

ANTI-THEFT SURVEILLANCE CAMERA

Guarding Your World: Our Cameras, Your Security.



OUR TEAM

Meet the dedicated individuals behind our anti-theft surveillance camera project



NITISH

KUMAR

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AMANPREET

KAUR

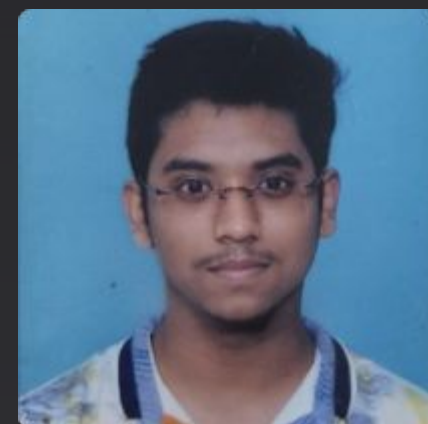
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SOUMYA

UPADHYAY

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SOUKARJO

KR. DAS

ID: 211001001004



ANUSRI

CHOWDHURY

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SEMESTER WORK RECAP

August

Reviewing previous work, researching existing anti-theft surveillance technologies, and brainstorming potential project directions.

1

2

September

Working on refining the initial idea, developing a comprehensive project presentation, and outlining key features and functionalities.

October

Beginning work on the physical model, setting up the basic camera and alarm system, and testing initial prototypes.

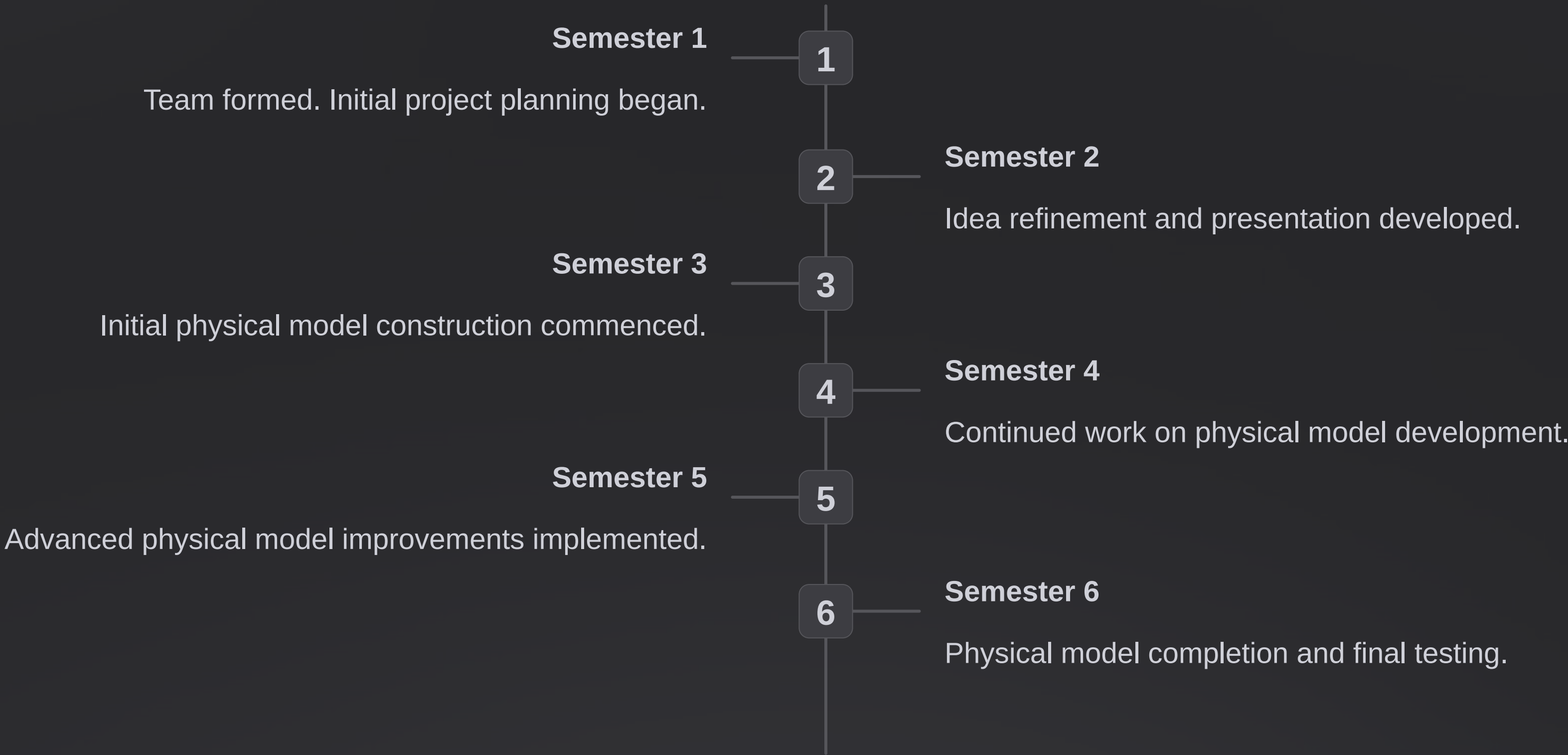
3

November

Continuing work on the physical model and setup, integrating advanced sensor technologies, and conducting thorough system testing and calibration.

