Expert review of "Spotify" by `free(lunch);`

By Jan Potma, Jonathan Moerman, Mathis Sackers, Tom Nijholt

Introduction

Spotify, the famous music streaming application, has over 50 million installs and 2 million five-star reviews on the Google Play store. But will it hold up in our expert review? We chose this app because most people are familiar with it, which means these results will be tangible to most people, yet we have very little experience with Spotify ourselves. We will be reviewing the Dutch app with a 'Premium' account which unlocks some functionality otherwise gated.

Before actually trying out the app, we made up some personas that would use Spotify, using general knowledge of the app to assure they are likely users of it but not tailoring them to specific functionality within the application. To some degree these might contain elements of ourselves but we have tried to cover the full scale, as objectively as possible.

For the setup we chose functionality that would both be useful to our personas and is present in <u>some</u> form within the app. These tasks might not be the absolute baseline for music streaming but are of use to our personas (the music connoisseur will appreciate downloading their music) or required for Spotify's functioning (logging in).

Personas

It can be hard to differentiate the audiences for an application. In our case, the target user wants to listen to streaming music (obviously, because this is a music streaming app). However, we have differentiated three profiles. These profiles are common in music appreciation in general; since Spotify aims to cater to as large an audience as possible these profiles fall within their target audience. Overlap between these personas is fully possible, but we will look at the app from each angle and put into perspective the various sides of the application.

Our personas consist of the **inactive listener**, the **explorer**, and the **music connoisseur**.

Inactive listener

The inactive listener simply wants to listen to music, not too different from turning on the radio. This person might just be going jogging, working, or doing things around the house. To these persons, the music only has to generally fall within their tastes and should always play continuously. They wish to have minimal user input, especially after play has started. Their experience with (music) software varies but is assumed to be minimal.

Explorer

The explorer comes to Spotify do discover music based on former tastes. He or she is prepared to put some effort finding interesting things, such as tapping on recommendations and filling in tastes, but does not want to go on a wild goose chase finding the perfect song – the app has to do the brunt of it. It should also be easy to find out the song and artist, either fully visible, stored in history, or possible to save somewhere. They have some knowledge of artists and genres but want to expand on it, they have some experience with music software.

Music connoisseur

The music connoisseur is in some ways the opposite of the explorer: he/she knows exactly what they want to listen to, and is likely to attempt to listen to full albums (easy to find in their correct order, of course) or discographies. They have extensive previous experience with music-related software. It is likely they do not want other music to suddenly come between whichever it was they were listening to and disturbing the vibe, although something unobtrusive by the side might be acceptable. They will also want the sound to be of high quality, and may enjoy album artwork.

Heuristic Evaluation

We tested the application with 3 evaluators. They would at first start playing around with the app, like a regular user would do, and move on to more complicated tasks. During their time with the app, they would perform the assignments outlined in the scenarios below. They are roughly sorted by both difficulty and chronology (the order in which a user would encounter them). If a problem occurs in multiply scenarios it is noted separately. Distinguishably personal opinions in the evaluation are in *italics*.

Scenarios

We have devised the following scenarios for our evaluators. Some of these are more essential than others, and some cater to a specific persona more than others. As such, we aimed to cover the full spectrum. A fair few of these are most important to the music connoisseur, but as the user becomes more proficient with the app this functionality will be more important to them. Therefore it should be present but not confuse less experienced users.

1. **Logging in**: The user must attempt to log into the app on start-up. They have their username and password. *Relevant for all users.*
2. **Logging out**: The user must attempt to log out of the app. *Relevant for all users.*
3. **Search**: The user must attempt to get a song or album to play. They are expected to find the search function, enter relevant information, and recognise the desired result. Ideally the search function of the app can be intuitively found, and according to standards for the platform; a robust, forgiving search that can function despite slight typographical errors is also a plus. The user has a song/album in mind, they either know the artist ahead of time or recognise them

when presented. The user might make some typos while entering the names. *This is important to all users but especially so for the music connoisseur.*

4 **Controls**: During play, the user must attempt to perform basic tasks like pausing and playing and skipping forward and backward. *Important to all users. Should be simple for the inactive listener.*

5 **Downloading and playing a song**: The user must attempt to download a song, and then attempt to play a downloaded song. *Mostly important to the music connoisseur.*

6 **Finding similar music**: Based on a specific song, the user must find songs that are similar to this song. After play, the user should hopefully be able to find this music again, either through previous action for saving (starring a song, for example) or in history. *An essential feature for the explorer.*

Findings

Jan Potma

General impression of interface and overarching problems

The app looks nice and modern, and is fairly easy to navigate. The ubiquitous 'hamburger'-style menu button (≡) might be confusing to the most novice of users but is platform standard, as are the three dots (…) to open a context-menu.

1 No problems found.

2 Finding the button to log out can be problematic. After opening the sidebar through the hamburger button, the first thing a user would do to log out is press their account name to open the relevant menu. However, the logout button is actually located in the settings menu. This is counterintuitive to users of all levels of proficiency. An experienced user would be quicker to recover from their error, though. *This button should be moved to the account section, or even added for a more error-tolerant system. It could even be a separate entry in the sidebar at the cost of slightly increased clutter.*

3 There are no problems with the search specifically, but playing a full album proves cumbersome. A large '▶ Play Shuffle' button is present, but there is no clear way to play an album in the original order. This turns out to be done by tapping the first song entry in the album list, but this is partially covered by the aforementioned button.

