



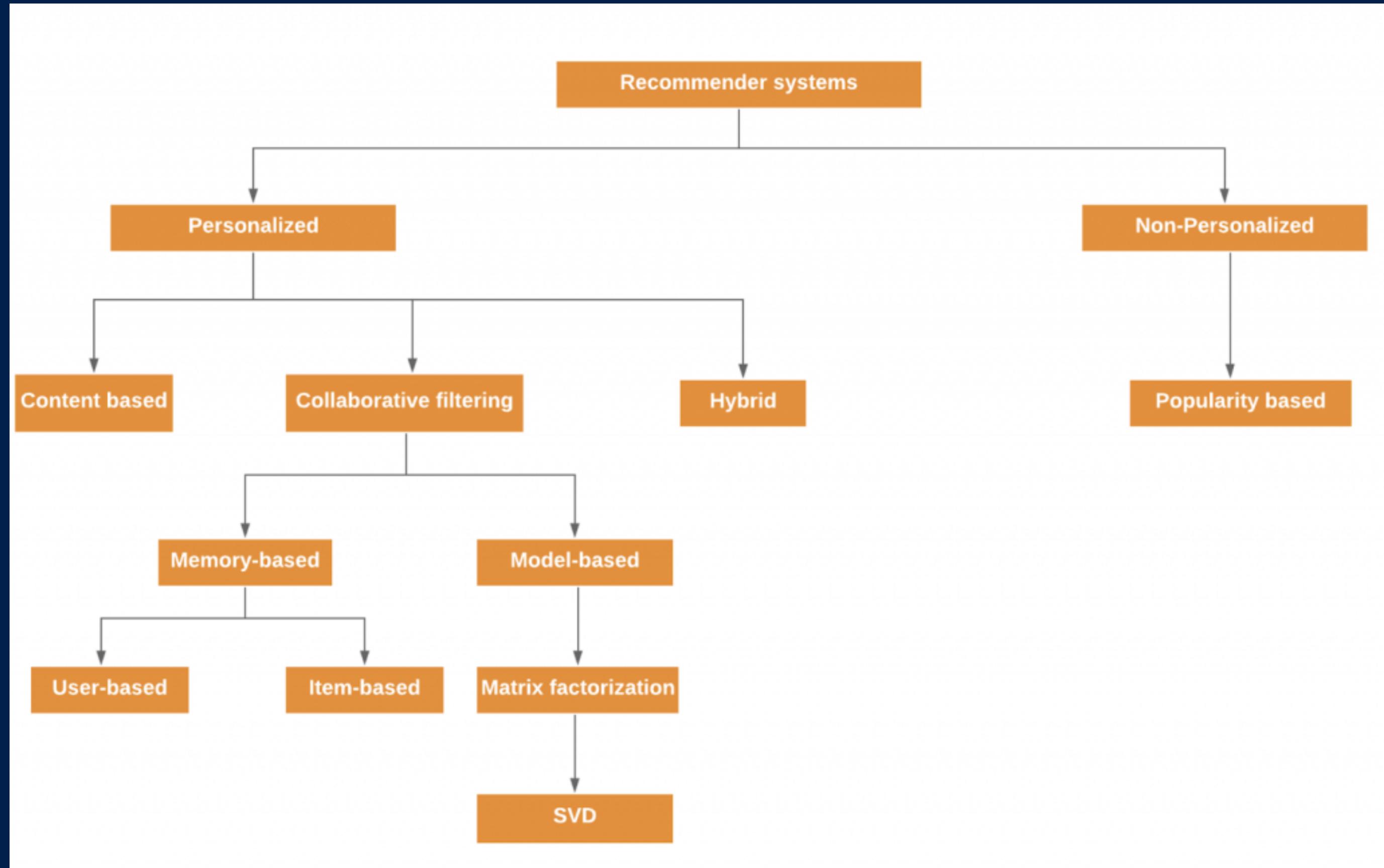
A large, semi-transparent purple triangle is positioned in the upper left corner. A smaller, semi-transparent orange triangle is located at the bottom center. Two glowing, multi-colored rings (one blue/purple, one red/orange) are suspended in the air, one on the left and one on the right.

