

A Dynamic Web Application to Track Assets using Geospatial Technology

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ASSET
CONNECT

Introduction

The asset management system focuses on reducing the maintenance while extending the lifetime of the asset. It is an interactive GIS platform to manage, visualize, query, maintain, and update the database related to ground based assets. The assets can be tracked by monitoring their routes. Spatial information is one of the key requirements in decision making for ground based assets.

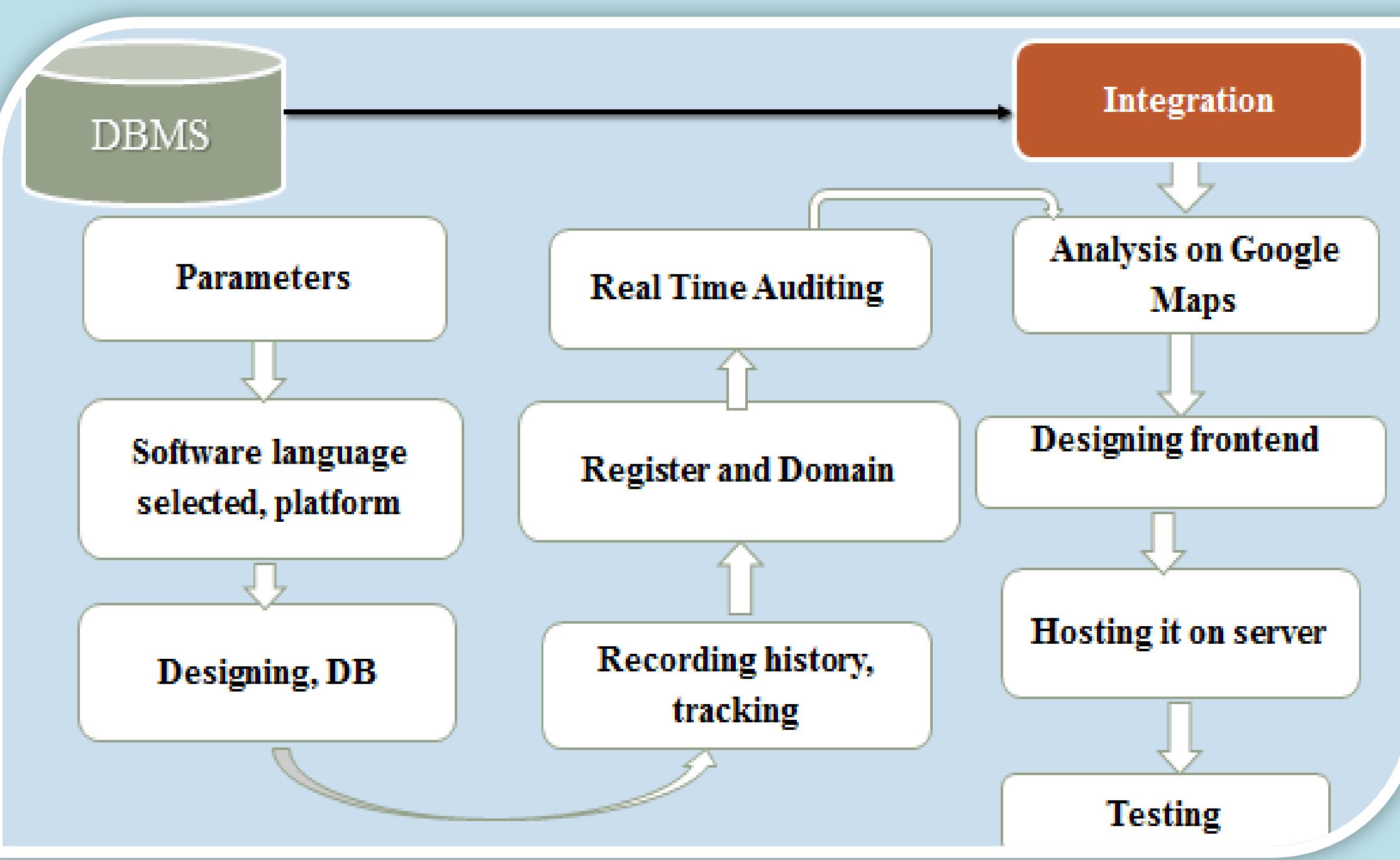
Aim and objectives

Aim:
To develop a dynamic web application to track assets using geospatial technology.
Objectives: To develop a dynamic interactive website which will store the data of the assets to track.
To do real time auditing.

