**Team Assessment**

**Our Team**

* **Julian Flores - Circle Role** :The member in the circle role will create a mockup of a database with a set of sample data, or even fabricated data. This will ensure the database will work seamlessly with the rest of the project.
* **Robby Rangel - Triangle Role** :The member in the triangle role will create a mockup of a machine learning model. This can even be a diagram that explains how it will work concurrently with the rest of the project step
* **Aktug Cilekci - Square Role**: The team member in the square role will be responsible for the repository.

**Our Project:** *2000-2019 (20 Years in Music)*

**Our Goal : What Makes a Song Popular ?**

With our Machine Learning Model, we want to predict/calculate the popularity of a song with given features such as its "danceability" , "key" and "tempo" etc.

**Summary of Project**

We started with datasets that were comprised of 2000 rows and 18 columns. Most columns , such as danceability, liveness, tempo, and song duration were already in integer format and did not need any feature engineering. Some columns did have to be encoded., such as : Explicit had to be converted to numeric , popularity converted to categorical, and genre needed to be encoded.

**Description of how data was split into training and testing sets:**

* The data was split on 20% test to 80% training.

**Explanation of model choice, including limitations and benefits:**

* Neural Network: 2 Hidden Layers with 200 and 100 nodes respectively and activation function as ‘Relu’ – accuracy: 0.63
* Random Forest Classifier: accuracy: 0.63
* Support Vector Model: accuracy: 0.518
* Logistic Regression: accuracy: 0.50