Tleylesov  
Maksyt  
Tleulessov  
Maxut

# Music Recommendations

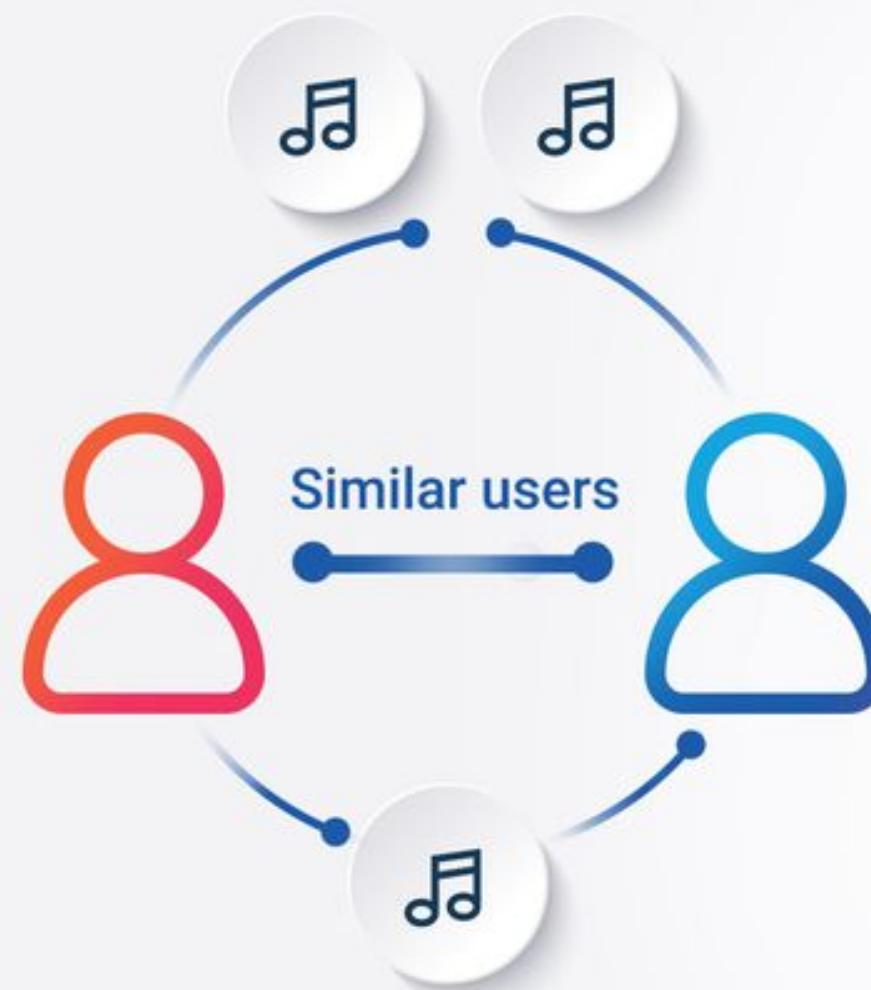
Research

Krivaboradoff  
Aloxey  
Krivoborodov  
Alexey



## COLLABORATIVE FILTERING

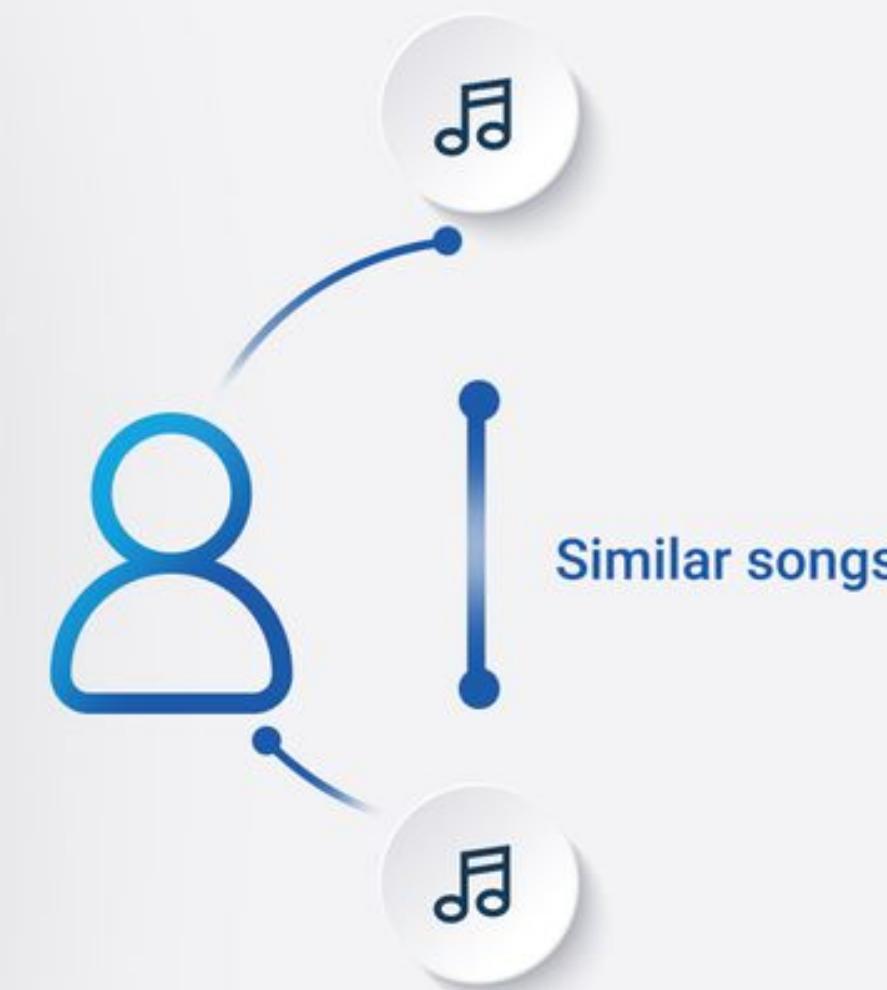
Listened to by both users



Listened to by her,  
recommended to him

## CONTENT-BASED FILTERING

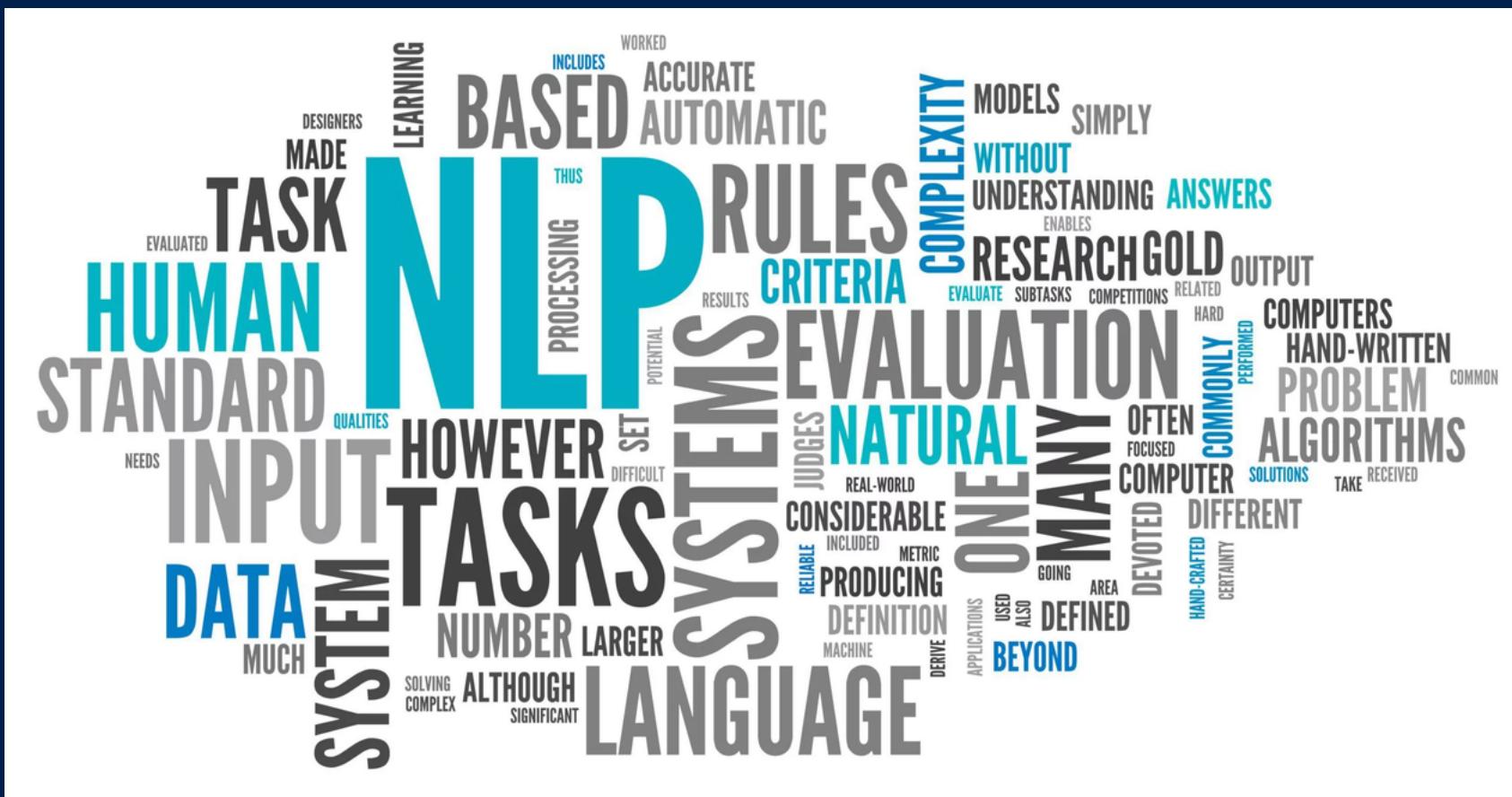
Listened to by user

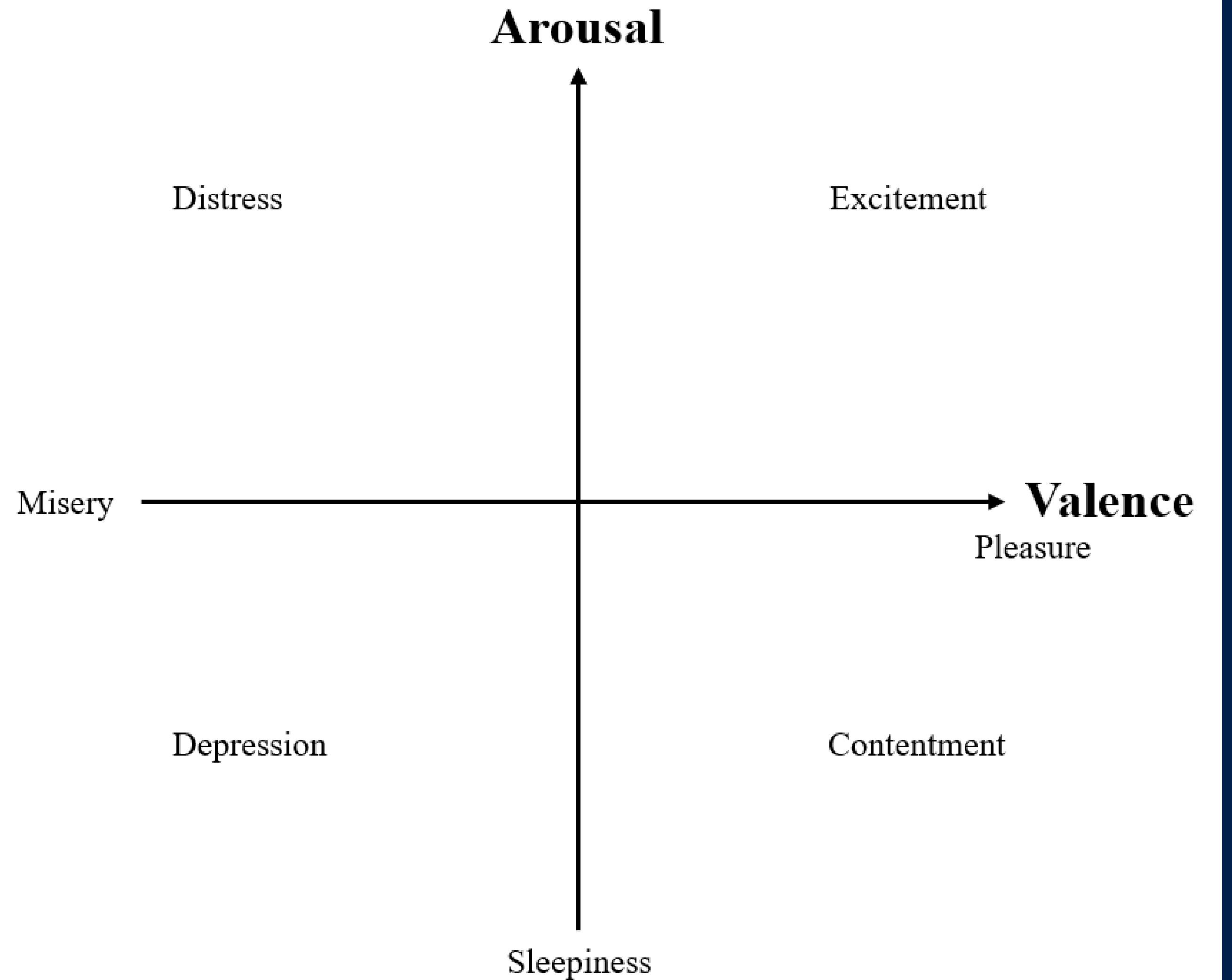


Recommended  
to user

# Что по спотифаю?

- collaborative filtering
  - NLP for text analysis
  - audio models for audio file analysis

