

MAP524 Assignment 1 – Spotify

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Spotifly is an Android application that makes use of the Spotify API to play music without the same wait times that Spotify offers with their official app. The reason behind this is that when you run the Spotify application, it will reload its music library on startup, including searching your online library. During this time, you will not have access to your library at all and will be unable to listen to music. This can usually take up to 30 seconds or even more for users on older devices, and that usually tries the user's patience a bit too much for something which should happen instantly.

This is being done in the form of a mobile app because its purpose is to replace the official Spotify app in terms of performance (although most likely in exchange for features).

This app will:

- Make a list out of the user's Spotify library.
- Cache this list to make sure that it will be available immediately upon re-entering the app.
- Display and cache the user's Spotify playlists.
- Search in the common directories for the user's local music.
- Allow playback of local music, as well as music hosted on Spotify.

I expect the user of this app to be someone impatient and without the need for any fancy features that a full-blown music app that a large team of people with more time would have been able to develop. Also, anyone who wants something lightweight that won't take up as much space as the Spotify app while still allowing them to listen to their music from Spotify.

Use case: User

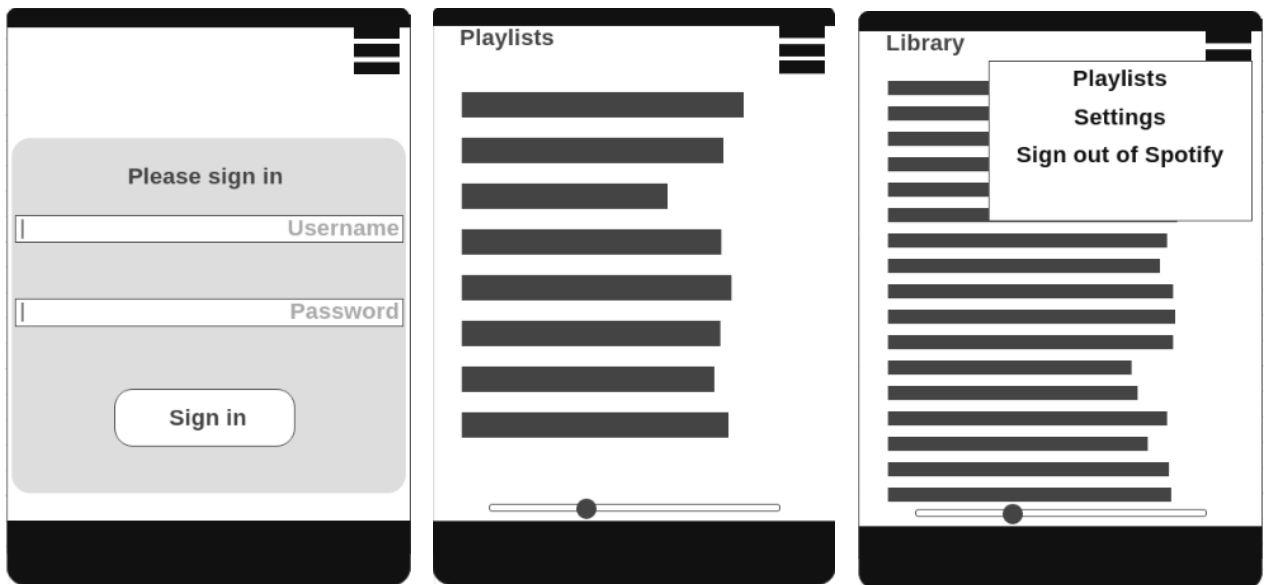
Scenario #1: Login

Actor (User)	System	Data Used
	Requests authorization to access data from the Spotify Accounts Service (SAC) and prompts user to login	
User enters their username and password to login to Spotify	The system sends the information to the SAC	Username, password
	SAC returns with access token and refresh token.	

Scenario #2: First load

Actor (User)	System	Data Used
User logs in successfully for the first time.	Attempts to GET the user's saved tracks and playlists and saves the resulting data from a JSON.	Access token
	Displays the library in a list fashion to the user.	

Mockups:



Timeline:

- Interface design
- API implementation
- Caching of library information
- Playback capabilities
- Completion – 5 weeks