
# Project SLVP

## A step towards Smarter Governance

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# Team Members and roles


| Member Name | Role(s) | Skills |
|---|---|---|
| Deepak Bhattad | Author | Project Management / Business Consulting |
| Vamsi Krishna | Product Management | Product Management / Project Management |
| Sreenivas Chinni | Architecture | Solution Architect |
| Pavan Raju | Front End Development | Angular, HTML, CSS & Bootstrap |
| Manoj Kumar Chaluvadi | Back End Development / Middleware Development | Mainframes, Ethereum, Hyperledger, Dot Net Stack |
| Kiran Pochiraju | Machine Learning Expert | ML expert |
| The Team | Testing | NA |

# Smarter Law Violation Prevention System – A step towards Smart Governance

Author(s):
Deepak

## The problem being addressed

- Law is meant to bring in equality amongst people from different walks of life, from different cast, creed etc.
- Law brings in safety and aims to protect the basic rights of the citizen of the country
- However people always look at ways to break law for various reasons.
- Any law when being enforced brings with it a lot of overhead to ensure its enforced in true sense and abided by. Huge Costs and effort is spent to prevent law violation and to prove the guilty and penalise him accordingly.

## Stake Holders Involved

- Law enforcement dept.
- Public
- Government
- Law Creation dept.

## Proposed Solution

Focus in on Traffic Violations.

- The smart cameras capture the images and recognise the number plates of the vehicles
- The law enforcing department will have its own IRI node running that will further store this data on to the tangle.
- Once the data is finalised on the tangle a challan is generated and emailed / messaged to the violator.

## Applicable Industries

- Government
- Public Utility Service Companies

## Benefits

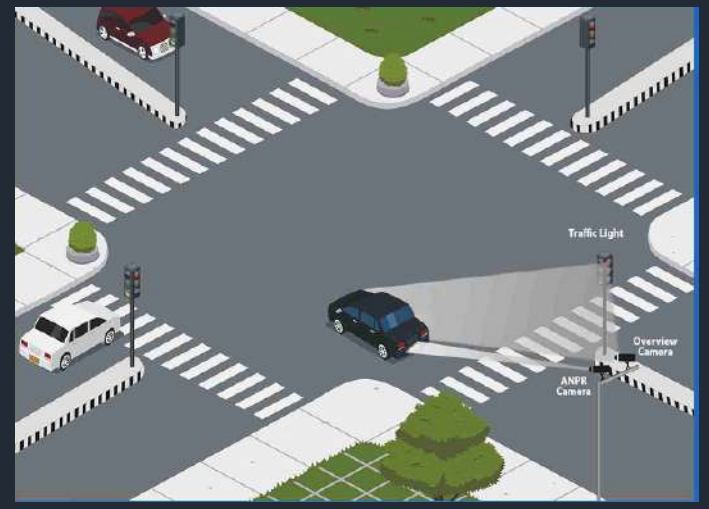
With the advent of Internet, Smarter Devices, Sensors, Drones, Artificial Intelligence and Blockchain we foresee a future wherein proving law violation can be dealt with at lesser cost and effort and when enforced strictly can eventually lead to better law abidance and a desired civil life.

## Competitors

- Govt. IT department
- Law Enforcing IT Department

# MVP Scope for Phase

- Traffic Violation Determination and Provenance
  - The scope of this project is to detect and determine any traffic violation.
    - Use Smart Cameras to detect violation
    - Captured image is stored in IPFS system and corresponding transaction on IOTA tangle
    - Customer must be able to access traffic department webpage URL to search violation records based on his vehicle plate number
    - Traffic Admin must be able to search based on customer vehicle plate number, date, location, appeal so that he can see view corresponding violation records.