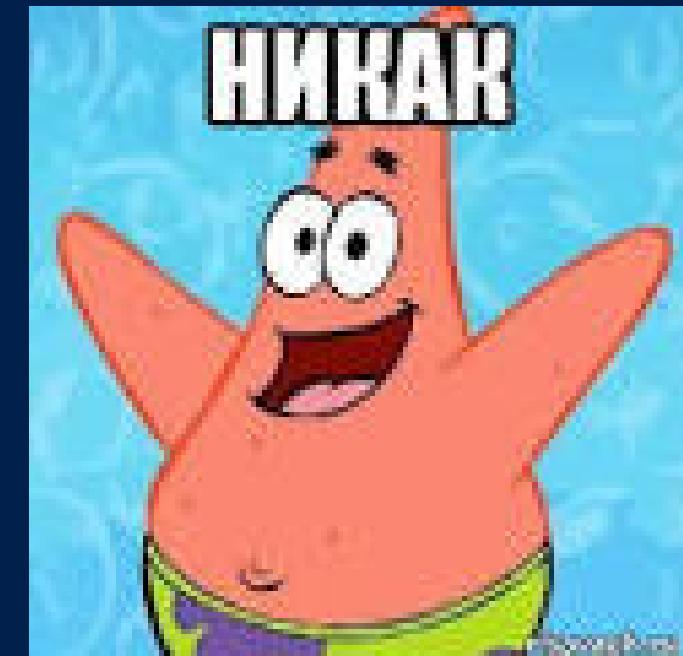




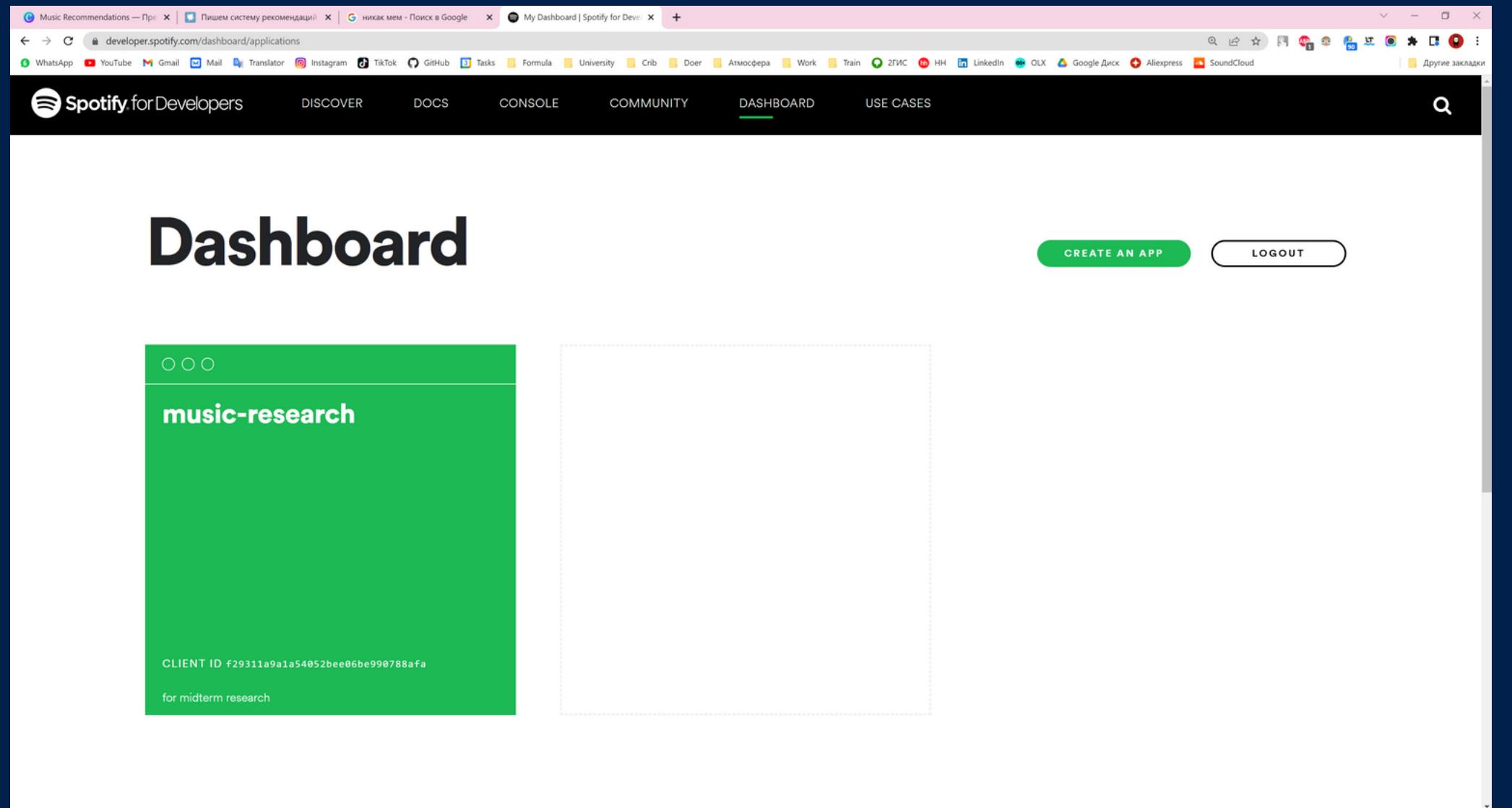
## модель Рассела

как смоделировать  
настроение всего четырьмя  
характеристиками?

«Танцевальностью»  
«Валентностью»  
«Возбуждением»  
«Темпом»



