Music recommender

Scenario

This section presents a scenario that illustrates one important use case of a music recommender application. Based on Carroll's (2000) five factors that scenarios should include, the following scenario was created:

Michael is sitting in his car just about to begin his drive to work. He is in a bit of a hurry, but he also wants to start playing some music before beginning his journey. However, he is not quite sure what to listen to, so he opens the music recommender app which provides him personalized recommendations. Through these recommendations and the ability to preview songs, the app helps Michael to quickly find an artist/album that feels perfect for the moment, and he eventually makes it to work in time, in a good mood, feeling energized by the music he has just listened to.

In the described scenario, the actor is Michael, whose goal is to find some music to listen to in the setting of being in a hurry to get to work (challenge: time pressure). The scenario describes a sequence of actions which include the use of the music recommender application, and an outcome that is reached by these actions. Thus, the scenario includes all of the factors that Carroll (2000) mentions.

Persona

Michael the Music Listener

Michael is a man in his early 30s. Listening to music has been a part of his life for as long as he can remember, and the genres he listens to vary a lot based on his mood and the current listening situation. These situations vary from relaxing evenings at home, to working out, driving to work, or even partying with his friends. Depending on the situation, Michael's genre of choice can vary from aggressive heavy metal to energetic rap beats or relaxing jazz albums.

Challenges:

- Difficulties in deciding what to listen to.
- Not always knowing which genre/artist would be best for the current situation.
- Getting tired of listening to the same artists and albums again and again.
- Not being able to find music that matches his current mood.
- Needing to quickly find something to listen to.

Goals:

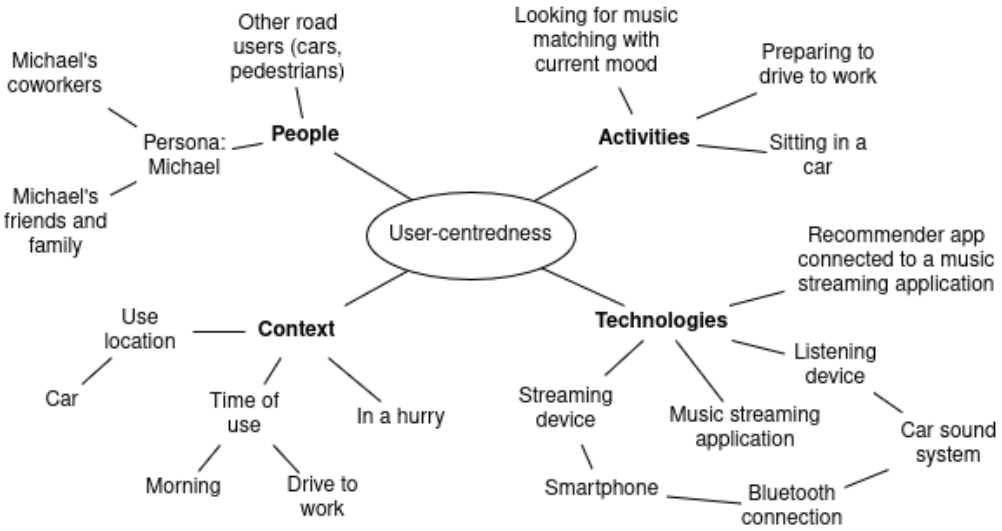
- Finding new music to listen to.
- Finding the perfect music choice for his current mood and activity.
- Being able to quickly choose an artist, album, or genre to listen to.

Image:
https://www.gettyimages.fi/detail/valokuva/texting-and-driving-rojaltivapaa-kuva/487580219?searchscope=image%2Cfilm&adppopup=true

The above persona description focuses on aspects that are relevant in terms of the application at hand, leaving out aspects such as overly detailed demographic info. Since the variety of people who listen to music is so wide, demographics such as the age, living location, or relationship status of the users do not matter. Instead, the thing that matters are the music listening habits of the users, because they can effectively reveal the needs that the users may have. If additional personas were to be created, their main differences compared to Michael should lie in their music listening habits. For example, a possible additional persona could be a more casual music listener who is less picky when choosing the music they want to listen to.

Context analysis

PACT-analysis:



MRT-analysis:

According to Wickens (2002), humans only have a finite amount of cognitive resources over which multiple tasks typically compete over. In the context of the scenario described earlier, the main MRT conflict that arises is that Michael has to simultaneously prepare to drive to his workplace and decide what music to listen to during the car ride. Both of these activities require cognitive decision making (e.g. browsing music options and planning a route). Furthermore, Michael will not be able to start driving the car before he has finished using the application (i.e. made a music choice). Using the application occupies Michael's visual perception channel, which draws focus away from the external environment, such as the car and the environment around it. He also needs his hand to use the application, which occupies his spatial responding channel.

Design requirements

1. The application must be accessible through a smartphone. This is because the desire to listen to music often arises when a smartphone is the only device available for streaming music (e.g. in a car).

2. There must be a section for quick recommendations, and a discovery section/page for discovering new music. These features support the two main objectives of the application: reducing the time it takes to find situation-suitable music, and helping with discovering new music.

3. The discovery page must allow the user to choose e.g. a genre, an artist, or a mood which is used as a basis for new music recommendations. This will guide the recommendation process and improve the accuracy of the recommendations.

4. The application must allow the user to preview small snippets of the songs that are recommended, meaning that there must be some sort of "Play" button for each song. This is because previewing songs can allow for quicker and easier decision making.

5. The application must be linked to the preferred music streaming application of the user (i.e. a button for e.g. "Play in Spotify"). This is because there is a need to quickly start playing the music that the application recommends in an actual streaming service.

References

Carroll, J. M. (2000). Five reasons for scenario-based design. *Interacting with Computers*, *13*(1), 43–60. https://doi.org/10.1016/S0953-5438(00)00023-0

Wickens, C. D. (2002). Multiple resources and performance prediction. *Theoretical Issues in Ergonomics Science*, *3*(2), 159–177. https://doi.org/10.1080/14639220210123806