User stories

fleet-telemetry

reju@
sreemakam@

US1: Fleet monitoring (base)

As a **fleet-operator admin,**
I want to view the current information of all the trucks on a map
So that, I know my business is running smooth

Criteria-1 (functional)
    Given, a Track (set of lat/long) from source to destination
    When, a new Truck is added to the fleet
    Then, I can see the Truck traveling the path on the given track

Criteria-2 (functional)
    Given, a Truck
    When, a new Truck is added to the fleet
    Then, I can see who the driver is, and his/her current position

US2: High availability

As **operations head,**
I want to have high availability of the backend services
So that, I can ramp up my business quickly by adding more Trucks

Criteria-1 (non-functional)

    Given, an infrastructure in the cloud (i.e a single GKE cluster)
    When, 1000s of Truck is added to the fleet
    Then, it should scale seamlessly to handle the generate telemetry load

US3: Geo Latency & Proximity routing

As a **fleet-operator admin,**
I want the trucks to send telemetry information to the nearest datacenter
So that, I get accurate, and timely status of 1000s of Trucks with min latency

Criteria-1 (non-functional)

> Given, that a "browser-refresh" will simulate an e-Sim on the vehicles' OBD
> When, the fleet-telemetry app is accessed from **Mumbai**
> Then, I can see the Traffic coming to Mumbai GKE Cluster

Criteria-2 (non-functional)

> Given, that a "browser-refresh" will simulate an e-Sim on the vehicles' OBD
> When, the fleet-telemetry app is accessed from **Delhi**
> Then, I can see the Traffic coming to Delhi GKE Cluster (via Kiali/Pod-logs etc)

US4: Single IP

As a **fleet-operator admin**,
I want to access the application via a single URL
So that, I can share the domain URL with my "business people"

Criteria-1 (non-functional)
    Given, 2 GKE clusters (Mumbai, Delhi regions)
    When, the application & database is hosted on both Sites,
    Then, I must only only access the application via single URL / IP

US5: Disaster Recovery Site

As operations head
I want to have a capability to execute a BCP to failover
So that, my business doesn't suffer downtime.

Criteria-1 (non-functional)
    Given, 2 GKE clusters (Mumbai, Delhi regions) &
        Trucks are traversing the defined track from **point-A** to **point-B**
    &
        It leaves a trail.
    When, at **point-C**, disaster strikes in **Mumbai** region
    Then, <u>ALL</u> the subsequent request should be handled by **Delhi** &
        The Maps should continue to show the trail from **point-C**

US6: Cross site database replication

As a **database administrator,**
I want the application database to synced in real time between
So that, I can execute a BCP in case of disaster and meet my RPO requirements (under 15 mins)

Criteria-1 (non-functional)

Given, a static track info in a Table (Tracks)
When, Truck starts moving
Then, it commits the current-position (lat/long) to the primary database &
all those commits are also synced to the DR database in **real-time.**