# Spotify API



client\_id

client\_secret

SpotifyCRUD

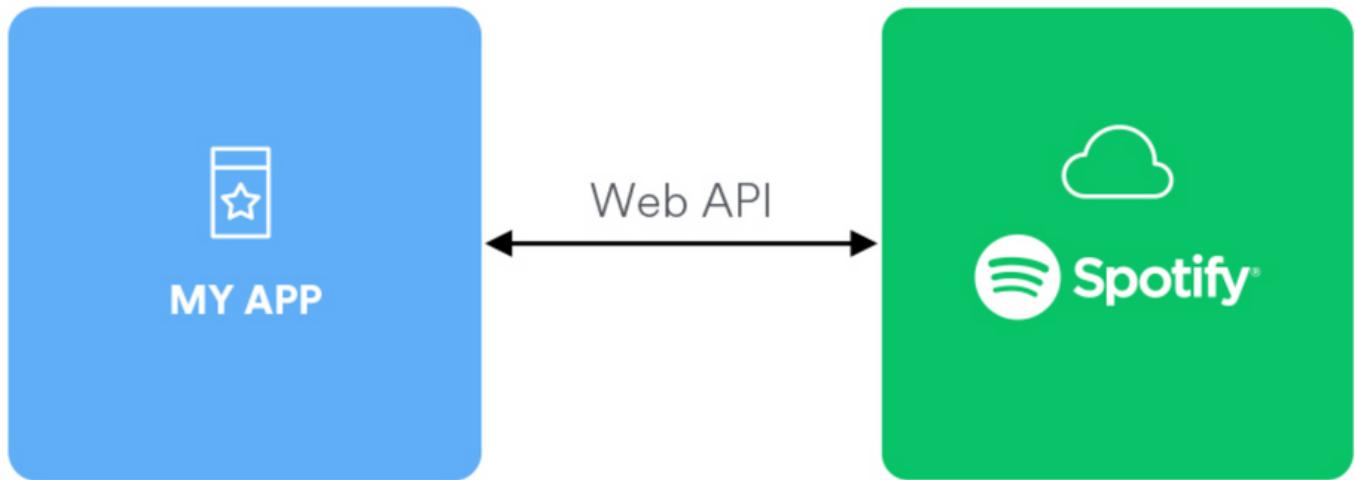
Tekore

tqdm

Всем привет и сегодня у нас  
новый эксперимент с  
гидравлическим прессом



STATUS CODE	DESCRIPTION
200	OK - The request has succeeded. The client can read the result of the request in the body and the headers of the response.
201	Created - The request has been fulfilled and resulted in a new resource being created.
202	Accepted - The request has been accepted for processing, but the processing has not been completed.
204	No Content - The request has succeeded but returns no message body.
304	Not Modified. See <a href="#">Conditional requests</a> .
400	Bad Request - The request could not be understood by the server due to malformed syntax. The message body will contain more information; see <a href="#">Response Schema</a> .
401	Unauthorized - The request requires user authentication or, if the request included authorization credentials, authorization has been refused for those credentials.
403	Forbidden - The server understood the request, but is refusing to fulfill it.
404	Not Found - The requested resource could not be found. This error can be due to a temporary or permanent condition.
429	Too Many Requests - <a href="#">Rate limiting</a> has been applied.
500	Internal Server Error. You should never receive this error because our clever coders catch them all ... but if you are unlucky enough to get one, please report it to us through a comment at the bottom of this page.
502	Bad Gateway - The server was acting as a gateway or proxy and received an invalid response from the upstream server.
503	Service Unavailable - The server is currently unable to handle the request due to a temporary condition which will be alleviated after some delay. You can choose to resend the request again.

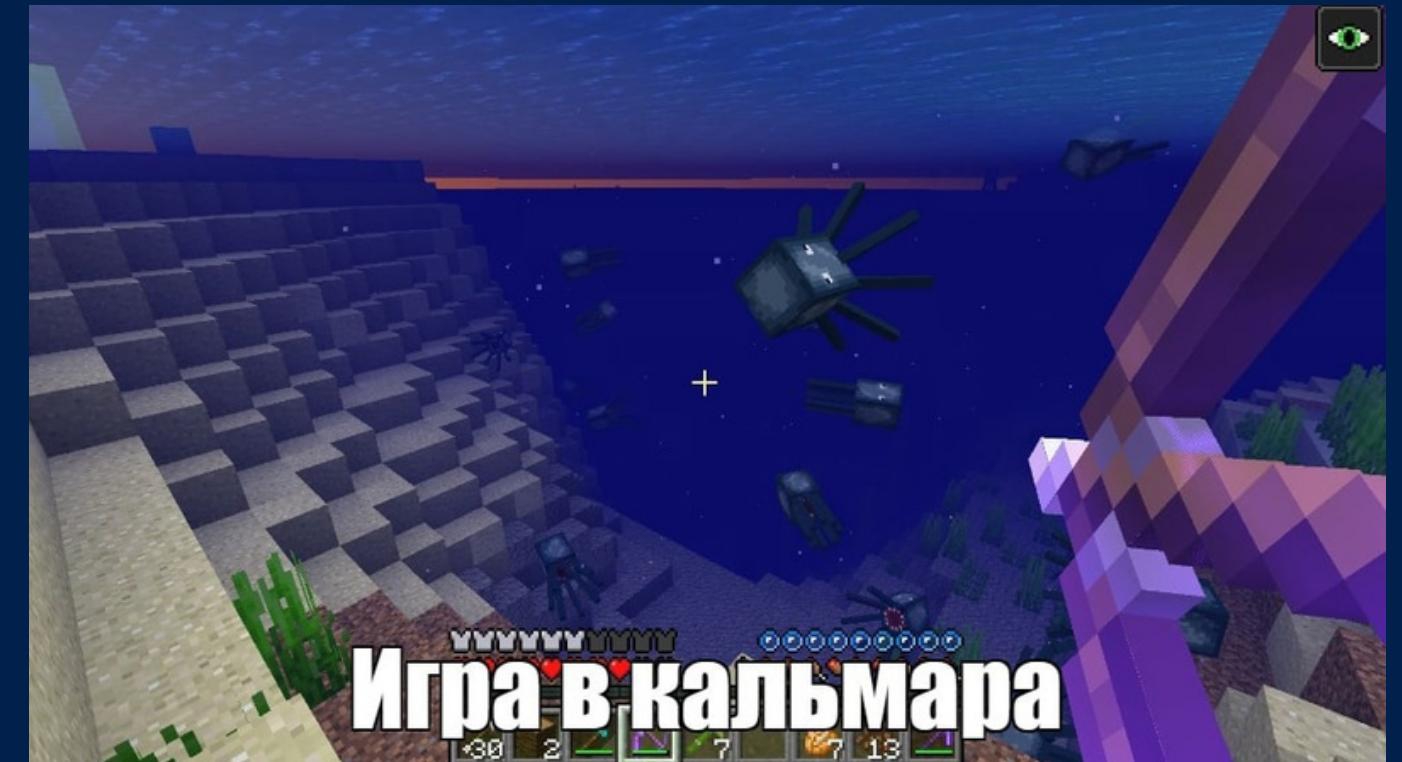
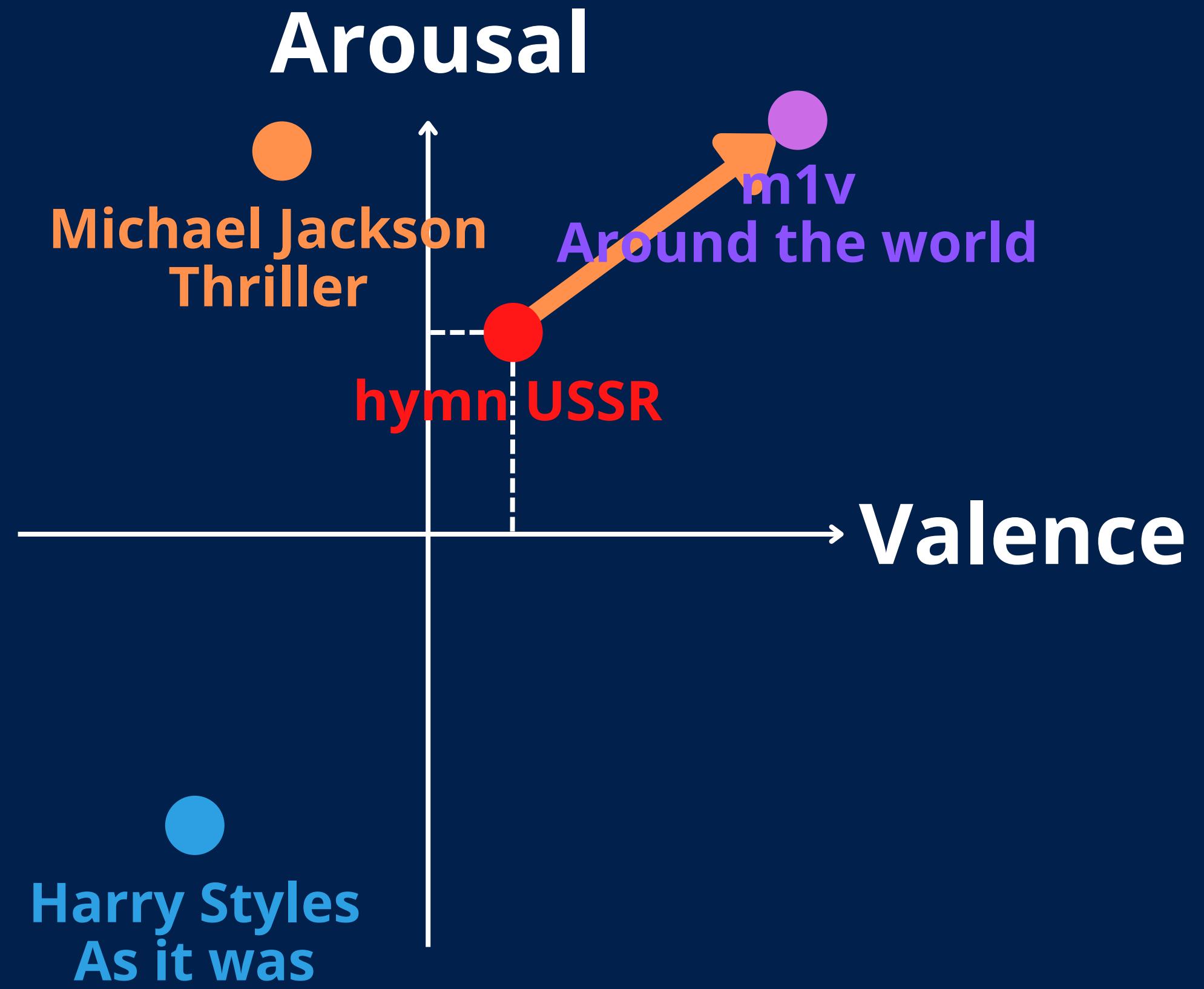


