

Project Synopsis/Project Concept Document

Project number: 4

Project title: **Quantifying carbon footprint for logistic hubs**

DASS Project Concept Document

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Description

Problem statement: Quantifying carbon footprint using geospatial data

As a result of growing public awareness about global warming and an increasing need to combat it, there has been an increase in interest regarding the carbon footprint assessment and it is also necessary. Carbon footprint is a measure of the amount of greenhouse gases produced which can be in different sectors such as Agriculture, Industrial, Transportation etc. Our goal is to help the users handling a logistics hub to quantitatively understand the carbon footprint in the transportation sector due to truck movements from one hub to another. Using this quantified data, we then suggest the best routes for the transport so that the carbon emission is minimized.

Profile of Users

Many organizations and governments are looking for strategies to reduce emissions from greenhouse gases which are responsible for global warming. The quantitative assessment of the emissions in the form of carbon footprint will be helpful to all such organisations and governments for example the State Pollution Control board.

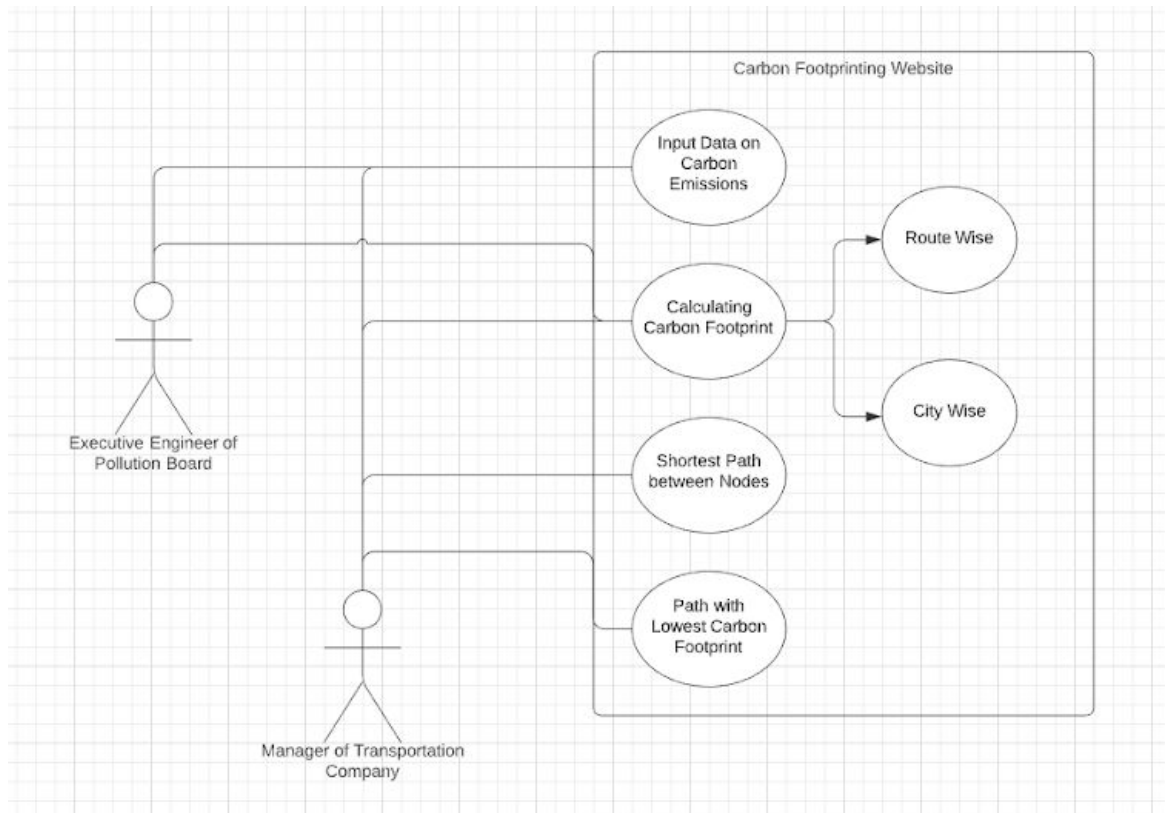
The two main users would be:

- 1) Managers of Transportation companies looking to reduce their carbon footprint in accordance to their carbon credits.

- 2) Executive Engineer in the Pollution Board and related authorities looking to get an overview of the carbon footprint in their city.

Users mostly will be equipped with basic knowledge on the subject and related software, hence can comfortably use our service.

Usage Model and Diagrams (if any)



Managers of transportation companies are exposed to all the routes from the hub along with the carbon footprint data along each of them. The optimum route with the minimum carbon emission is suggested, and the route with the shortest path is also suggested.

The Pollution Control and related authorities are shown the city wise overview of the carbon footprints.