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# **BrahmaX 1.0**

The Creation of Tomorrow

**BrahmaX 1.0**

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- **Theme** – Eco –friendly sustainable transportation system
- **Problem Statement Title-** Combat pollution via sustainable transportation
- **Team Name** – The Digital Dominators



The Digital  
Dominators

why?

Shift to Eco-conscious  
transportation



1

Environmental impact



2

Public health concerns



3

Resource Depletion



4

Inequitable Access



5

Traffic congestion & accidents

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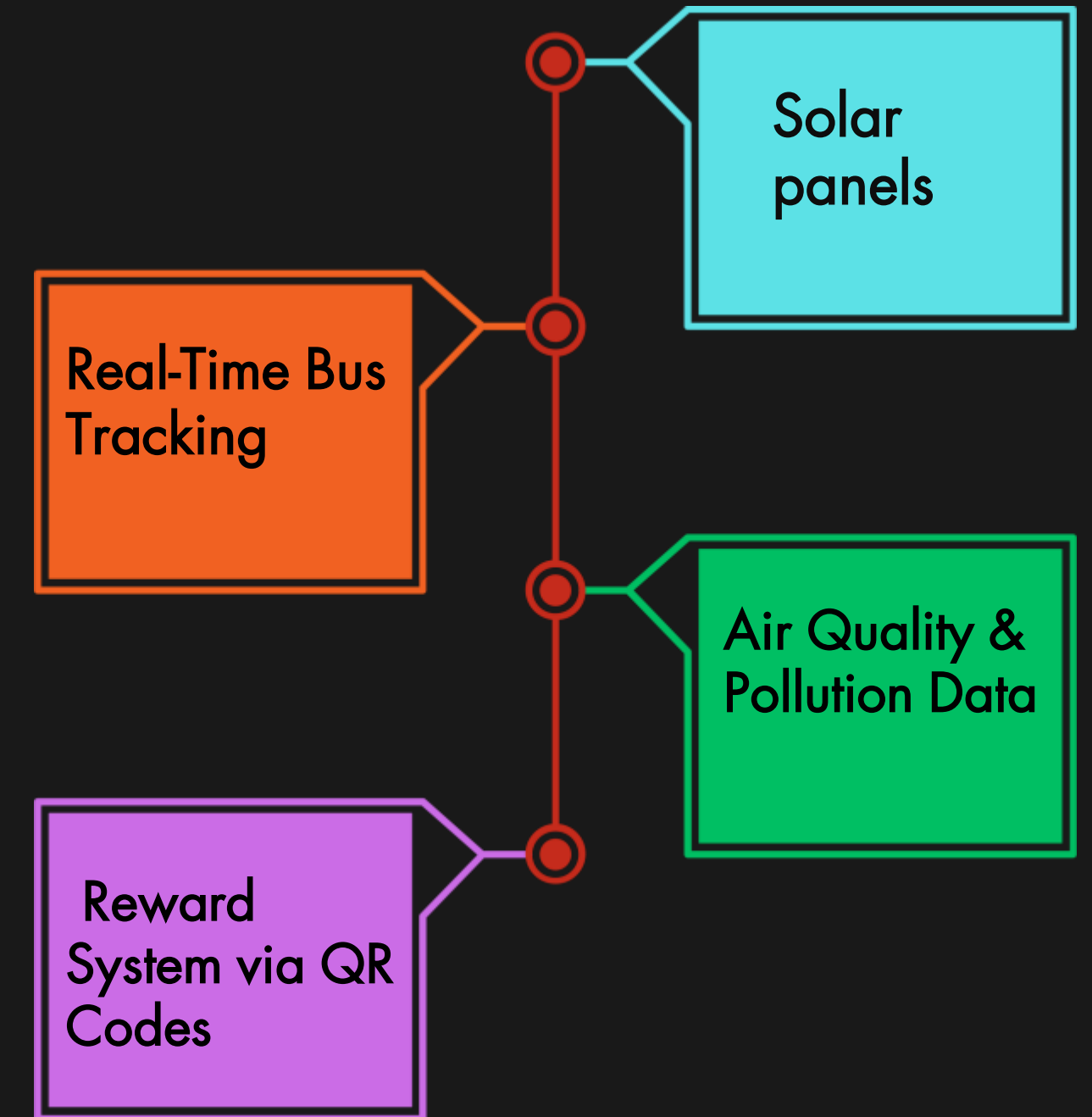


# SMART BUS STOP

A solar-powered ☀️, interactive public transport stop equipped with real-time tracking, local environmental data, and gamified incentives (reward QR codes) to encourage public transport usage and eco-conscious commuting.