4

PROJECT MILESTONES



PROBLEM STATEMENT

Rising Vehicle Thefts

Motor vehicle thefts are increasing in India, even during lockdown.

Major Factors

Lack of parking, casual attitude, and second-hand markets contribute.

Affected Parties

Vehicle owners face violence, threats, and invasion of private properties.



MISSION

STATEMENT

- Minimize theft and enhance security nationwide with our innovative camera: Our primary goal is to significantly reduce vehicle theft incidents across India by providing a state-of-the-art surveillance solution that acts as a powerful deterrent to potential thieves.
- Our mission is to provide peace of mind to vehicle owners by offering a cutting-edge anti-theft surveillance system: We strive to reassure vehicle owners that their property is protected, offering them a sense of security through our advanced technology and reliable surveillance capabilities.
- We are committed to leveraging advanced technology to deter criminal activity, assist in vehicle recovery, and create safer communities for everyone: We dedicate ourselves to employing the latest technological advancements to actively prevent criminal activities related to vehicle theft, aid in the swift recovery of stolen vehicles, and contribute to building safer and more secure communities for all citizens.

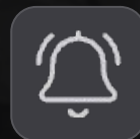


SOLUTION



Intruder Detection

Our system can trace any intruder attempting to tamper with or steal parts from the vehicle. It captures detailed footage and provides real-time alerts to the owner, enhancing the chances of apprehending the culprit and preventing further damage.



Alert System

Highly sensitive sensors are strategically placed within and around the vehicle to detect any unauthorized access or suspicious activity. Upon triggering, these sensors promptly send alert signals directly to the owner's smartphone, allowing for immediate awareness and action.



Cloud Storage

All captured video files and alert logs are securely stored in a dedicated cloud storage system. This ensures that even if the camera itself is damaged or stolen, the crucial evidence remains accessible to the owner and law enforcement, facilitating vehicle recovery and investigation efforts.

SWOT ANALYSIS

Explore our business concept. It provides innovative security features. We offer real-time threat detection and alerts.

	Opportunities	Threats
Strengths	<div>Increasing demand for AI-based security systems.</div> <div>Potential integration with smart home ecosystems.</div> <div>Expansion into business and corporate security sectors.</div>	<div>Dependence on internet connectivity for real-time monitoring.</div> <div>Rising concerns over data privacy and surveillance ethics.</div> <div>Competition from established security brands.</div>
Weaknesses	<div>Government grants and funding opportunities for security innovation.</div> <div>Growing interest in affordable and efficient surveillance for small businesses.</div>	<div>Risk of cybersecurity attacks targeting the system.</div> <div>High initial setup costs may limit market adoption.</div> <div>Potential for false positives leading to unnecessary alerts.</div>

BUSINESS CONCEPT

Our business model centers on leveraging three key areas: e-commerce platforms for direct sales, strategic influencer marketing to build brand awareness, and partnerships with automotive accessories shops for wider distribution.

Our target market includes automobile companies seeking innovative security solutions, businessmen needing reliable vehicle protection, working parents prioritizing family safety, and shopping malls aiming to enhance customer security in parking areas.

Our anti-theft camera will be initially priced at 1499 INR, offering competitive value. We also offer attractive discounts for bulk sales to encourage adoption by larger organizations and dealerships, making our solution accessible and scalable.





STAKEHOLDERS MAP

1

Partners

Automobile companies seeking innovative security solutions for their vehicles. Advertising companies looking to promote the anti-theft surveillance camera to a broad customer base.

2

Staff

Product managers responsible for the camera's development and improvement. Marketing managers focused on creating brand awareness and driving sales. Finance managers overseeing the company's budget and financial performance.

3

Customers

Vehicle owners seeking to protect their cars from theft and vandalism. Parents prioritizing the safety of their families by ensuring their vehicle is secure. Homeowners looking to monitor their driveways and garages for suspicious activity.

4

Advisors

Dr. Tanmoy Dasgupta, a leading expert in vehicle security and surveillance technology, providing guidance and insights to the company.

