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LA588

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**Proposal: Microclimate Analysis in Des Moines, Iowa**

**Introduction:**

Des Moines, Iowa is a growing city with a diverse range of neighborhoods, each with its unique characteristics. One area of interest is the microclimates in each neighborhood and how they differ from each other. Understanding the differences between microclimates can be valuable for urban planning, environmental management, and public health. Our proposed project aims to evaluate and compare the microclimates in Des Moines neighborhoods and present the results through a series of visualizations.

**Objectives:**

The main objectives of this project are:

* To evaluate and compare the microclimates in each neighborhood of Des Moines, Iowa.
* To present the results in a visually appealing and easy-to-understand format.
* To provide insights into the factors that influence microclimates in different areas of the city.

**Methodology:**

To achieve our objectives, we will follow these steps:

* Collecting trees and building data for each neighborhood using remote sensing techniques.
* Analyzing the data to identify variations in microclimates between neighborhoods.
* Creating visualizations to present the results.

**Deliverables:**

Our project will include the following deliverables:

* A project introduction in Markdown format.
* A slippy map showing the study area with a marker on the study area.
* A graph showing how much the neighborhoods differ based on density and greening ratio.
* A choropleth map illustrating the density of each neighborhood in the city.
* Adding a popup to the map, which shows each neighborhood's identity.