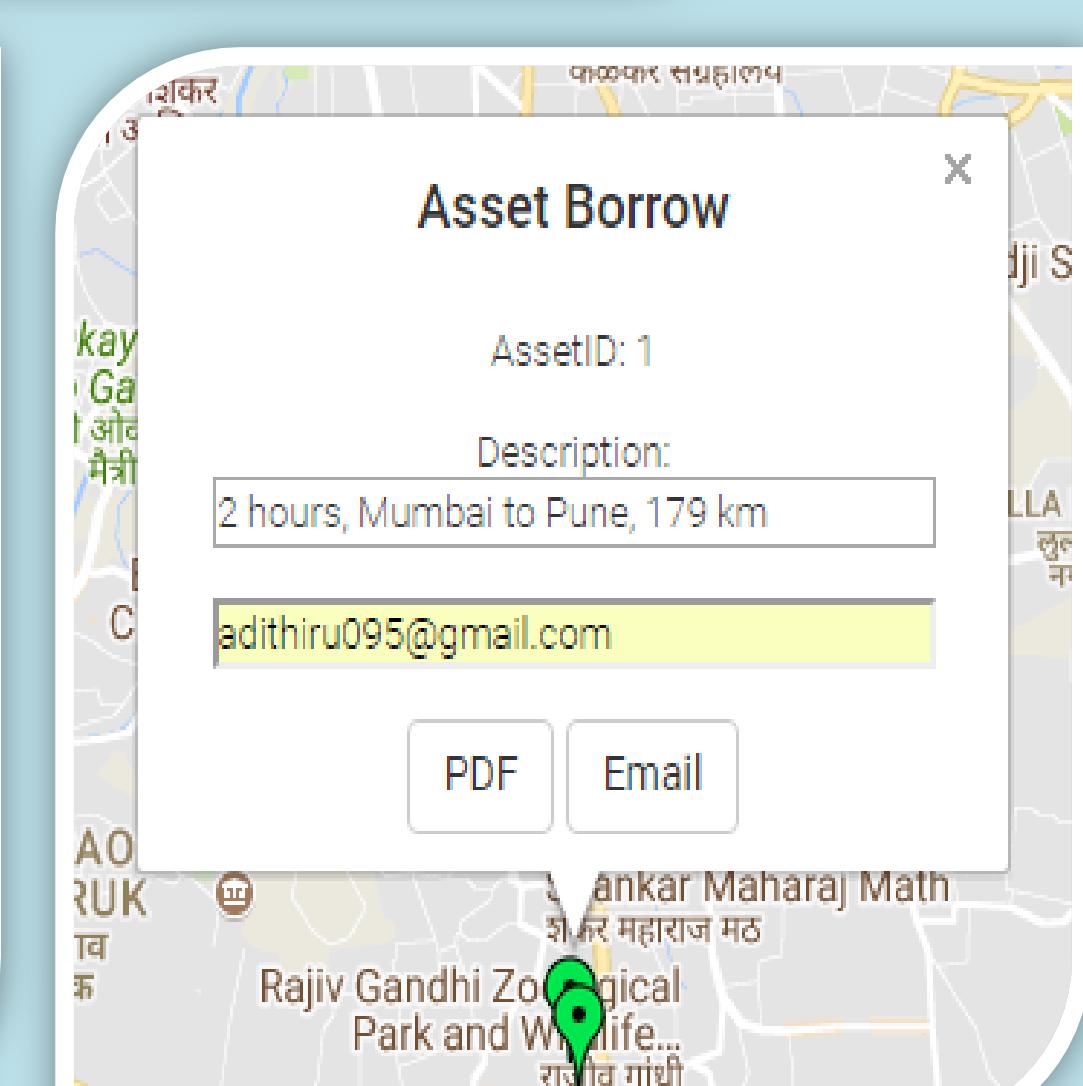
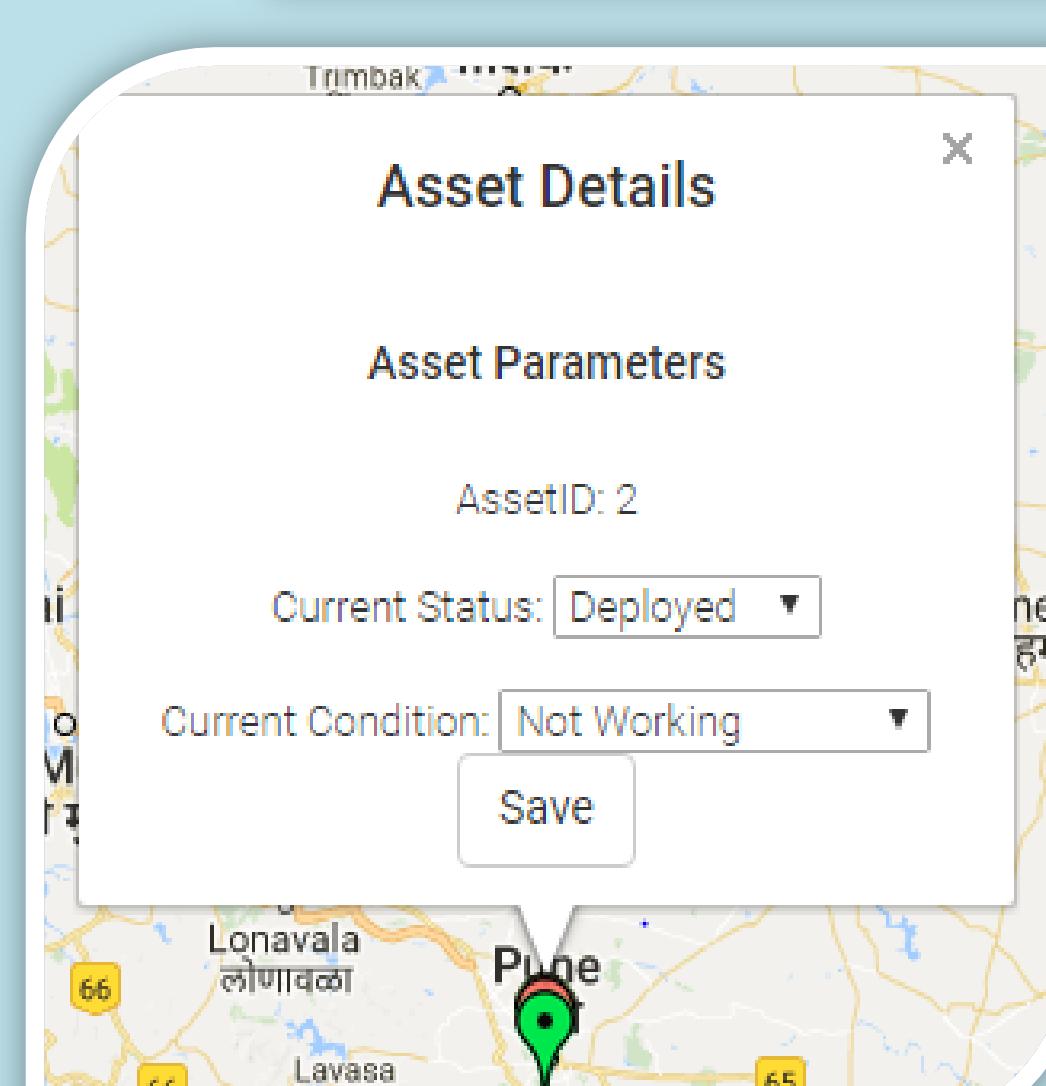
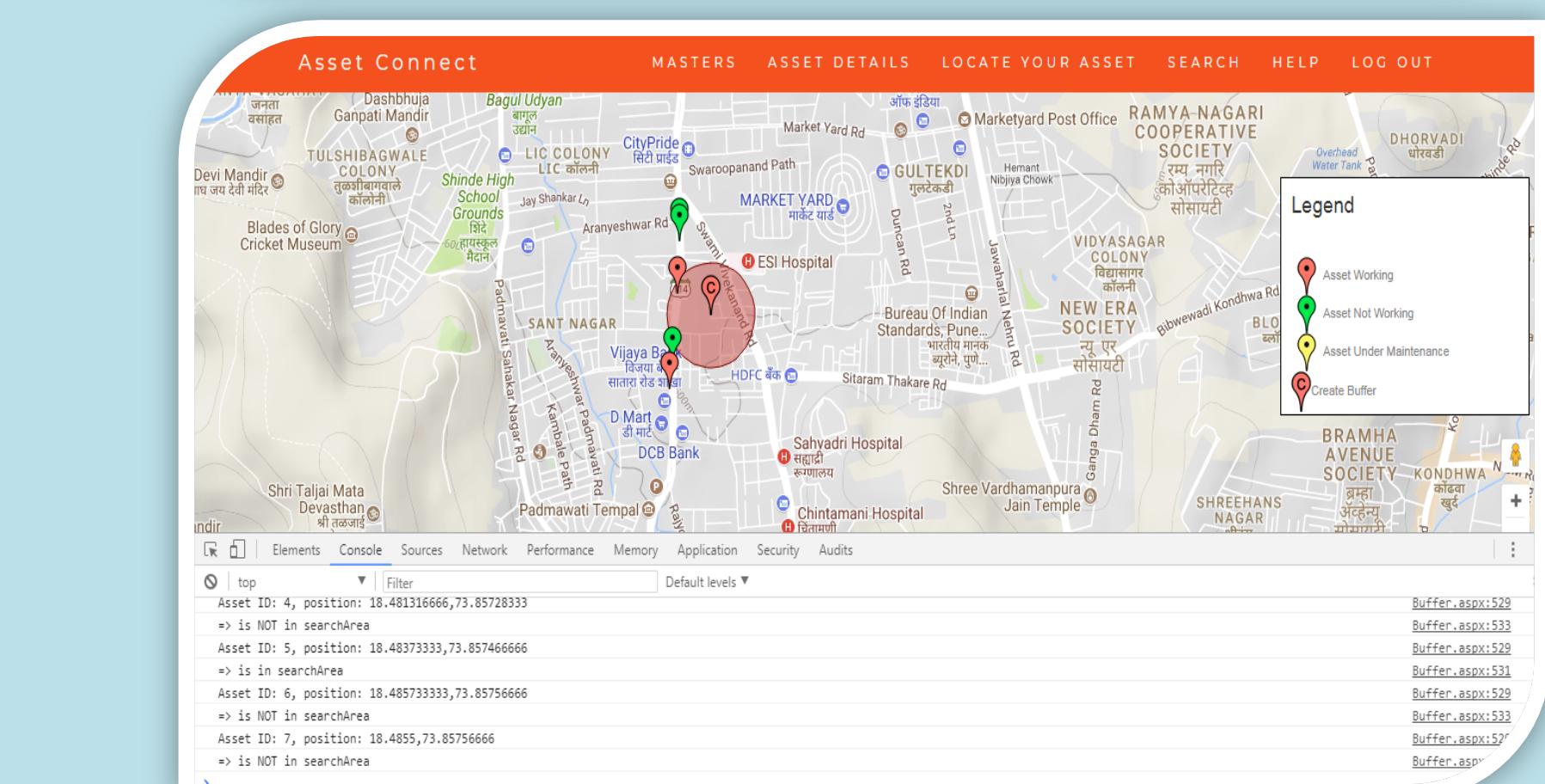
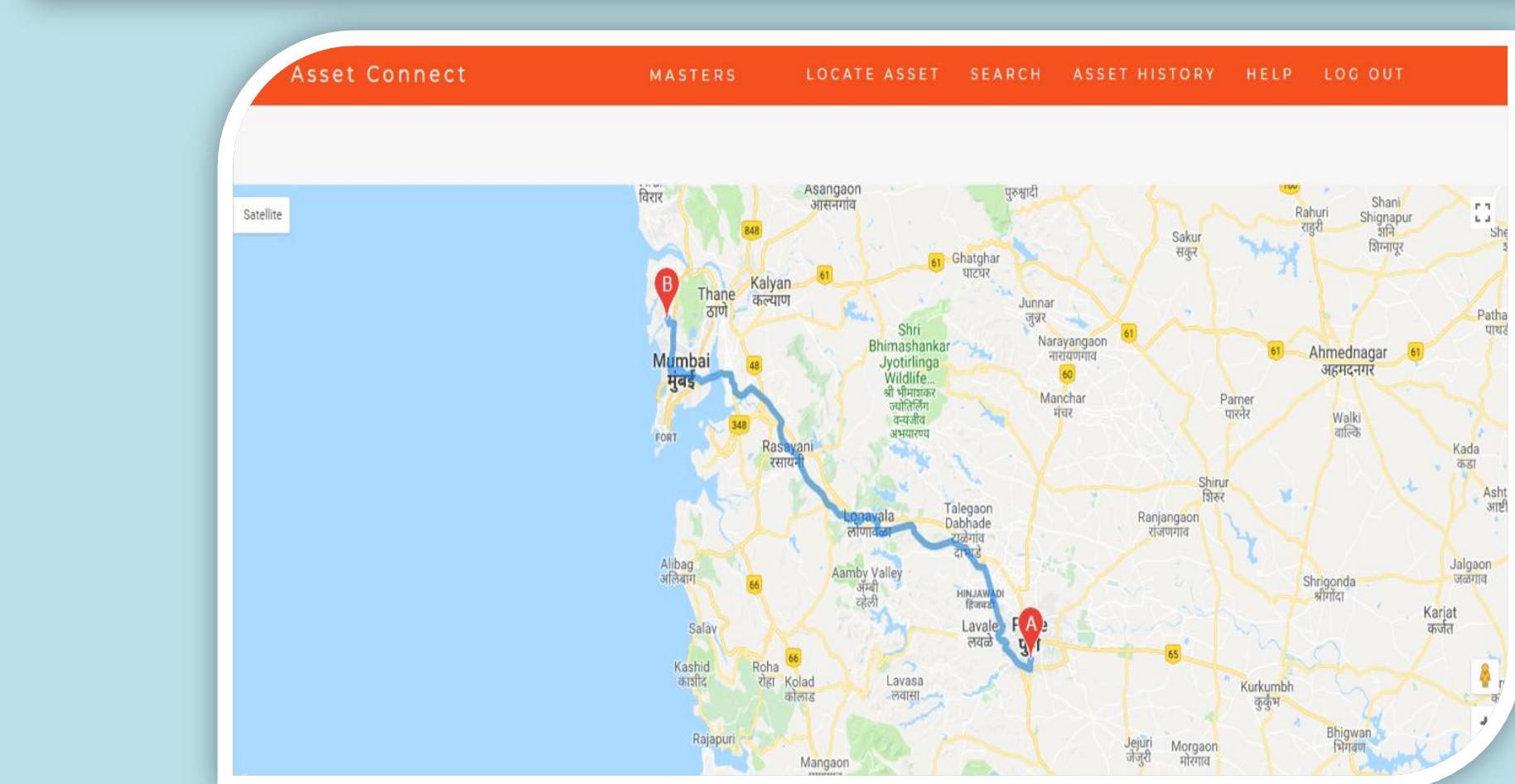
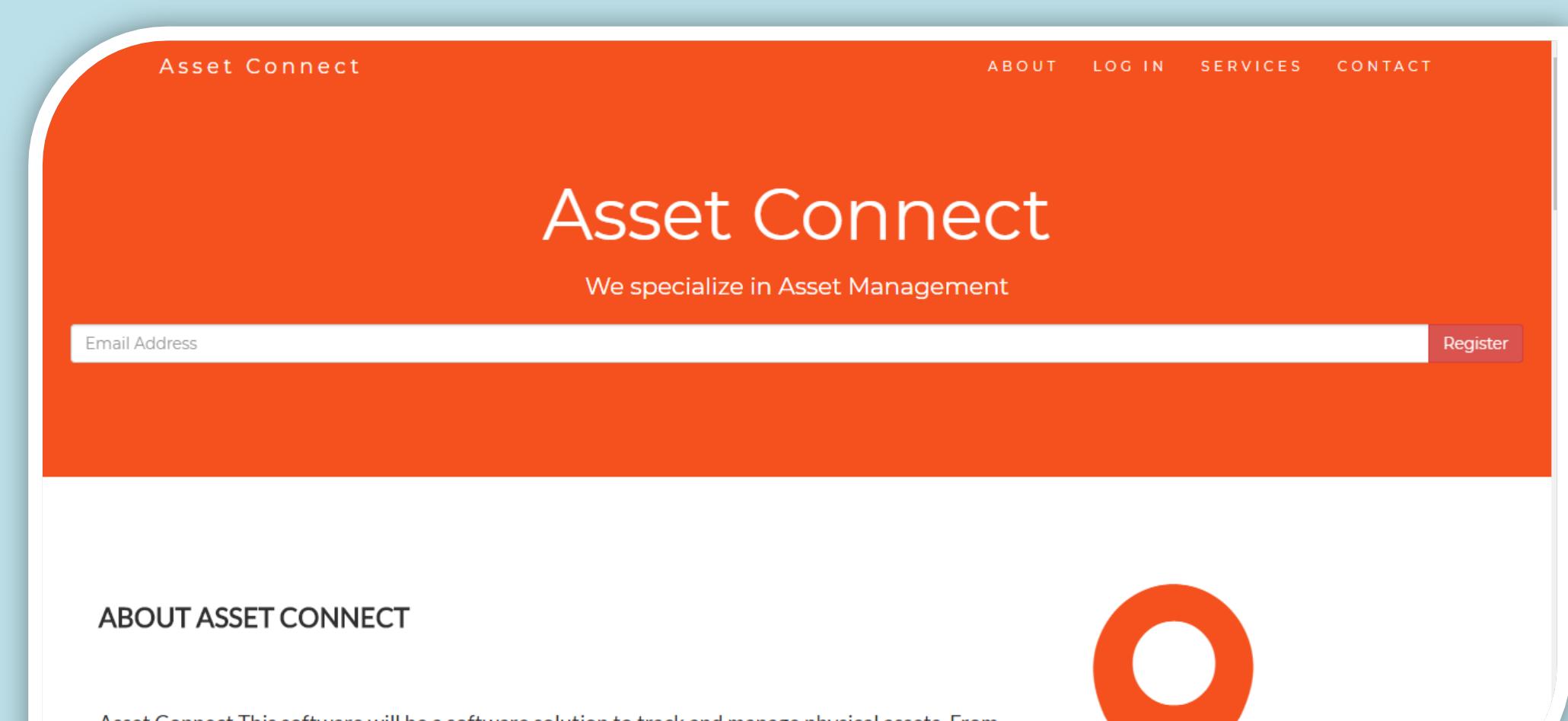
Research Question

How to track ground assets using geospatial technologies using a software?

Methodology



Application Interface



Results

The crucial part of the system is the web services which provide a gateway for any device to communicate with it.
It can provide cost of travel and history along with the asset information and asset condition assessment.
It demarcates buffers around the asset for nearest replacement.
The real time auditing of the asset's condition and status is possible just by a button click.
The details of the asset along with any other specific damage or alert can be mailed to authority using the application and a report is also generated along with it.

Conclusion

Geospatial technology can be used to design and manage equitable financing and assessment strategies for infrastructure improvement.
Condition-based Maintenance,
Reliability-centered Maintenance
Perform condition assessment and renewal/replacement planning.
Implementing an asset management master plan.
Development of a strategic asset management plan.
Effective asset management can enhance the infrastructure, improve performance in many critical areas, and respond to current and future challenges.

Suggestions

This system could have been sophisticated by using camera on the asset which can be switched on to see what the status of the asset is.
Also an integration of IOT would be a breakthrough in this technology.
There is a need to host this website so that the actual location of the asset can be updated from time to time.
The decision support system can be improved.