4 It takes some getting used to way a song is played. While a song is playing, a bar is present at the bottom, showing the song and a button to quickly stop and play a song. To get more advanced controls one must press the bar to open a full player. To close the full player again, the cross in the top left must be pressed, but it is unclear whether this stops playback. *Rather than a cross this should be a downwards facing arrow, such as the '∨'-shape in the YouTube application. In fact, this turns out to be implemented in the iOS version! Also, the bar in the button lets the user navigate the app while playing a song, which is a huge plus in user-friendliness and flexibility, I personally recommend keeping the current player.*

5 This turns out to be two steps while it appears as one. When viewing an album or song, there is a 'save'-button, but this adds it to a collection of starred songs rather than immediately

downloading. A box to download it then appears. In the player the '+'-button stars a song, one must select download in the three-dots-menu to download it. Songs starred previously must be visited in 'Your music' and then saved. When visiting the 'songs' section of 'Your music' a toggle for instantly downloading a song when saving it is present. *Because the two-step-download is displayed so prominently the user quickly adapts to the starring-is-not-downloading system, which is beneficial for scenario #6, and there is a setting for making it one-step so this causes little issues.*

6 To get recommendations, one must choose 'Play Radio', which is reasonable but not the first thing to look for when searching for recommendations. This is intuitive for the inactive listener but less so for the explorer. *Little can be done to unify these personas without clutter.*
In addition, when playing radio there is no back button, and the progress slider cannot be changed, which might annoy the explorer. However, a song can be saved to look up later, and 'Your music' has a 'Recently played' section. There are like- and dislike-buttons which allow the explorer to tailor recommendations.
For the music connoisseur there is no way to get non-intrusive recommendations, he/she must dedicate to the radio function.

Tom Nijholt

General impression of interface and overarching problems

The app has a sleek look, the simple black, grey and white skin with hints of apple green is very nice. It's sad that there is no option to view your music by genre, especially considering there are multiple rival apps available which do have this functionality. There is a 'Recently played' list below the browse options which is useful.

1 One can use their Facebook account with this app which is nice, but the pop-up where one has to fill in one's Facebook account details is ugly. *This is due to Facebook's workings and is difficult to amend.*

2 Finding where you can log out is a bit problematic. The first instinct was to check the sidebar menu, but it was not there. The logical next place would be under one's name, but it was not there. At the third try it turned out was hidden under Settings. This does not seem very intuitive.

3 No problems found, sorting by type of result, of which there are several such as playlists, artists, albums and profiles, with the best result at the top is great.

4 To start playing music is a bit confusing. There is a big "Shuffle" button, but what if one does not want to do this? If you just want to start playing a song you have to click the song which you want to start with and, when in the music player, press the shuffle and repeat buttons to get the play style which you want. The generic music player options (next track, previous track, play, pause, shuffle, repeat) are very easy to recognize and use. However there is one other button which has an icon that makes the function of the button seem like a volume slider, but this is not the case at all. It gives you the option to connect to a different device with Spotify on it and use this app as a remote controller. This function is nice but it seemed like an odd button and to hide such a great function seems illogical.

5 It's not really clear how to download a song. It first needs to be added to your music or playlist unless it is part of an album. Then you have to navigate to your music, playlist or album and flick the "Available Offline" switch. But in the long term one can get used to it, because when browsing one can download it to the right place in just one or two taps.

6 There is not really a way to just view similar songs to the song currently listened to. One must start a "Song Radio" which will just start playing similar songs. There's also a discover option which is located on the "Browse" page which is found when accessing the sidebar. This will display recommended songs based on the artists that you listen to.

Mathis Sackers

General impression of interface and overarching problems

Only one complaint here: the menu button (…) is too small and the user accidentally hits other things close to it.

1 No problems found.

2 The option to log out is buried under two other menus and thus not easily found.

3 The search function is hidden behind the menu icon (≡) and thus not as easily accessible as one could hope for. Even with typos the desired song is found.

4 No problems found, play/pause is easily accessible and even though skipping music requires two taps it is still easily found.

5 It is not possible to download a single song. While trying to save the song it was accidentally added to "Your music". The inexperienced user is unable to complete the task, and the error is not easily recovered.

Classification of problems

Many of the 'cosmetic' problems are indeed cosmetic, but they should have the priority of a 'small problem'. The presence of mainly cosmetic problems suggests there is less to worry about than is actually the case.

Showstoppers

Large problems

- Confusing and lacking downloads

Small problems

Cosmetic

- Log-out counterintuitive
- Lack of 'Play album'-button
- Cross for minimizing player
- 'Save' for starring rather than downloading confusing

Conclusion

Overall Spotify is a fairly well-designed app that conforms to current standards. However, there is certainly room for improvements. Some recommendations for further development:

The download functionality needs a rework. The option should be clearer, more prominent and have more functionality and flexibility. It needs to work for individual songs.

There should be a prominent regular 'Play album'-button next to the 'Play shuffle'-button.
The button for connecting to a different advice should be made clearer, and the menu button (…) should be larger.
An option for logging out should be present in the account menu or sidebar.
'Save' should be changed to 'Star'
If it is doable within Spotify's current (server-side) systems, we would like some more control over the radio function.

We recommend adding some form of recommendations list that is not a stream.