User Stories, Use-Cases and Requirements

Sound Sensei Version 1

6: Software Samurai



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GitHub Repository: https://github.com/Neural-Node/CSCD350-Spotify Curation Site

Project Description

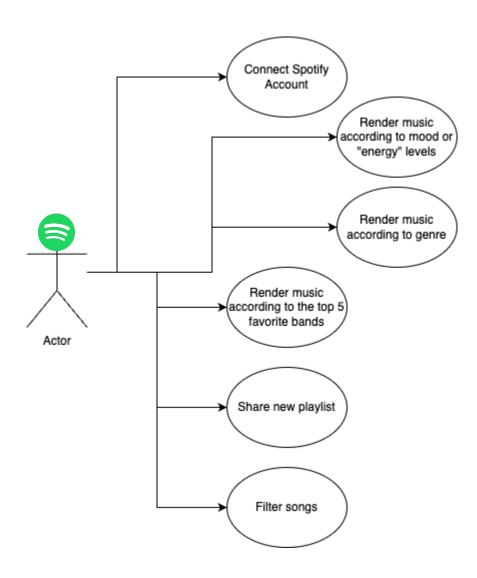
This is a digital music service that gives the opportunity for millions to control and listen to music all over the world. Everyone loves music, however finding and managing specific types of music is not easy. This user-friendly application will give you a new experience with music. The website will create a playlist for the user, using input and preferences, that the user can then listen to on their Spotify account. The project is going to be done by a team. In the team, everyone has their own knowledge other than common knowledge about software engineering. Every member will work on the part that they are most confident in the project. Team work will combine and be checked by the group leader at the end of every week, and the leader is going to check the team every day to make sure everyone is on the same page. Therefore, it is going to be ready to use in a reasonable time.

User Stories Based on the Project Description[1]

- U1. I am a yoga instructor and I would like a 1 hour playlist of calm meditation music that I can use for my Yoga class tonight.
- U2. I am a delivery driver and I would like to make an energetic playlist based on my tastes of Nikki Minaj, Shakira and Carrie Underwood, to help my shift go faster.
- U3. As a student, I want to explore new music, so that I start listening to the new music within 5 minutes, because I need to start running to class in 5 minutes.
- U4. As an overworked employee who wants to listen to new music, I want to sign in with my Spotify account, so that I don't have to create a new account.
- U5. As a store manager, I want a new playlist with no explicit songs to play over the store speakers.
- U6. As a student, I want to be able to share my newly created playlists with my friends.
- U7. As someone who mainly listens to alternative music, I want to try listening to classic rock music.
- U8. As a music professor, I want to be able to show students all genres from all over the world.
- U9. I am a parent and I want to have parental control to make sure my kids are listening to appropriate music.

- U10. As a student with ADHD I want to listen to music that will help me focus.
- U11. As a future wife, I want music that sets the mood for my wedding reception.

Use Case Diagram





This diagram is from Spotify's developer kit showing the relationship between our end user, the application we are creating which uses the API to access Spotify.[2]

Requirements and Specifications

- R1. There shall be a feature that filters songs for playlists using the genre of the song provided by Spotify's API. [2] (U7, U8, U11)
- R2. There shall be a feature that filters songs based on their "energy" levels using Spotify's recommendation . (U1, U2, U10)
- R3. The playlist that is created for the user will be curated based on the user's music tastes, using Spotify's API Spotify.getRecomendationPlaylist. (U2, U11)
- R4. There will be a feature that will share the playlist by copying the link to the playlist and let the users send it to their friends or post it online. (U6)
- R5. The website will be able to generate a new playlist that fits the users specifications in a timely manner, no more than one minute, using proper and efficient coding. (U3)
- R6. There shall be a feature that allows users to add the newly created playlist to their spotify account, using Spotify's API. There they can immediately start listening to it or share it with their friends through Spotify. (U3, U6)
- R7. There will be a feature that creates a playlist without any songs with the explicit tag, using a filtering out any explicit songs on the created playlist. [3] (U5, U9)

R8. The website will curate a new playlist based on user inputs and their listening preferences, using multiple different aspects of Spotify's API. (U1, U2, U5)

Glossary

"Energy" Levels: Represents a perceptual measure of intensity and activity of a song. The Spotify API refers to it as maxEnergy, minEnergy, or targetEnergy. [4]

ADHD: Attention Deficit Hyperactive Disorder is pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning.[5]

API: An application programming interface (API) is a way for two or more computer programs to communicate with each other. It is a type of software interface, offering a service to other pieces of software. [6]

Explicit: Having sexual acts or nudity clearly depicted.[7]

Parental Control: Feature that is used to limit access on your system.[8]

Render: To cause to be or become; make. [7]

Spotify's API: A Web API that lets your applications fetch data from the Spotify music catalog and manage user's playlists and saved music. [4]

Sound Sensei: The Spotify playlist curation website we are creating.

Bibliography

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