Capstone Project: Clustering Medical Centers in Puebla, Mexico

Business Problem Section

In 2017, the Mexican Association of Faculties and Schools of Medicine registered 38,600 applications for medical residences, of which only 21% obtained a place. There are many reasons because not all of the medical applicants get a place in a hospital, the most obviously is because there are not enough places. However, in some cases, the applicants get a place in the hospital but them don´t want to take it because of the location of the hospital. In these cases, the doctors prefer to continue doing a social service in hospitals and wait one year more to apply to residences again. Generally, at each application, the doctors can stablished three hospitals in which, if they be accepted, they are assigned one of the three hospitals stablished before.

Considering it and using the Foursquare data location, in this work we are interested in clustering the medical assistance centers of the Puebla state in Mexico, taking into account the amenities that are around the medical centers, in order to doctors can choose similar medical centers as their three options.