[http://open.spotify.com/track  
/6rqhFgbbKwnb9MLmUQDh  
G6](http://open.spotify.com/track/6rqhFgbbKwnb9MLmUQDhG6)

**Я: \*РЕШАЮ ПРИМЕР НА ДВЕ СТРАНИЦЫ\***  
**ЗАБЫТЫЙ МИНУС:**

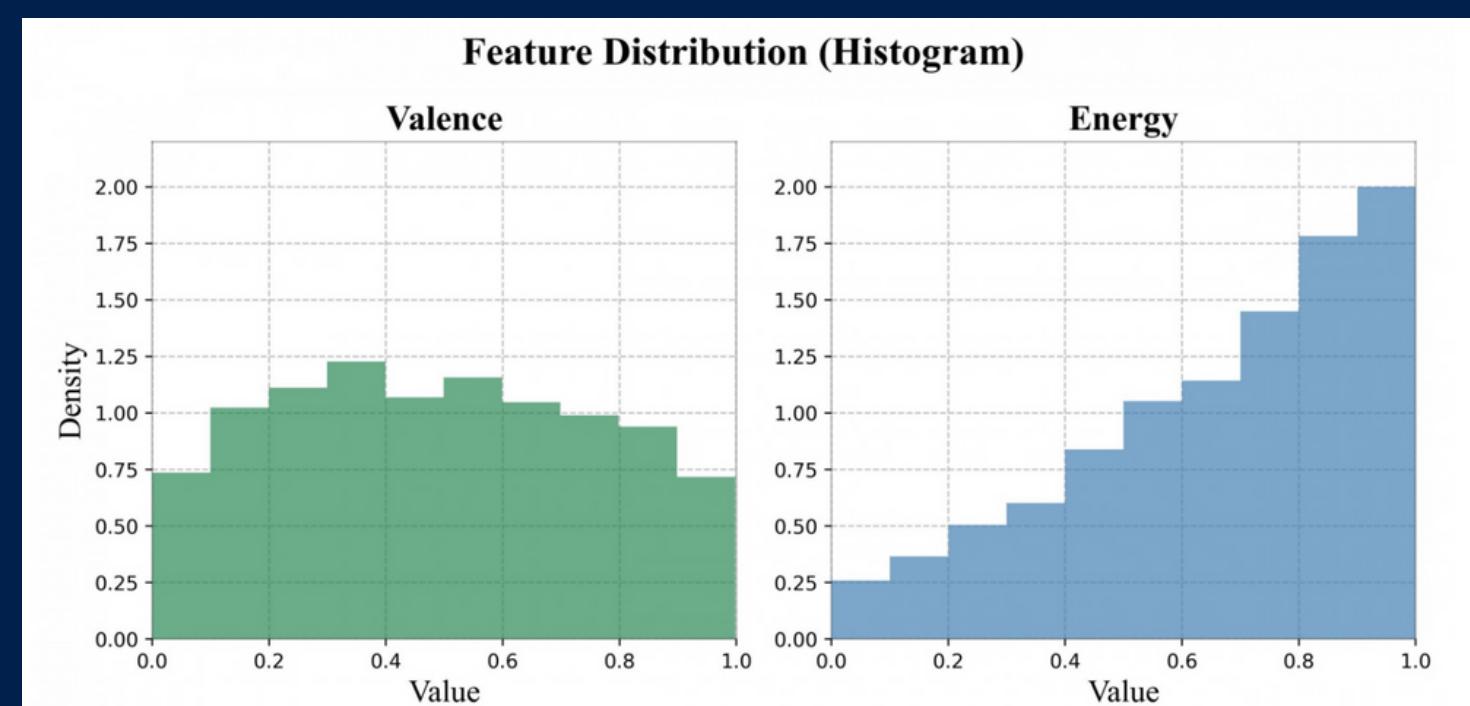
**WELCOME TO THE CUMZONE**

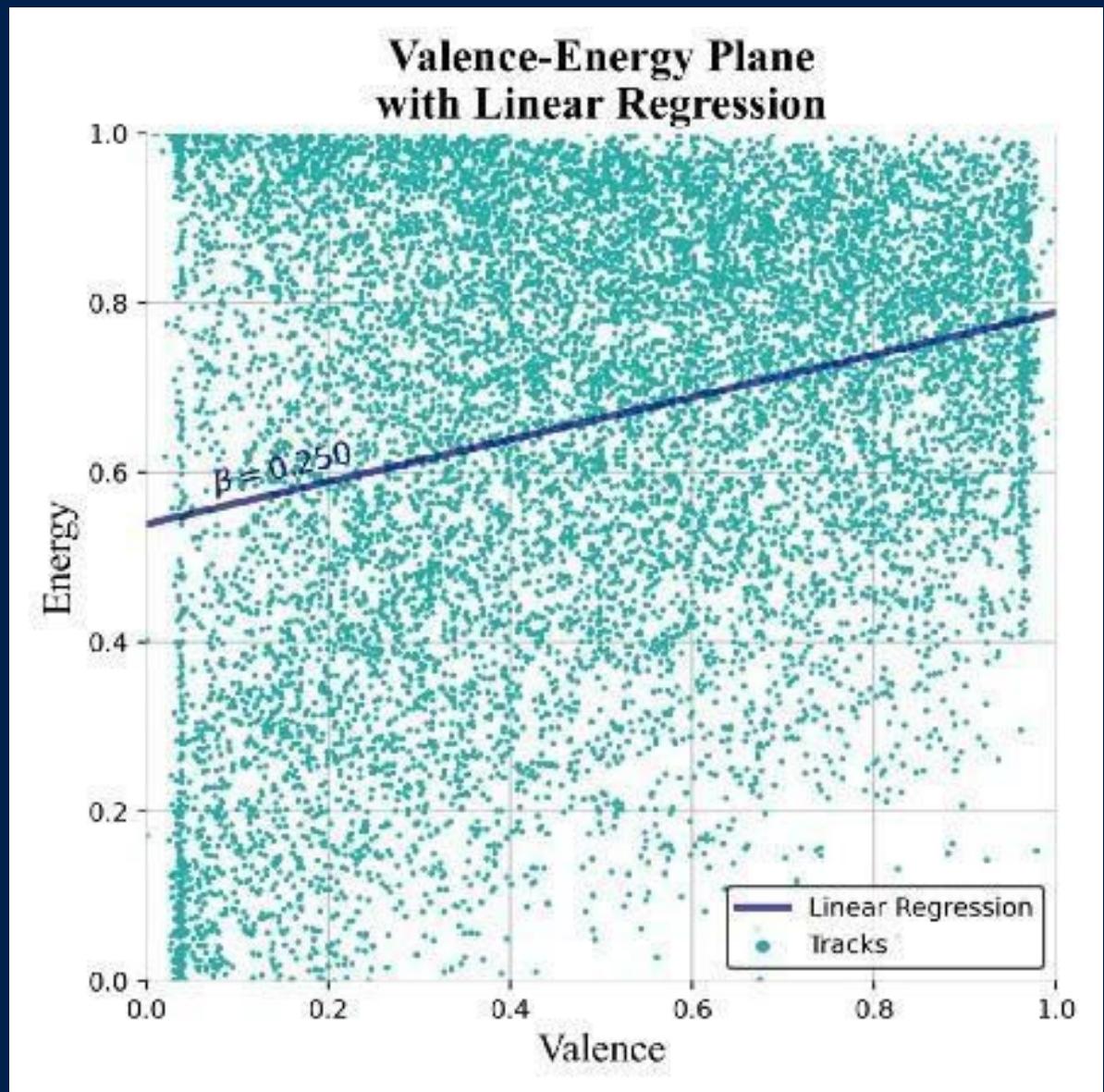