# Business Model Canvas

## Key Partners

Insert

- Law Enforcing Agenices
- Law Creation Agencies
- IOT Vendors
- IOTA Foundation
- Government

## Key Activities

Insert

- Working with the Law Enforcing Department to gain the confidence in the system
- Installation of Smart Devices
- Building of Machine Learning Engine
- Initiating an IRI Node within the department
- Setting up of the IPFS System
- Purchase of IOTAs

## Key Resources

Insert

- IOT Devices
- Machine Learning Engine
- IOTA
- Skilled Personnel

## Value Proposition

Insert

- Smarter Governance
- Faster Governance
- Provenance of Law Violation
- Effective Law Enforcement

## Customer Relationships

Insert

## Channels

Insert

- Mobile Apps
- Machine Learning Engine
- IOT Devices

## Customer Segments

Insert

- Governments
- Law Enforcement Agencies
- Public Utility Companies
- General Public

## Cost Structure

Insert

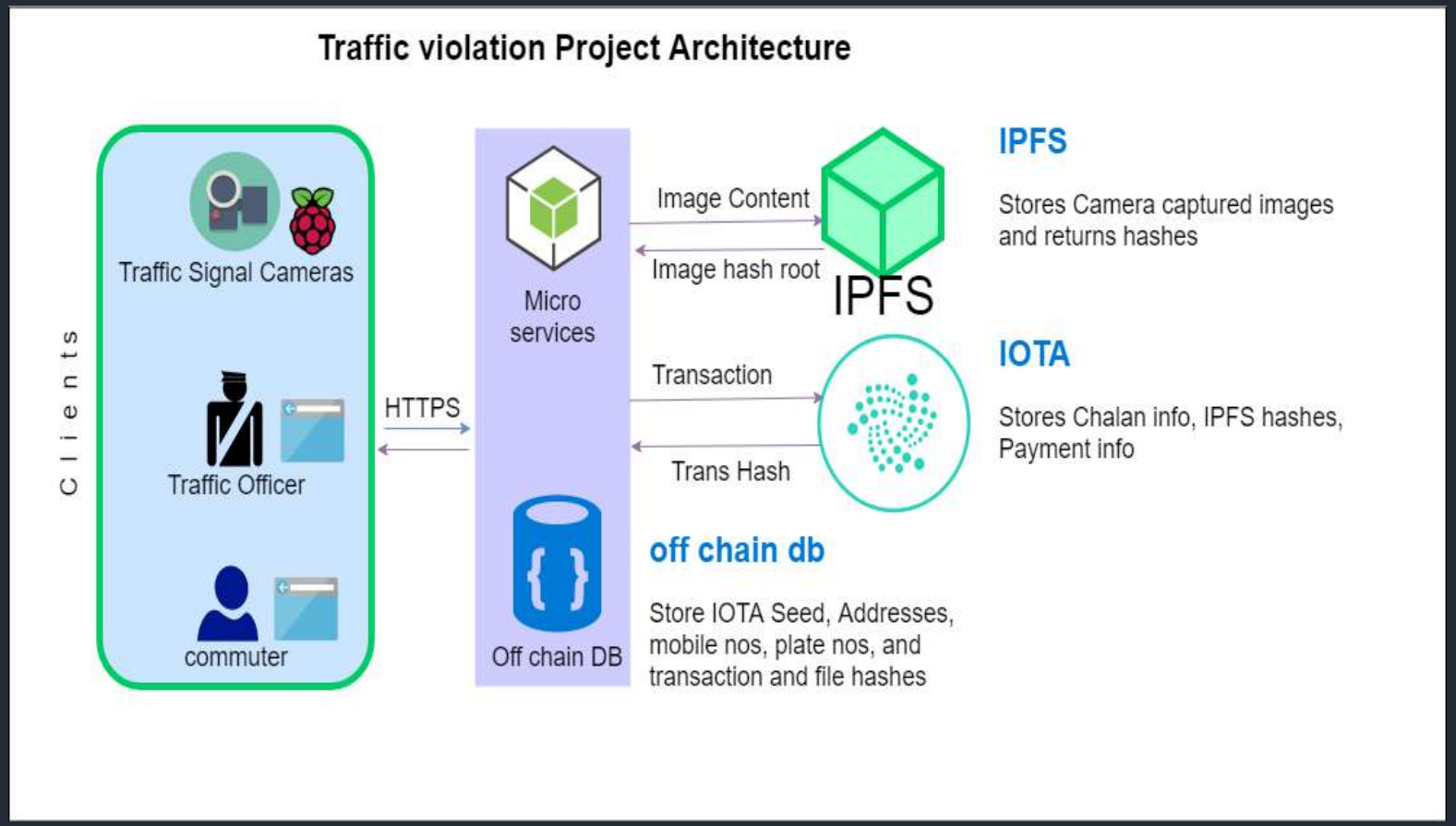
- Smart IOT Devices
- Setting up of the Machine Learning Engine
- Maintenance of the Machine Learning Engine
- Buying of IOTAs

