Data

# User data

The program will utilize data imported from the users’ Spotify account. This could consist of favorite artists, top artists, playlists, etc. From this data it is possible to build a profile of the user, which hold information of which artists and genres they listen to. The program will then be able to recommend concerts for the user based on this profile.  
The data is received through Spotify’s Web API, which prompts the user to login and connect the app to their Spotify account.

# Concert/Artist data

The program stores the following data about the artists (playing at Roskilde 2017):

* Name
* Genre(s)
* Related Artist(s)

This data is imported from Spotify using the Web API and the artists’ Spotify Id.

# “Content Based Filtering” approach using the data

It is now possible to recommend the user concerts at Roskilde Festival by using these two sets of data. By first comparing top and favorite artist with the artist at the festival, it is possible to find concerts that user want to attend. Secondly, by comparing the related artists of the artist playing at Roskilde with the users top and favorite artists, the program can recommend concert that the user is likely to attend. Thirdly, by find matches between genres of the user and the artists at Roskilde Festival, the program can find concerts, which the user might be interested in.   
So by filtering through the concerts at the festival using the names of the artists, related artists and genres it is possible to recommend concerts to user.

# “Collaborative Filtering” approach using the data

By building up a database of recommended concerts for past users, it will be possible to use collaborative filtering by comparing users based on their common favorite/top artists and recommended concerts.   
The logic goes: If a new user and a past user have the several of the same favorite artists and both got recommended some of the same concerts, through content based filtering, then the program should probably recommend some of the past user’s other concerts to the new user.