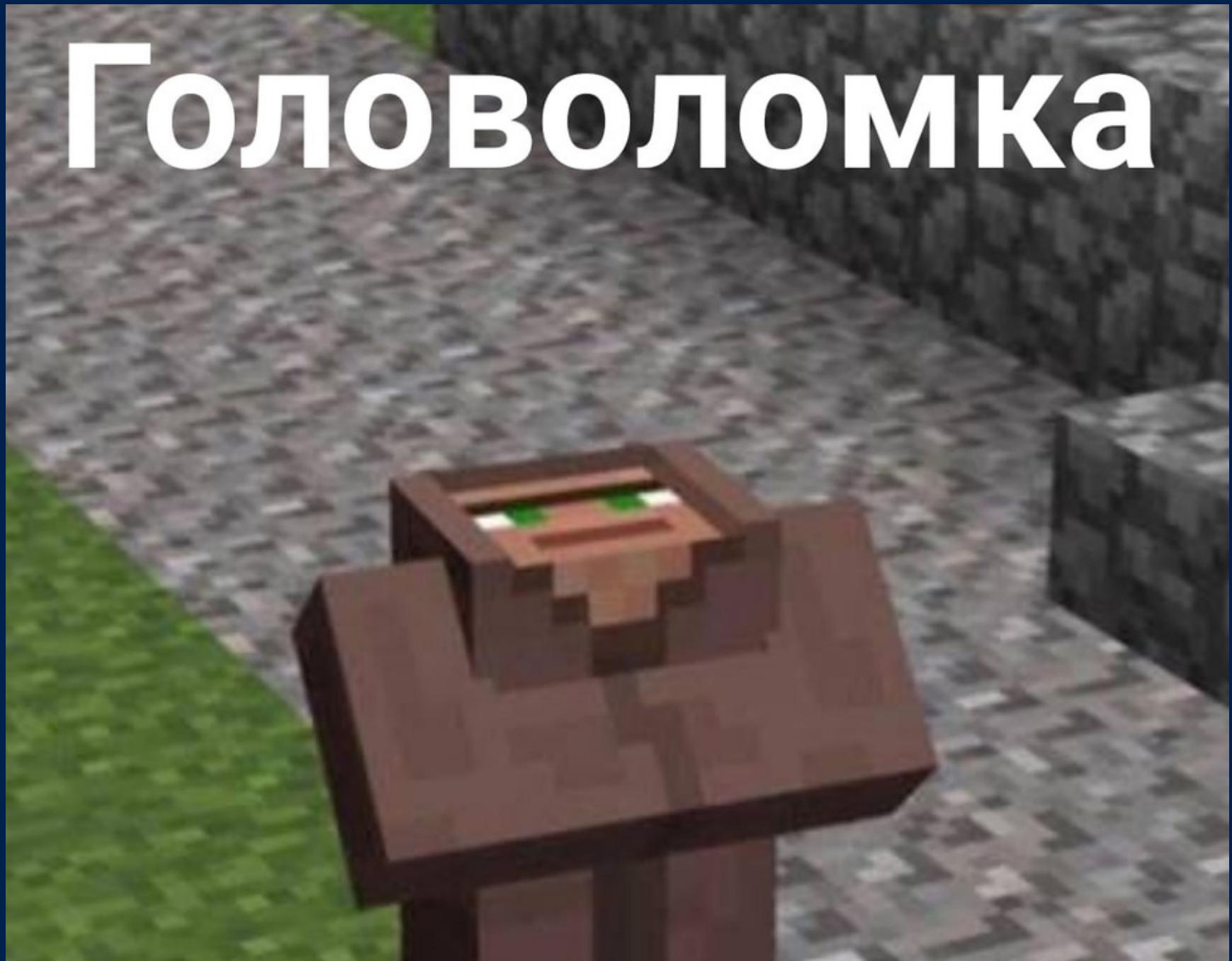
Вот формула:  $\sqrt{a^2+b^2}$

разность двух векторов:  $p_2 - p_1$



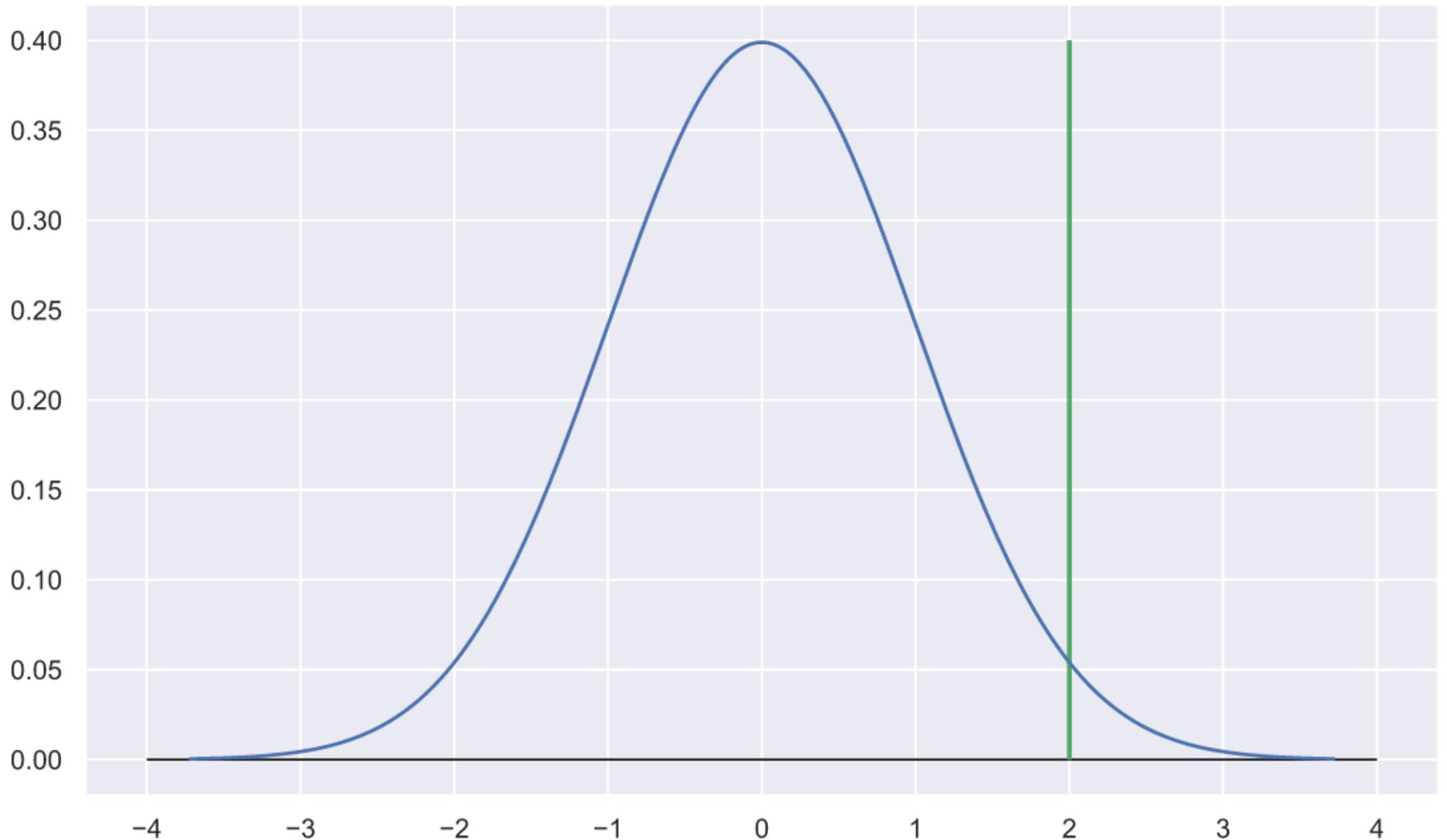


Она предполагает, что вектор  $(0,5, 0,5)$  так же близок к  $(0,7, 0,5)$ , как и к  $(0,5, 0,7)$ .



решение?