## Revenue Streams

Insert

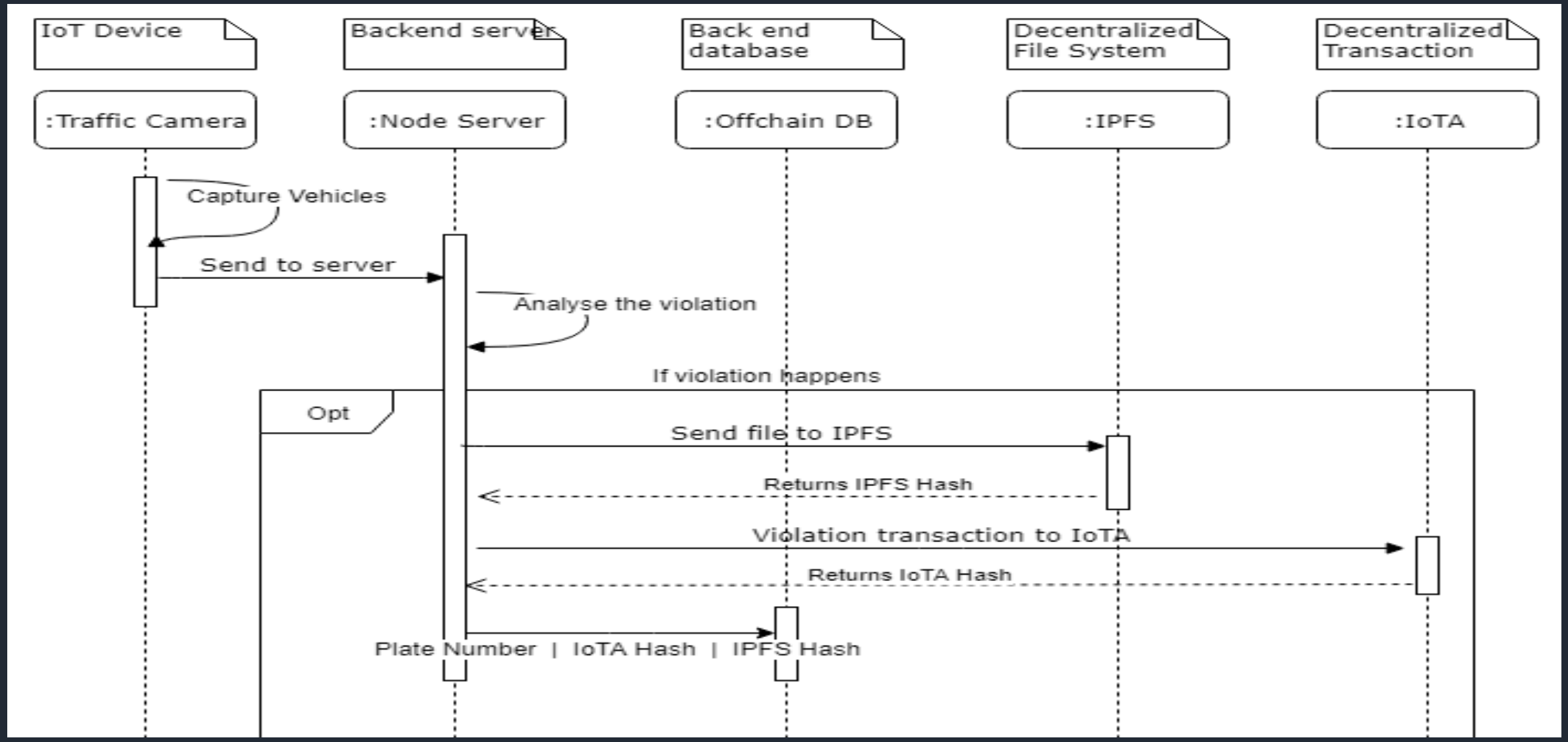
- Violation Tickets
- Public Utility Services