TARGET CUSTOMERS / BENEFICIARIES

1

Growing Demand

Consumer electronics demand is rising due to shorter cycles and lower prices.

2

E-Commerce

Easy availability through online platforms boosts frequent purchases.

3

Autonomous

Vehicles encourage ongoing interest in vehicle tech.

4

Targeting Two-Wheelers

We specialize in security solutions for motorcycles and scooters.

PRICING

Rs 699

ESP32-cam

Rs 149

FTDI module

Rs 54

Jumper wires

Rs 350

Anti-theft lock sensor

Selling price of each unit: RS. 1,818.

This allows for a profit margin that supports ongoing research and development, as well as marketing and distribution efforts. We also offer attractive discounts for bulk sales to encourage adoption by larger organizations and dealerships.



BUSINESS CANVAS MODEL

Component	Details
Key Partners	Hardware suppliers, AI & software developers, cloud service providers, security agencies & law enforcement, government organizations & smart city initiatives.
Key Activities	AI-based threat detection development, system integration with IoT, data processing & cloud storage management, research & development, marketing & customer support.
Key Resources	AI-powered surveillance software, hardware components, cloud storage infrastructure, development team, secure communication & data encryption protocols.
Value Propositions	Real-time, AI-driven theft detection, instant alerts, integration with smart home security, cost-effective solution, easy-to-install interface.
Customer Relationships	24/7 customer support, mobile app for monitoring, subscription-based service, personalized security solutions.
Channels	Direct sales via website & mobile app, partnerships with security firms & retailers, online marketplaces, B2B collaborations.
Customer Segments	Homeowners, small and medium businesses, government agencies, smart city initiatives, large enterprises.
Cost Structure	Hardware manufacturing, AI model development, cloud storage, marketing, R&D.
Revenue Streams	Device sales, subscription services, licensing AI software, B2B contracts.

UNIQUENESS OF THE PROJECT

Existing Solutions

Many projects offer some degree of functionality in this space, but they often fall short in several key areas. For example, some solutions are too complex for the average user, requiring significant technical expertise. Others are limited in scope, only addressing a small subset of the overall problem. Finally, many existing tools lack the scalability needed to handle large datasets or complex workflows.

Our Unique

Approach

Our project is unique because it addresses all of these shortcomings. We've designed a user-friendly interface that makes it easy for anyone to get started, regardless of their technical background. Our solution is comprehensive, covering the full range of functionality needed to solve the problem. And, critically, we've built our platform to be highly scalable, ensuring that it can handle even the most demanding workloads. In addition, we offer personalized support and training to help our users maximize the value of our platform.

MARKET SUMMARY

Global camera modules market to reach USD 58.5 billion by 2026.

Growth of 6.8% expected by 2025.

- Increasing demand for surveillance cameras in commercial and residential sectors.
- Rising adoption of ADAS (Advanced Driver Assistance Systems) in automobiles.
- Growing popularity of camera-equipped smartphones and other consumer electronics.
- Technological advancements in image sensors and processing.

**ADAS PRODUCTION IN
THOUSAND UNITS, GLOBAL,
2014 – 2021**



CONCLUSION

Our anti-theft surveillance camera delivers:

Superior Security: Our system provides a dependable anti-theft surveillance, ensuring real-time monitoring and immediate alerts in case of suspicious activity. This helps deter potential thieves and provides valuable evidence for law enforcement.

Customizable Solutions: Our camera is easily adaptable to various vehicle models and specific security needs. Its modular design allows users to select the features that best suit their requirements, ensuring a tailored security solution for every vehicle.

Cost-Efficiency: We offer a budget-conscious security option without compromising on quality or effectiveness. By optimizing our production process and leveraging affordable components, we deliver a high-value solution accessible to a broad customer base.

Scalable Growth: Our product is ready for new markets and emerging technologies. The platform is designed to easily integrate with new sensors, software updates, and advanced features, ensuring it stays ahead of the curve.

Wide Application: This camera is perfect for cars, motorcycles, and scooters. The compact design and versatile mounting options allows for easy installation in a wide range of vehicles, making it an ideal security solution for diverse transportation needs.

Significant Market Potential: Our anti-theft surveillance camera is poised to capture the rising demand for advanced vehicle security. The increasing concerns about vehicle theft, coupled with the growing popularity of in-vehicle technology, position our product for strong market penetration and sustained growth.

A close-up of a black surveillance camera lens, showing the internal glass elements and the mounting bracket. The camera is positioned diagonally across the frame. In the background, a city skyline is visible at night, with numerous lights creating a bokeh effect. The overall image has a dark, moody aesthetic with a blue and orange color palette.

THANK YOU

Thank you for considering our anti-theft surveillance camera project.