## **Introduction**:

## Problem statement

You are a performing arts organizing agency whose mainstream source of revenue is organizing sensational events/gigs for public entertainment from conception to execution. You aim to organize hundreds of events both highly frequent small scale ones and occasional large scale ones. You work with all kinds of performance artists like actors, comedians, dancers, magicians, circus artists, musicians, and singers, songwriters, choreographers, and so on.

One of the major decisions that have to be made is the selection of an appropriate venue for a performance. For this, the agency needs not only a holistic list of venues in an area but also to group it with tags like nightlife, small scale, relevant performance art that can be performed here, etc. So that an optimal decision can be arrived at.

Once the database for the area of interest is built, a simple K-means clustering would reveal the best zones for further classification and analysis.

## Target audience and Utility

The database once built and analyzed would be of tremendous utility to all companies/agencies involved in any sub-domain of the performing arts ecosystem. A few scenarios would help in grasping of the underlying value of this project:

- 1) An individual comic/ group of comics scouting for popular locations to perform and showcase their gigs throughout a particular city/area.
- 2) Musical Bands/ individual performers looking for crowded venues and popular locations to perform frequently to increase ticket sales.
- 3) Play actors/ dance performers and a host of other performing artists aiming to maximize the reach, popularity, and ticket sales for their art.
- 4) Supporting staff like choreographers, songwriters, scriptwriters, cameramen, etc looking for employment opportunities.
- 5) Not only the supply side but the demand side too, for instance, art enthusiasts and staple audiences of each of the above-mentioned arts can benefit too.