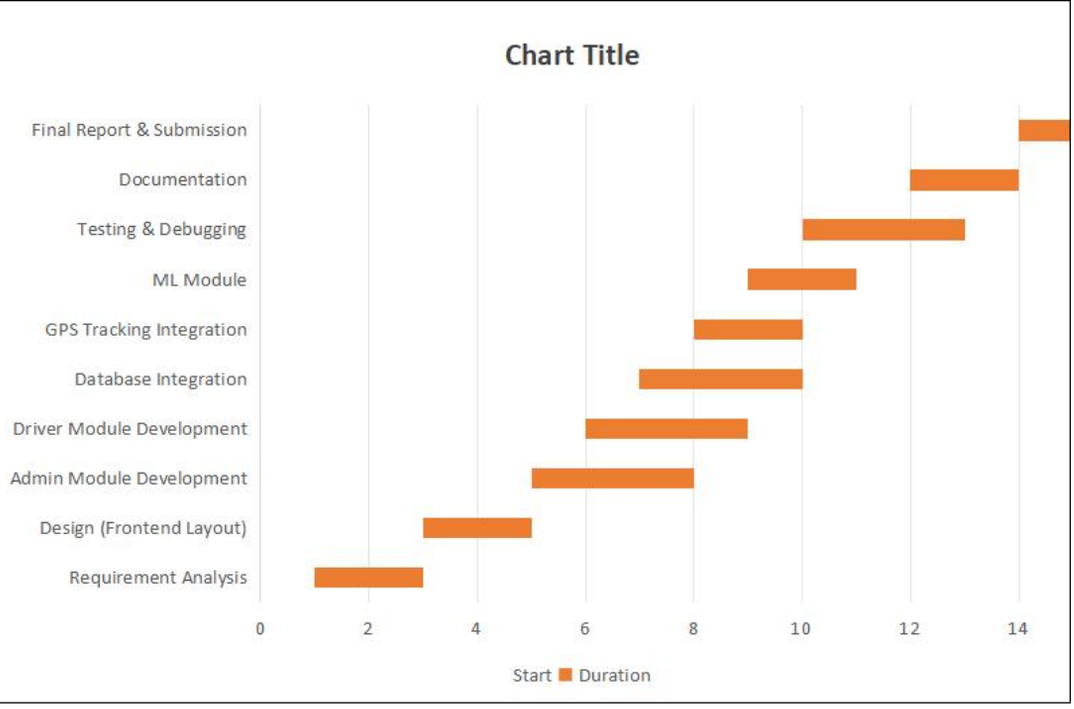
cspit
Chandubhai S Patel Institute of Technology

Faculty of Technology and Engineering
Chandubhai S. Patel Institute of Technology
Department of Computer Science & Engineering

Project Problem Statement for Project-III

Project Group ID: CSPIT/CSE/B2/		
Student ID:	23CS095	23CS101
Name:	Siroya Keshvi	Vanara Aditi
Project Title:	DriveNest	
Domain of Project Definition:	Logistics and Transportation Management	
Technology/Methodologies to be used in project:	• Frontend: React.js • Backend: Node.Js & MongoDB • Database: MongoDB • REST APIs • Git & GitHub for version control • Machine Learning for delay prediction	
Project Objectives	• To streamline truck and transport operations through a centralized web platform • To enable efficient assignment and monitoring of drivers • To generate analytical reports and summaries for the admin • To enhance communication between admin and drivers • To implement ML models for predicting route delays • To provide real-time tracking of vehicles using GPS integration	

Brief Description about project:	The DriveNest is a web-based solution designed to manage and monitor logistics operations efficiently. It includes modules for admin and drivers, allowing the admin to assign trips, track vehicle movement via GPS, and receive updates from drivers in real time. The system aims to reduce manual overhead, improve route planning, and provide insightful reports. An optional machine learning component can be integrated to predict delays based on historical data, enhancing decision-making and delivery reliability.
SWOT analysis chart for the Project	**Strengths:** Centralized management system Real-time tracking and updates Scalable and modular design **Weaknesses:** Initial setup complexity GPS and ML integration may require additional resources Dependence on internet connectivity **Opportunities:** Can be extended for large logistics companies Potential for mobile app integration Scope for advanced analytics and automation **Threats:** Data security and privacy risks Integration challenges with third-party APIs Competition from existing commercial solutions
Project Deliverables	• Admin dashboard with trip assignment and driver management • Driver module for route details and status updates • GPS-based vehicle tracking system • Functional backend with database integration • Report generation and analytics module • Source code hosted on GitHub • Project documentation and user manual

Gantt chart with Project Timeline and Team Roles	

Keshvi Siroya Sign

Aditi Vanara Sign

Assessment Rubric to evaluate Difficulty level of Project:

Criteria	23CS095	23CS101
Scope and Complexity		
Technical Challenges		
Resource Requirements		
Quality level of Gantt Chart		
Quality level of SWOT analysis chart		
Innovation and Creativity		
Total (Out of 30)		

Assessment Rubric to evaluate quality of Project Problem Statement:

Criteria	23CS095	23CS101
Clarity of Problem Statement		
Relevance to Project Objectives		
Clarity of Language and Presentation		
Overall Impression		
Total (Out of 20)		

Mentor's Comments:

Mentor's Sign:

HOD's Sign with Comments: