14 MUSIC-BOX

AI SYSTEMS KNOW (ALMOST) EVERYTHING ABOUT YOU

No playlist without AI systems. But at some point this can also become dangerous.

This learning station simulates, in a very simplified way, AI systems used by music providers such as Spotify. The algorithm of this platform is not publicly available. Instead, we have taken the factors and methods described by music journalists.

This is how the AI system works:

1. The AI system is trained with a large amount of information about the music tastes of users.

2. This includes the music genre, when the tracks are listened to, keys, rhythm, tempo, mood, artists, etc. Sometimes, very private information is also collected.

3. Patterns are created from this information for specific music tastes.

4. These patterns are continuously updated and improved.

5. New users are registered and assigned to these patterns.

6. On certain days, users receive new music suggestions to listen to according to these patterns.

TOTAL NUMBER OF STREAMS
305,672

TOTAL MINUTES STREAMING
**26,734**

STREAMS OF FAVORITE TRACK
98

Such AI systems offer significant ==benefits==. For music lovers, discovering new tracks that match their taste is effortless.

But do not get too comfortable. If you actively seek out new music from time to time, you can avoid getting stuck in your ==own "music bubble"==. However, it is currently impossible to precisely predict a person's music taste for all time.

And: ==Some providers collect large amounts of the most intimate information== about their users, which also reveals a lot about their psyche. There is no effective control. It is unclear whether this data is shared with the advertising industry. Such data collections are dangerous not only in the hands of criminal hackers. For example, they can be used to manipulate specific target groups.
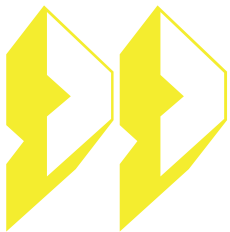
What do you think?
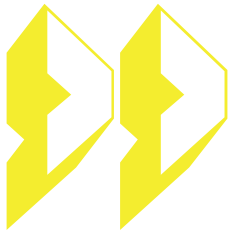**What reasons are there to use AI for music boxes?**
What are the risks? Discuss with other students.

The solution to the learning station tasks
==The crucial factor is the music genre==. The pieces can be divided into four groups. An AI system would sort similarly but with more features and much faster than a human:

Rock & Pop 1960er/1970er:	Current Rock & Pop:
Elvis Presley	Billie Eilish
Rolling Stones	Dua Lipa
Beatles	Nirvana
Current Schlager Music:	**Classic music:**
Matthias Reim	Mozart
Helene Fischer	Haydn
Kerstin Ott	Beethoven

14 MUSIC-BOX

Do you want to learn more about Spotify? Music journalists and legal experts have compiled this information:

While it used to be important for bands to be played on MTV, today it's essential to get a spot on a Spotify playlist. Whoever is there gets heard and recommended. With over 300 million listeners worldwide, Spotify has a significant impact on the international music business.

There are playlists not only for music genres but also for many activities: for falling asleep in the evening or waking up, taking a shower, and going for a run. Playlists are created in three ways:
   a) By editors hired by Spotify for each country.
   b) By algorithms or AI systems.
   c) By Algotorial Playlists: Here, the editors compile music tracks, and algorithms assign them to users.
For their decisions, the editors also evaluate the playlists: How often is a song clicked or listened to in its entirety, repeated, or saved? Spotify has more than 150 editors worldwide who manage around 4500 playlists, 450 of which are in German-speaking countries.

In the future, Spotify plans to analyze conversations and background noise, as well as track users' emotions. The idea is to be able to tailor playlists even more precisely to target groups. It is essential to find out when people listen to music during activities and in what mood they are. People are increasingly losing their privacy. If these intentions are enforced, then a music provider is allowed to do things that in Germany are only permitted to the police and intelligence services with a warrant.

Even if Spotify is just about music: The company's data collection on each individual is becoming increasingly explosive and dangerous.
Officially, the company adheres to ethical standards and the privacy of its users. However, there is no effective control or limitation of this data collection. The privacy policy that users must agree to is sometimes not understandable. Nobody knows to what extent this data will be passed on to the advertising industry, intelligence agencies, or - perhaps someday - to employers.

14
MUSIC-BOX

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