Z-статистика

$$Z = \frac{\bar{x} - \mu}{\frac{\sigma}{\sqrt{n}}} \quad Z = \frac{y - \mu}{\sigma}$$

p-value

$$[ \mu - |\mu - \bar{x}| ; \mu + |\mu - \bar{x}| ]$$



Download on the  
App Store

GET IT ON  
Google Play

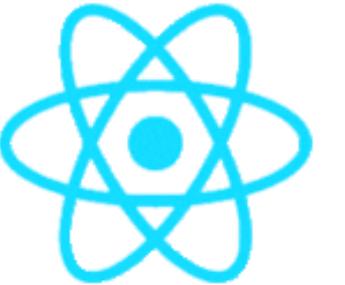


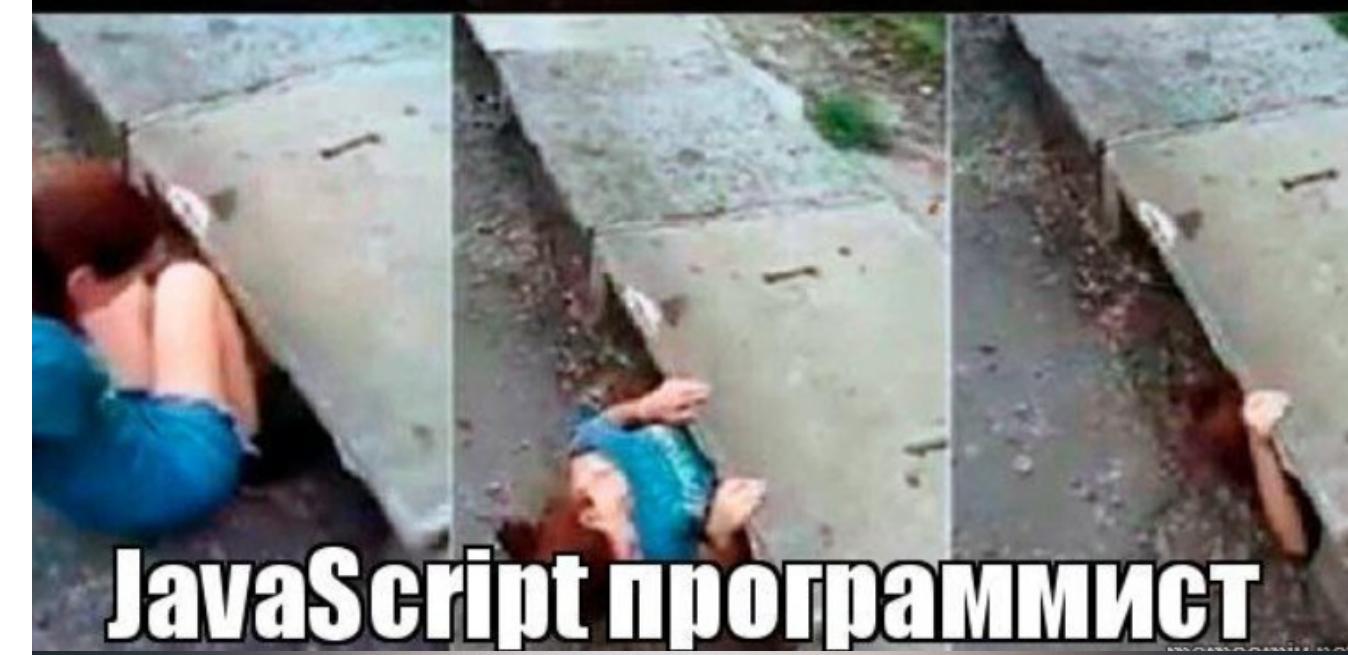
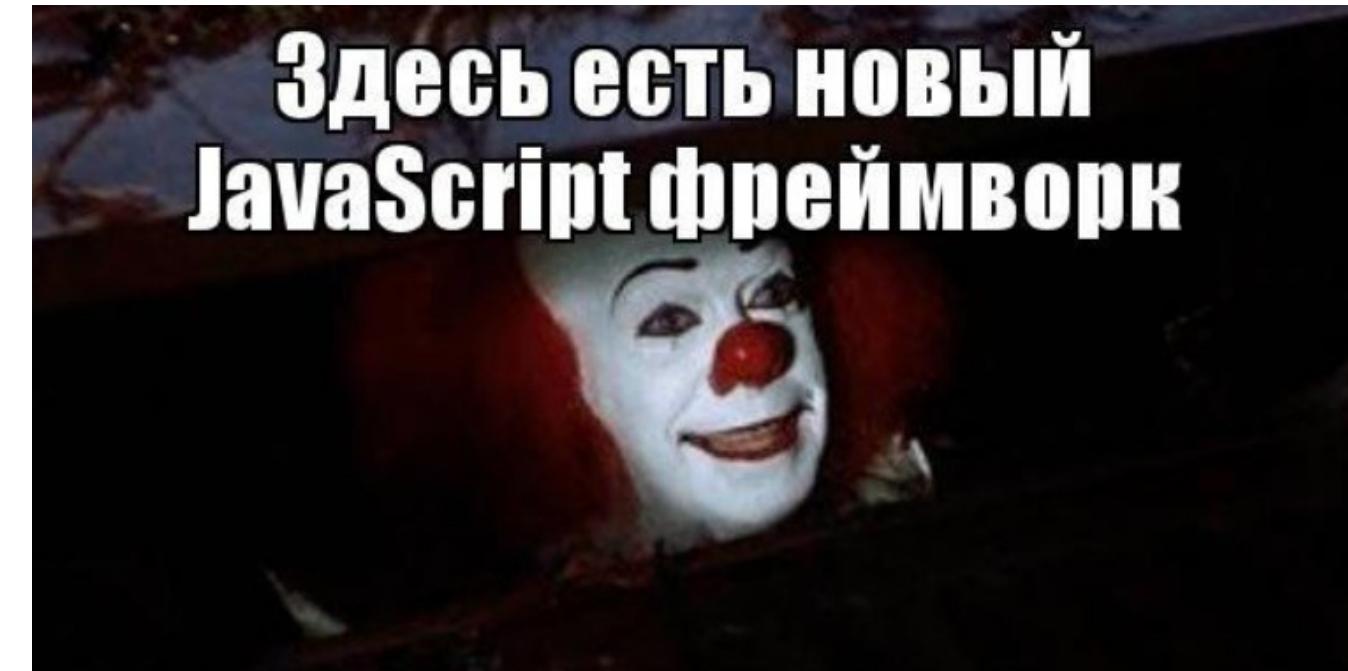
# Spotistats

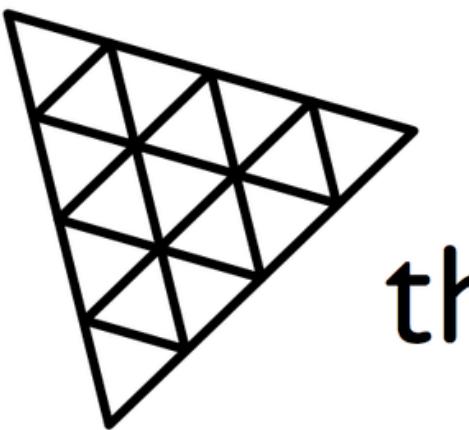
The screenshots show the app's main dashboard and various stats sections:

- Top Stats:** 35,342 total tracks streamed, 173 minutes streamed since 17:30.
- Genres:** Top genre is pop, followed by dance pop, pop dance, tropical house, and house.
- Currently Playing:** "good 4 u" by Olivia Rodrigo.
- Top artists past 4 weeks:** Lorde (#1), Olivia Rodrigo (#2), Bebe Rex (#3).
- Playlists:** "songs we forgot we loved" by tom darlaston, "Boei Spo" by Boei Mix.
- Recently played:** "Start of Something New - Nini Version" by Olivia Rodrigo, "good 4 u" by Olivia Rodrigo.
- Summary:** 63% of tracks are danceable, 61% are energetic.