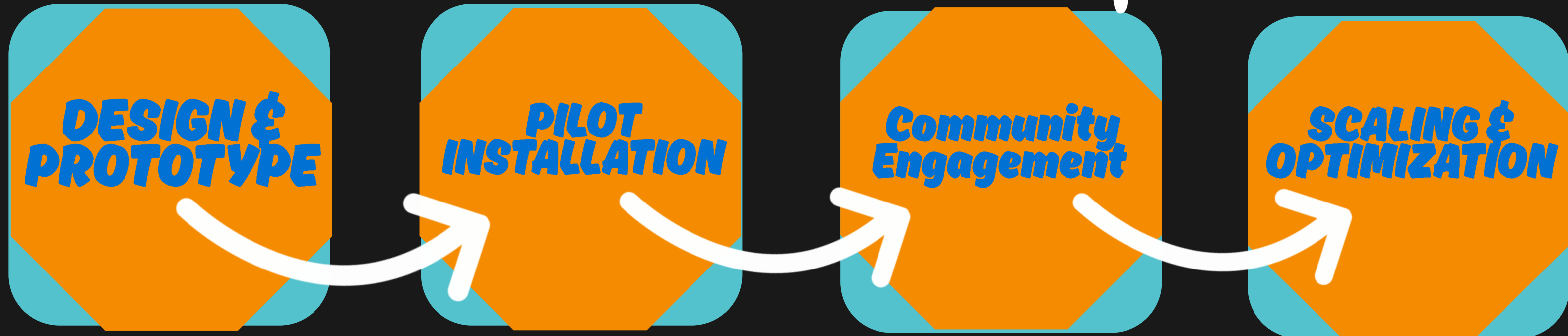


## KEY FEATURES





# we will work over 4 phases



## Create a modular prototype using:

- ❖ Solar panel setup
- ❖ Raspberry Pi/Arduino + sensors (for pollution & GPS display)
- ❖ Basic display panel for schedule + QR code system

## Choose 2-3 high-traffic bus stops in a busy city

- ❖ Install prototypes with collaboration from:
- ❖ Local municipal transit authorities
- ❖ Environmental organizations for data validation
- ❖ Tech partners for app integration

## Run a campaign to inform users about:

- ❖ Green Points and rewards
- ❖ How public transport reduces carbon footprint
- ❖ Partner with local businesses for reward sponsorship

## Use user data (scan rate, wait time, pollution levels) to:

- ❖ Optimize QR code rewards
- ❖ Improve bus arrival predictions
- ❖ Add new features (e.g., voice assistant, ad display for funding)

# Impact & benefits



*1. Commuters  
2. Transit authorities  
3. Local communities*

*1. Sustainable energy use  
2. Smart city integration  
3. Behavioral change through gamification  
4. Real time information increase reliability*

*1. Social  
2. Economic  
3. environmental*

*1. Foster a culture of sustainability and smart commuting  
2. Encourages long term reduction in urban CO<sub>2</sub> footprint*

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# References



## ***International Organizations:***

IEA – Global EV  
Outlook, emissions data  
UNEP – Sustainable  
transport reports  
World Bank – Transport  
statistics  
IPCC – Climate impact  
assessments

## ***Government reports***

U.S. DOE – Energy use  
and fuel efficiency  
UK DfT, India's NITI  
Aayog – National  
transport policies and EV  
data

## ***NGOs & Think Tanks:***

Transport & Environment  
(T&E) – Clean transport in  
Europe  
ITF (OECD) – Global  
mobility trends  
ICLEI – Urban eco-  
mobility programs

## ***Academic & Research Databases:***

ScienceDirect, JSTOR,  
Springer – Peer-reviewed  
articles

Key Journals: Journal of  
Cleaner Production,  
Transportation Research  
Part D

**Your queries are  
welcome !!!**

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