

SMART CITIES

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IDEOLOGY

OUR BASIC IDEA IS TO DEVELOP A TRAFFFIC MANAGEMENT WEBSITE WHICH INCULCATES THE FOLLOWING FEATURES

- REAL TIME TRAFFIC UPDATES
- INTERACTIVE MAPS
- USER REGISTRATION AND PROFILES
- ROUTE PLANNING AND NAVIGATION
- ALERTS AND NOTIFICATIONS
- FEEDBACK AND REPORTING



SCOOT: TRAFFIC MANAGEMENT SYSTEM



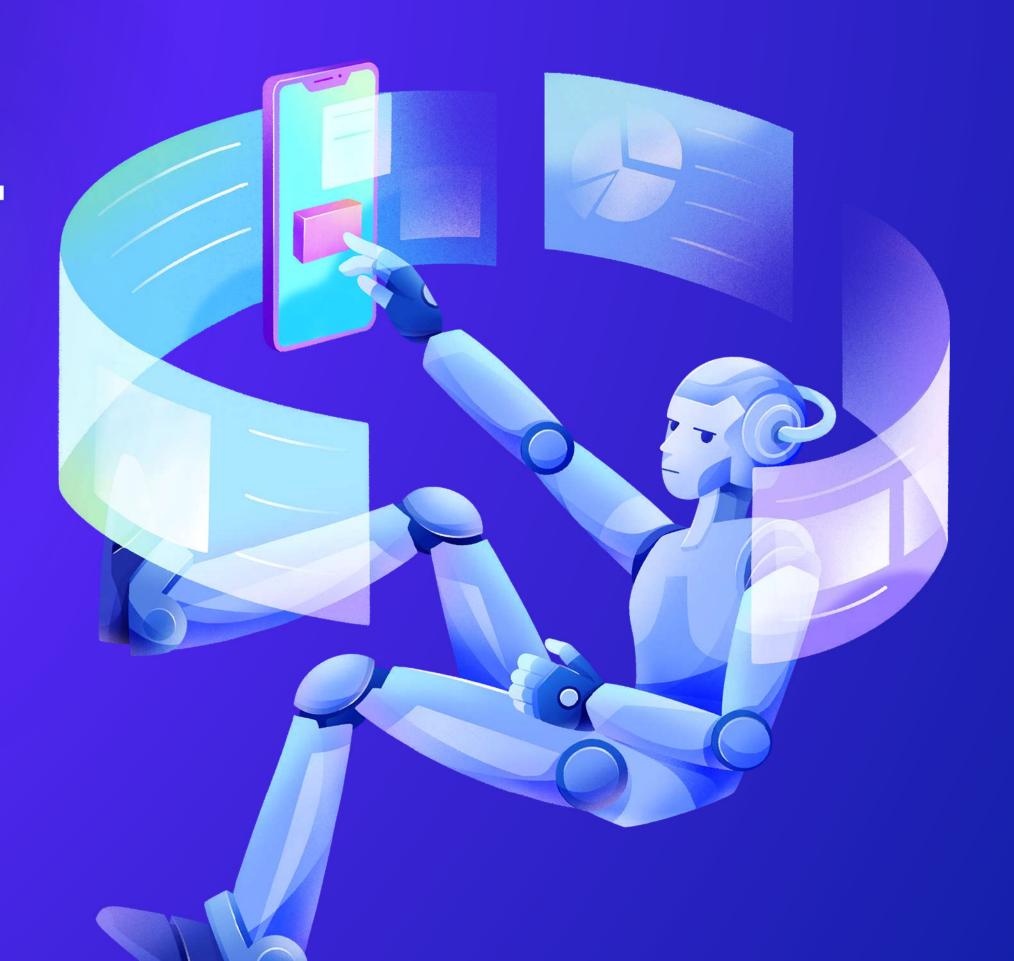
* SCOOT divides the signal cycle into smaller intervals, known as splits.
Each split corresponds to a specific movement, such as through traffic, left-turns, or pedestrian crossings

Cycle Length Optimization:
SCOOT adjusts the length of
each split dynamically based
on traffic demand, aiming to
minimize delays and maximize
traffic flow efficiency.

Offset Optimization: SCOOT optimizes the timing offsets between adjacent traffic signals along a corridor to create platoons of vehicles, reducing stops and delays.

Real-Time Adaptation: SCOOT continuously monitors traffic conditions using sensors and detectors embedded in the road infrastructure. It collects data on vehicle volumes, speeds, and queue lengths to adjust signal timings in real-time, responding to changes in traffic patterns and minimizing congestion.

PROJECT SCOPE





REAL TIME TRAFFIC UPDATES

We will incorporate a feature that provides users with real-time information about traffic conditions, accidents, road closures, and other incidents Using data monitoring

INTERACTIVE MAPS

we wil Implement interactive maps that allow users to view traffic flow, congestion areas, and alternative routes. we will use API for this purpose.



REGISTRATION AND PROFILES

This Enable users to create accounts and profiles to personalize their experience, save favorite routes, and set preferences for the next journey

ROUTE PLANNING AND NAVIGATION

We will try to develop a route planning tool that suggests the best routes based on current traffic conditions, user preferences, and historical data.



ALERTS AND NOTIFICATIONS

Implemention of an alert system to notify users about significant traffic disruptions, road closures, or emergencies affecting their routes

FEEDBACK AND REPORTING

This website will allow users to report incidents, road hazards, or inaccuracies in traffic data to improve the system's accuracy and reliability.