# High Level Architecture & Tech Stack

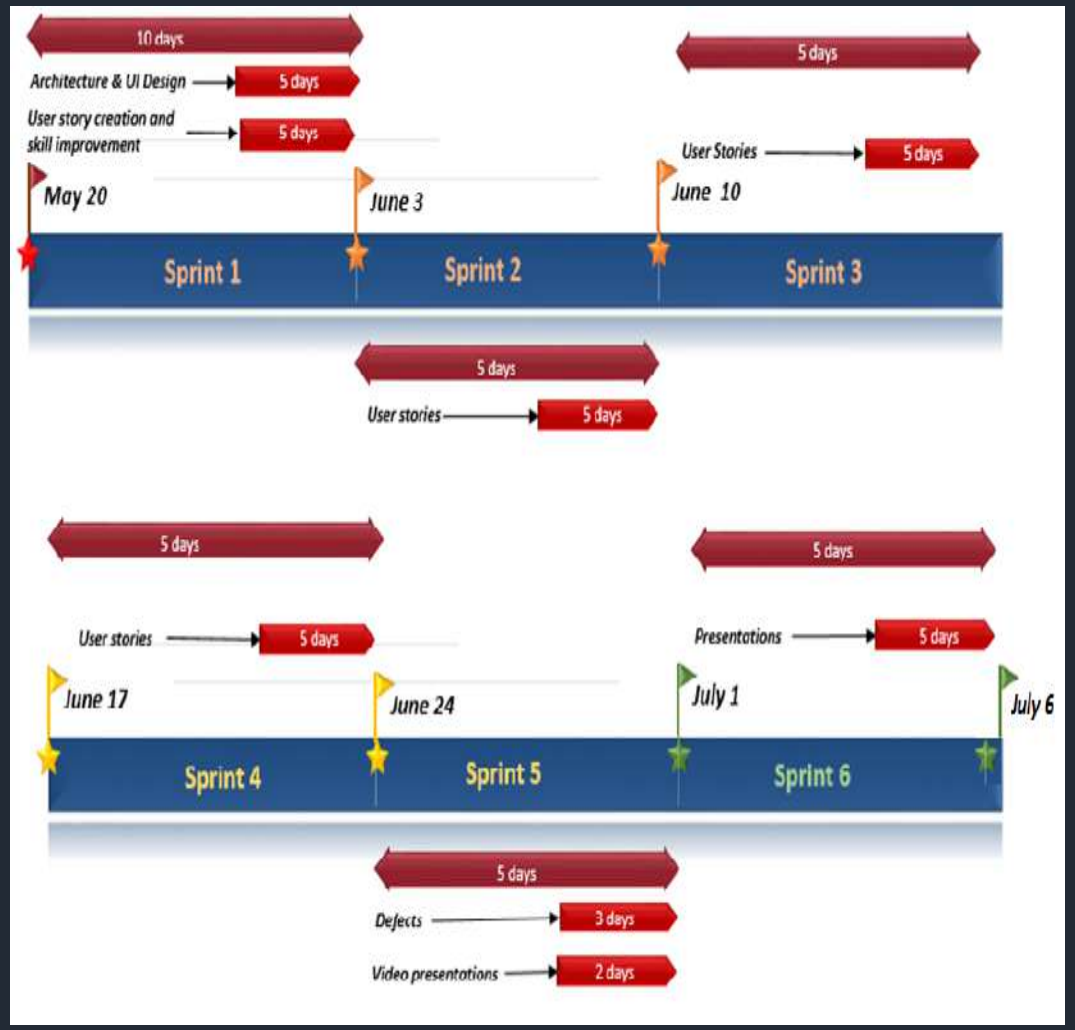


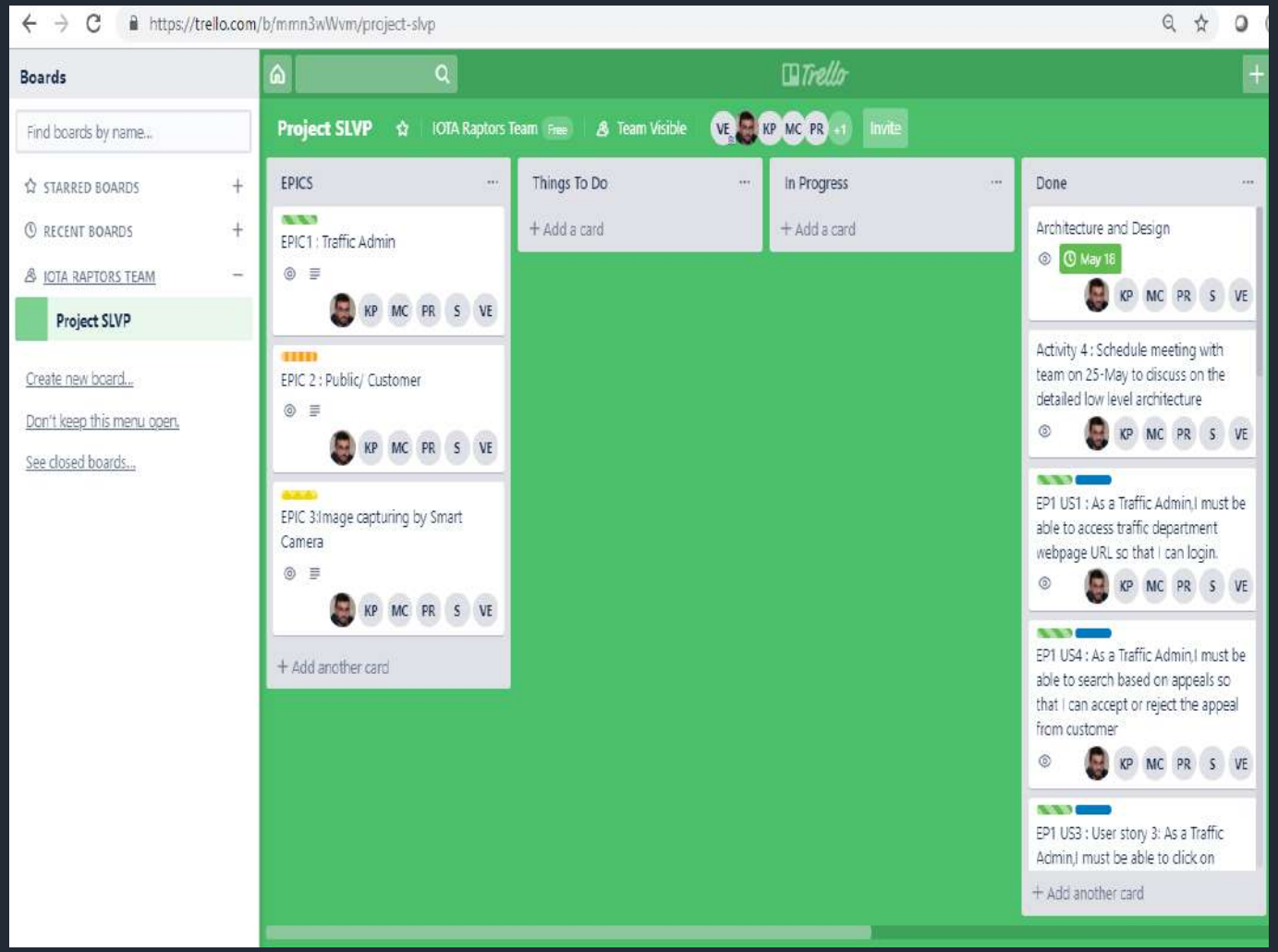

| | |
|---|---|
| ***Offchain DB*** | ***Mongo DB*** |
| ***Repository*** | ***GitHub*** |
| ***Web Design*** | ***angular 7 and angular material and WEB View for android*** |
| ***Back End*** | ***node.js*** |
| ***REST services*** | ***express.js*** |
| ***IOTA*** | ***IOTA.js*** |
| ***IPFS*** | ***JavaScript*** |
| ***Agile Project/Task Management*** | ***Trello*** |
| ***Editor*** | ***Visual studio*** |

