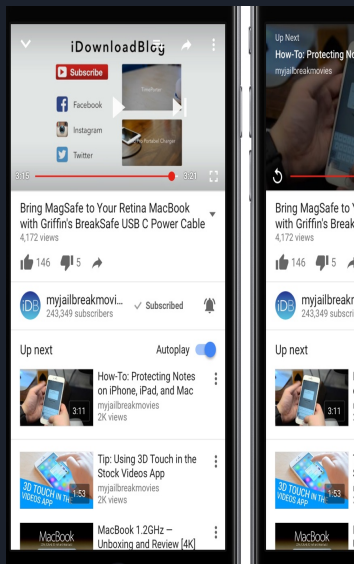
A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with diagonal stripes in a slightly lighter shade of blue.

# Recommender Systems

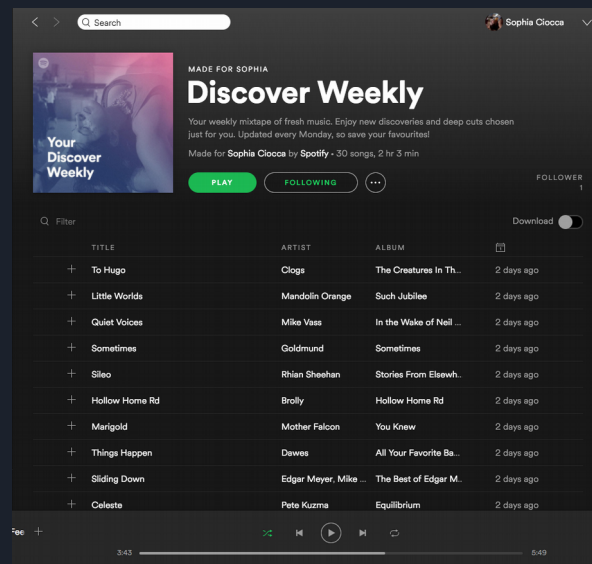
# What is a Recommender System ?



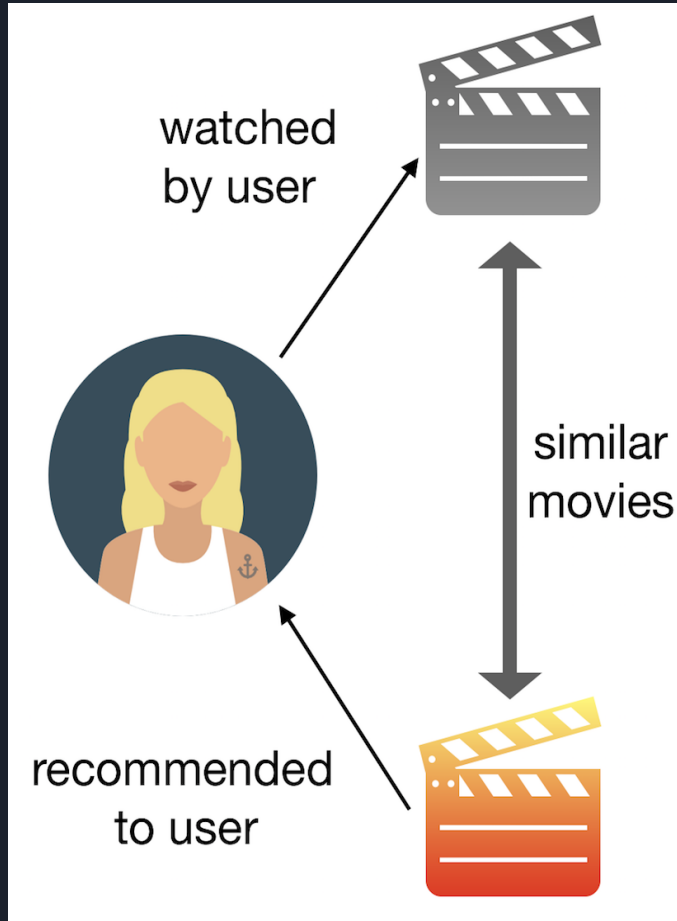
Youtube



Amazon



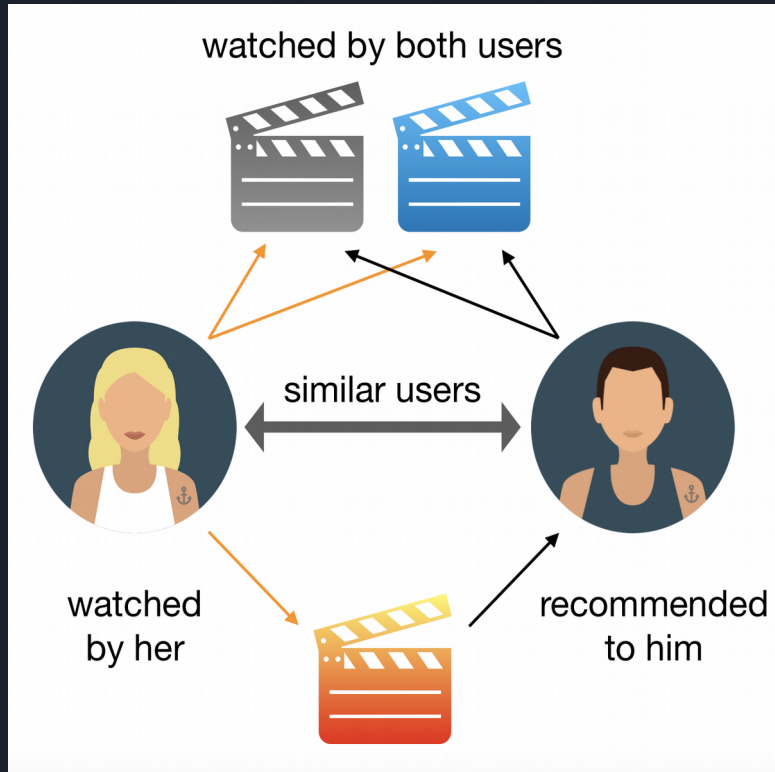
Spotify



## 1. Content based method

Recommend items based on the properties of items that user likes.

Ex: genres of music.



## 2. Collaborative method

Recommend items based  
similar user's interest

Ex: location based video  
recommendations.

# Steps to implement a movie recommender system

1. Filter data by rating count [ ex: count > 100]
2. Generate the pivot table
3. Find the correlation of movie/user with others
4. Fix a correlation threshold and recommend movies > threshold

# MovieLens Dataset

	user_id	movie_id	rating	unix_timestamp
0	196	242	3	881250949
1	186	302	3	891717742
2	22	377	1	878887116
3	244	51	2	880606923
4	166	346	1	886397596

Original dataset

movieId	4	5	10	14	15	18	19	26	31	34	...
userId											
1	4.0	0.0	5.0	4.5	4.0	0.0	0.0	0.0	5.0	0.0	...
2	4.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	...
3	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0	...
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	...
5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	...

Pivot table