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Design Specification

Objective

The object of our application is to provide music lovers, Spotify aficionados and playlist perfectionists alike a novel and fun platform to share their grooviest playlist with other Spotify users across the globe.

The focus of the sharing will be on DANCING. The application will rate Spotify playlists based on their 'danceability' and host a list of the world's most danceable playlists.

In addition to this, the application will explore fun ways to provide users with feedback on their playlists danceability, for example as an interactive animation or game.

Requirements

- Users **must** be able to log into their Spotify account via the website.
- Users **must** be able to select Spotify playlists from their account to be uploaded.
- Users **must** be able to have their Spotify playlist analysed in terms of its danceability (this is an attribute Spotify assigns to tracks. Playlist 'danceability' will consist of an aggregate average of all songs).
- Users **must** be able to have their playlists placed on a world rankings table.
- Users **must** be able to view the world rankings of all playlists uploaded, ordered in terms of danceability.
- Users should be presented with graphical feedback related to just how danceable their uploaded playlist is
- Users **should** be able to delete their shared playlists from the public view if desired.
- Users must be able to view the world rankings of all playlists uploaded, ordered in terms of danceability.
- Users should be able to click through playlist links on the worldwide rankings list and be presented with the playlist on Spotify Open (from here they can choose to listen in Spotify)
- Users **could** be shown their friends (Spotify uses facebook friends) stats
- Users could be shown other users uploaded playlists if they click on their name in the rankings table

Persona 1 - Britney

Britney is a music lover and a narcissist.

Making great playlists to dance to in her room isn't enough for her... She needs to show off!

She wants a platform to show the world just how danceable her swathe of weekend playlists are. She wants motivation to create new playlists and the ability to share them with ease.. I.e. without any technical work on her part. If the website isn't easy to use she won't use it.



Persona 2 - Adam

Adam is an aspiring DJ and uses spotify to construct his playlists. He needs the ability to not only rank the average danceability of his floor-filling lists, but also identify which are the strongest songs in the mix, and which are dragging the score down. He wants a clear output which will easily highlight these factors for him.



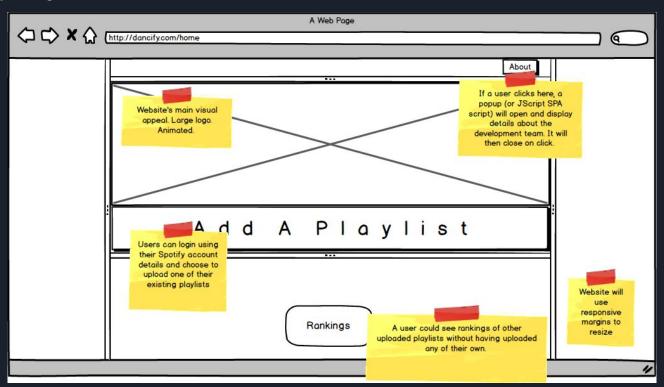
Persona 3 - Francoise

Francoise is a very private person. She curates her playlists with care and doesn't like sharing her music with just anyone. She wants to know that her playlists aren't mainstream enough for all tastes. She wants to see that her

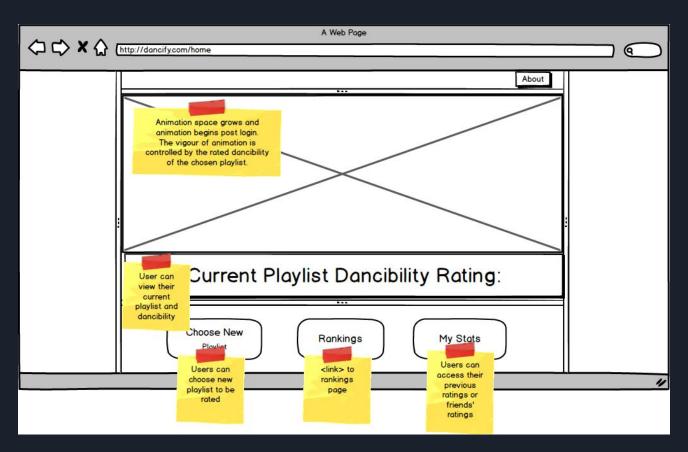


playlists can have low scores, but also, that once they are deleted, no one else can access them ever again. She will care about getting low scores for her soporific collections of non-English-language dirges but also that, once she hits delete, she can maintain her exclusive anonymity. It's also important to her that the system is easy and fast to use so no one sees her using it.

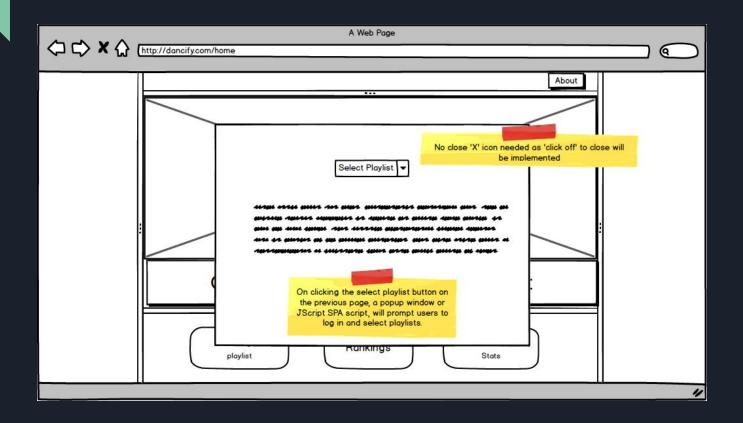
Wireframe(s) for Home Page: Upload your playlist