# Sequence flow Diagram

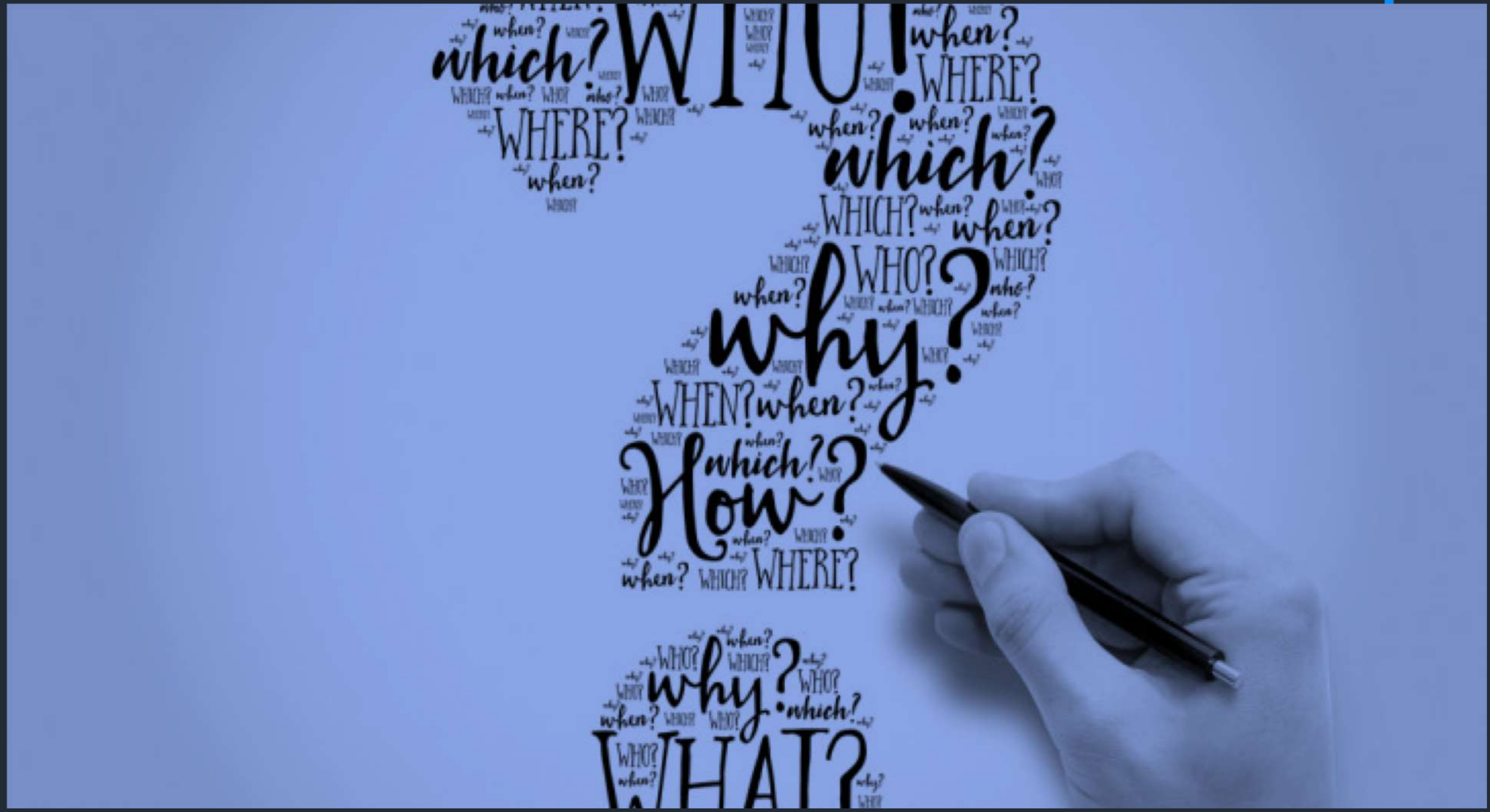


# Project Planning and Management




# SLVP Application Demo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