## First idea

If we have a matrix with artist and genre:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Artist 1 | Artist 2 | Artist 3 | Artist 4 | Artist 5 | Artist 6 |
| Genre 1 |  |  |  |  |  |  |
| Genre 2 |  |  |  |  |  |  |
| Genre 3 |  |  |  |  |  |  |
| Genre 4 |  |  |  |  |  |  |
| Genre 5 |  |  |  |  |  |  |

The table can now be filled in with the genres an artist has, and calculate the angle between each artist using linear algebra.

This means that we now will have an index, of the artist that are similar in style. If the user likes an artist, we can now look up what other artists are like the one that the user likes, and recommend these artists to the user.

This will be content-based filtering.

## Second idea

Instead of the genres, we have the users. Then, when a user listens to a certain artist, we can count the artist up a point. Then the users gets compared agenst each other, and the angle between the users gets calculated. If to users is very similar, but the one users has listened to an artist that the other hasn’t. This artist will be recommended to the user.

This is collaborative filtering.