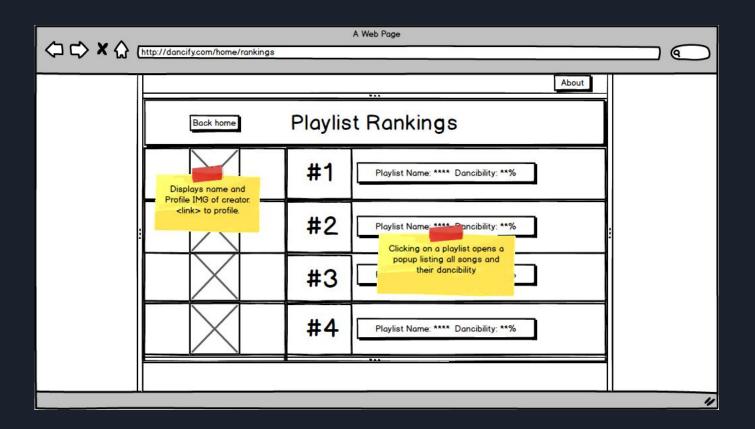
Wireframe(s) for Home Page: After Login



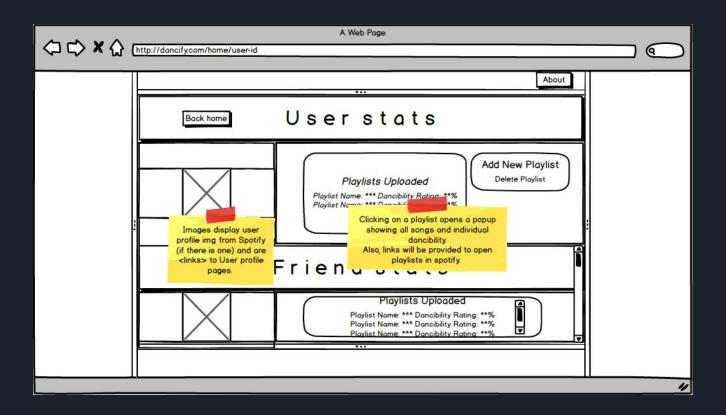
Wireframe(s) for Home Page: New Playlist



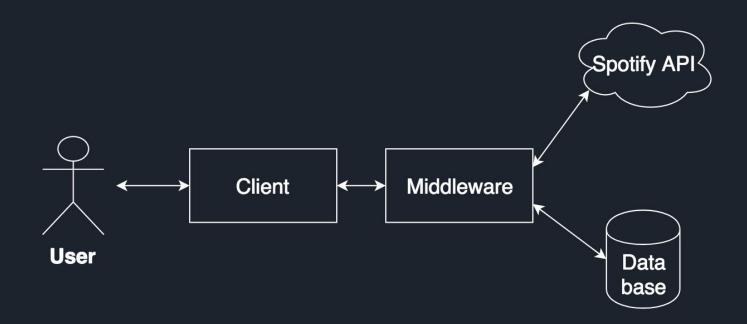
Wireframe for Rankings Page



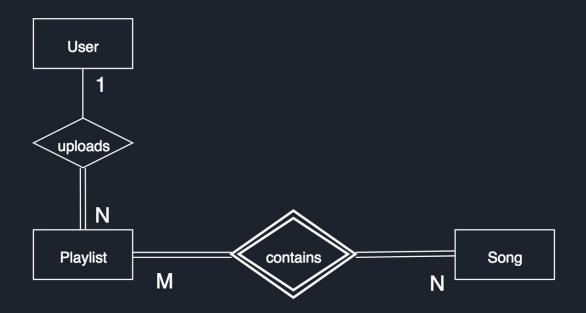
Wireframe for User Info Page



System Architecture



E-R Diagram



Entity-Attribute Tables

User

<u>User ID</u>	Integer
URI	char(128)
Display name	char(128)
Image	bytea

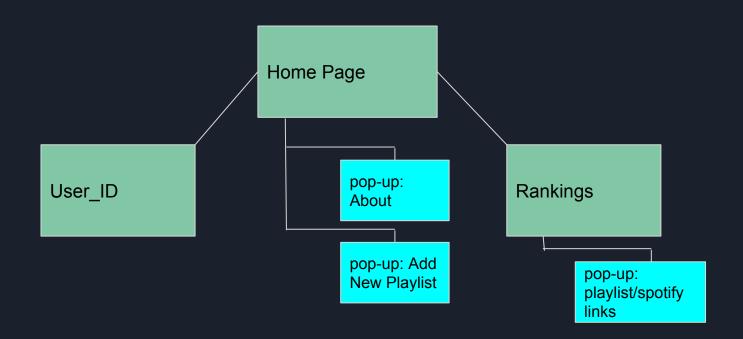
Playlist

<u>id</u>	Integer
URI	char(128)
Playlist Name	char(128)
Dance ability	Float

Song

<u>id</u>	Integer
Name	char(128)
URI	char(128)
Dance ability	Float

Site Map



URLS

/home

/about

/rankings

/user_id