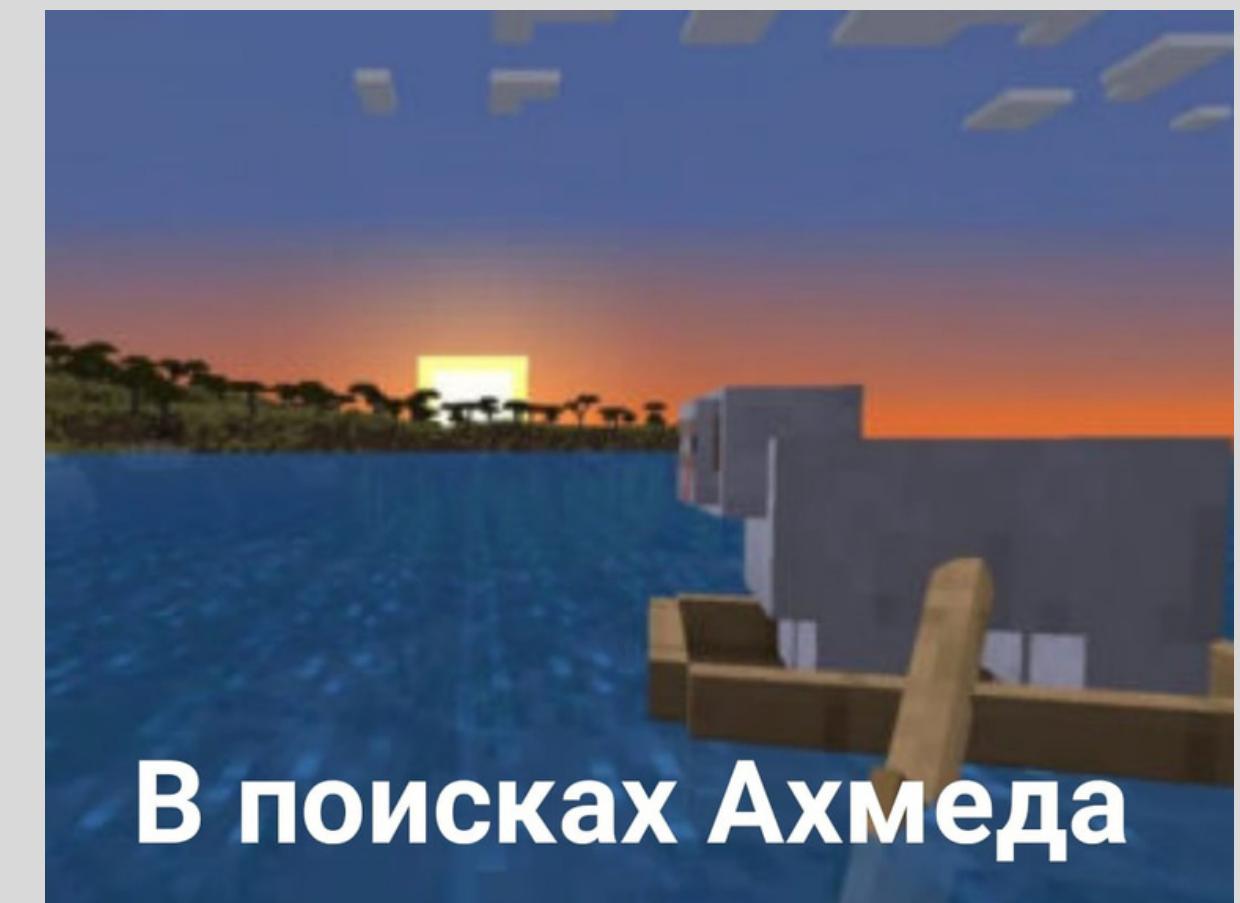
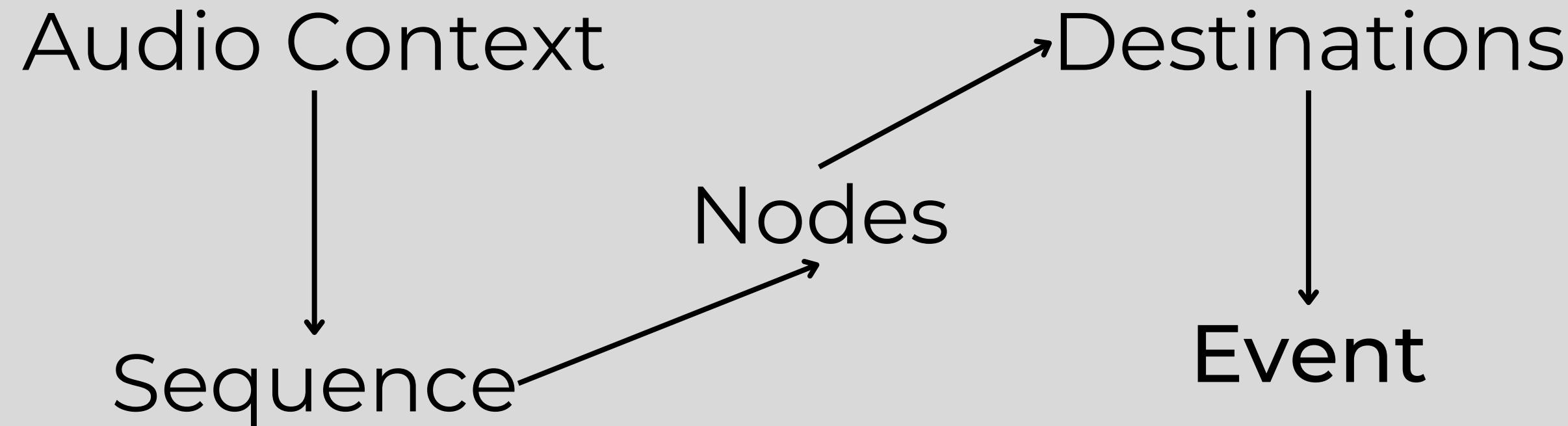
 React



 three.js



# Web Audio API



В поисках Ахмеда



Shrek



The Triplets of  
Belleville



Harry Potter



The Dark  
Knight Rises



Memento

-1

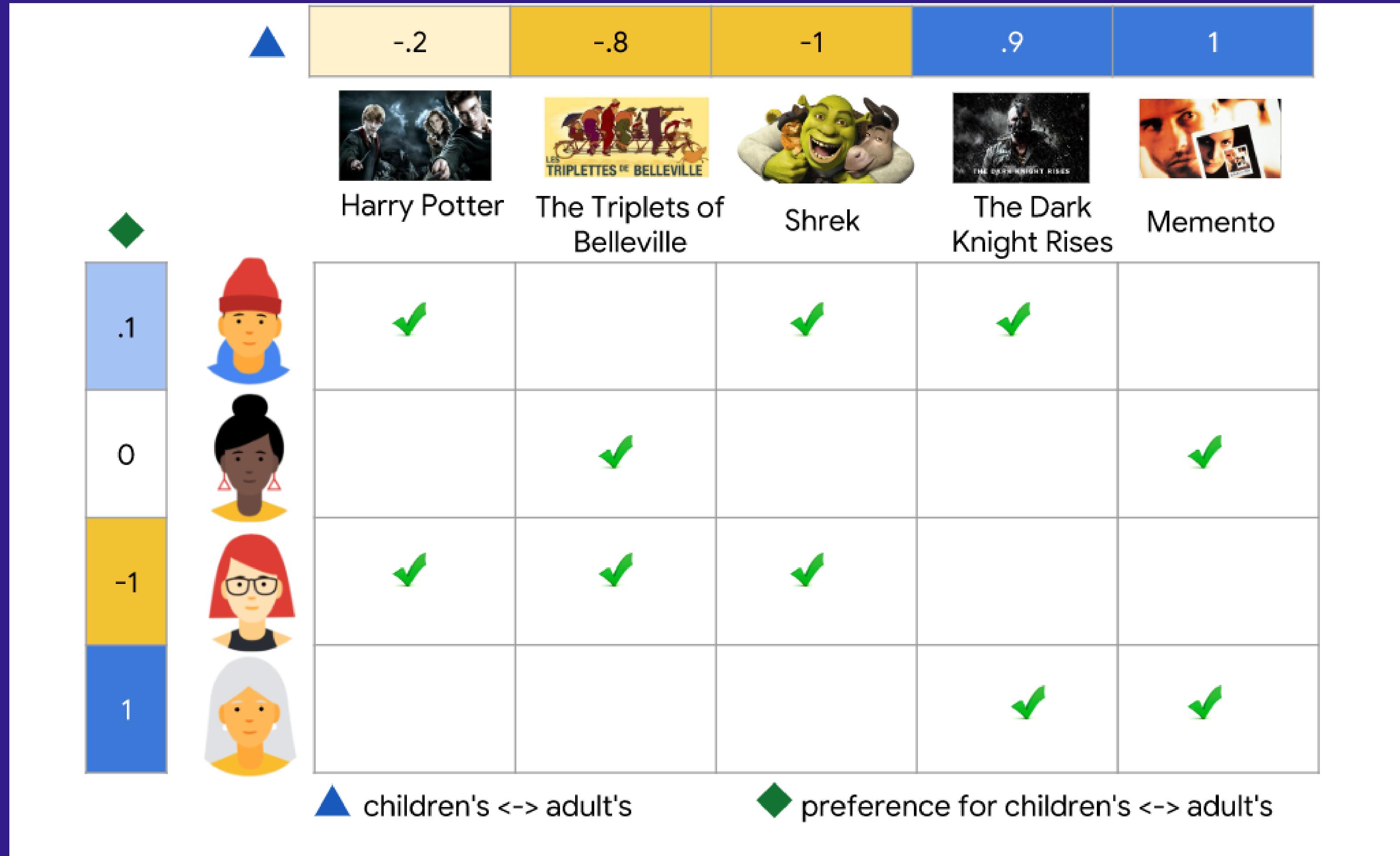
←

Children



+1

Adult



	.9	-.8	1	1	-.9
	-.2	-.8	-1	.9	1



● ♦

Harry Potter

The Triplets of  
Belleville

Shrek

The Dark  
Knight Rises

Memento

1	.1
-1	0
.2	-1
.1	1



✓		✓	✓	
		✓		✓
✓		✓	✓	
			?	
			✓	✓

■ arthouse <-> blockbuster

▲ children's <-> adult's

● preference for arthouse <-> blockbuster

♦ preference for children's <-> adult's