# Coursera Capstone Project

The Battle of Neighborhoods

Madiun Café

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# Introduction

I am looking to open a cafe in Madiun City, the question is, where is the best location for open new cafe? The background of the problem it is not worth setting up a cafe in the close promixity of existing ones. because the location of the new cafe has a significant impact on the expected returns.

Let's also make sure that audience is explicitly defined to be the local restaurant entrepreuners in Madiun City and they should care about this problem because the location of the new café has a significant impact on the expected returns.
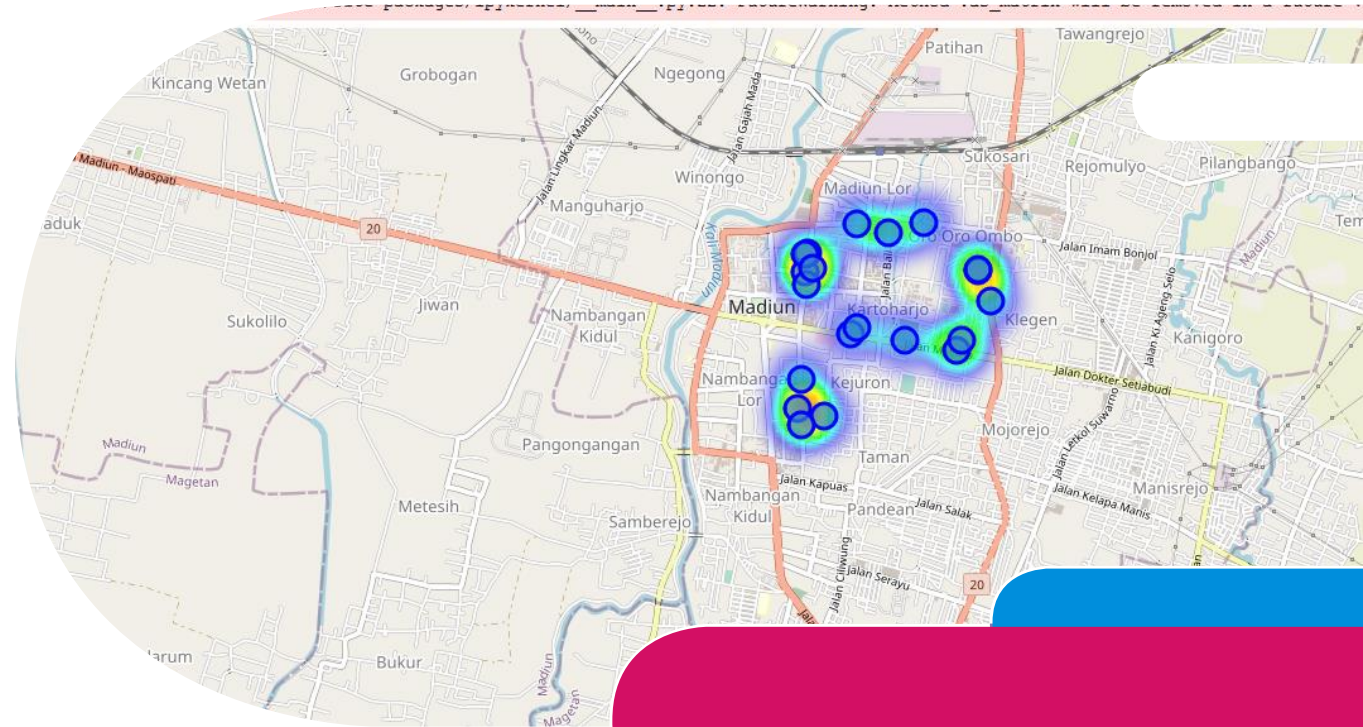
# Data

the data used to solve this problem is geolocation data collected from FourSquare. Data is a single tabel, containing location of the existing cafe.

| Name | Short Name | Lat | Lng |
|---|---|---|---|
| Markas Kopi | Coffee Shop | -7.648215 | 111.530610 |
| Caffe Late | Coffee Shop | -7.635934 | 111.519315 |
| Coffee Toffe | Coffee Shop | -7.622158 | 111.536357 |

# Methodology

We use Heatmap-based kernel density estimation. Heatmap was already implemented as plugin for Folium, which we used to visualize data to map.

# Results

**Based on the preliminary results, one possibly good location for new Cafe is on Tulus Bakti Street, because it is not in close proximity with other cafe, and located near school and at densest population region in madiun.**

# Discussion

**Before starting a business, some further data analysis of the best location of coffee shop must be done.**

# Conclusion

**The Best location for a new coffee shop in Madiun was estimated based on data from FourSquare and BPS data is on Tulus Bakti Street.**

# THANK YOU!

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