

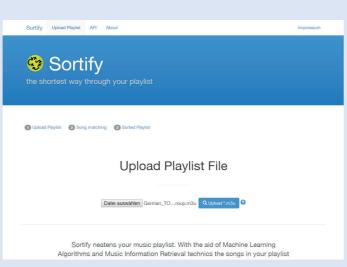


The Shortest Way through Your Playlist

User

At first we need a Playlist (m3u), this shall be uploaded to our service by the User

- Upload Playlist
- Initiate Process

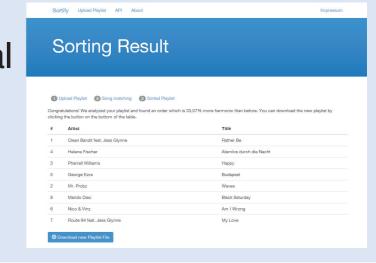


Present the result and provide the user with the optimized version of his playlist

- Display the new playlist and graphs representing the initial and our optimized order.
- Output Path lengths

Results

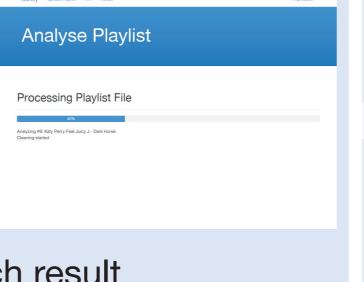
 User can now download the optimized Playlist



Identification Song Find a unique ID for each Song in The Playlist. Variations and Typos in the Users Playlists shall be eliminated

- Query musicbrainz.com
- Search for a sample on amazon.com
- Calculate similarity (Levenshtein Distance) between song description

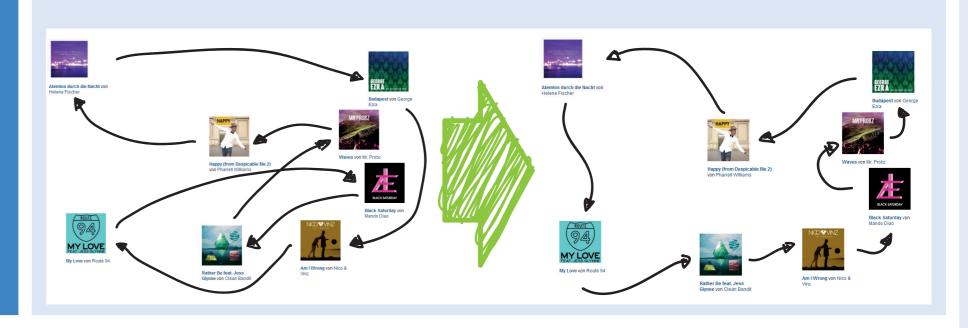
from the playlist and the search result



Playlist the Sort

Find the ideal order of the songs in the playlist based on the features

- Interpret the problem as the "Traveling Salesman Problem" (TSP) and solve it
- Short Playlists: Ideal solution can be calculated
- Longer Playlists (>14 Songs): Genetic algorithm is used





Let the user verify our interpretation of his playlist.

- Display our interpretation of the playlist
- User can change the Amazon. com URLs if necessary
- User than can initiate the sorting process

Two dan't not the correct force we would like you to search for the real song on amazon. Then you can click on the amazon until in the table and insert five didn't find the correct song we would like you to search for the real song on amazon. Then you can click on the amazon until in the table and insert five didn't find the correct link. Afterwards we calculate the obstonened amazon URL. If no link is inserted the song will not be sorted into the new playlest. ### Playlist Extended The Common	Result						
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Version)	6				http://www.amazon.de/up/boons/ben1//		
If there the first the disc.		Route 94 feat. Jess Glynne - My Love	Route 94 feat. Jess Glynne - My Love	100%			
		Mando Diao - Black Saturday (Single			http://www.amazon.de/dp/B00KWS5GAO/		

features

Collect the features for each song in the playlist

- Lookup features in our database
- If not available yet:
 - Download sample from Amazon
 - Extract music features from the sample with marsyas
 - Store features in Database

