



ÇANKAYA UNIVERSITY

# Literature Review For

***MyFM: Adaptive music player with personalized playlist generation***  
(Version 1.0)

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## Abstract

*In recent years the demand for personalization of recommendations have increased. This is because it's far easier to find something that you're looking for, recommended to you then have to search through the entire application. This is why we wanted to make this project about personalization of the recommendations to the user. We selected the music genre because it is a common occurrence that while listening to certain songs most people would enjoy to listen to similar songs that are in close proximity to the song that they are listening to right now. In this paper, we are trying to explain the processes that are involved in this.*

*Keywords: personalization of the recommendations, music genre, songs*

## Özet

Son yıllarda tavsiyelerin kişiselleştirilmesine olan talep artmıştır. Bunun nedeni, aradığınız bir şeyin size doğru olarak tavsiye edilmesi, kendinizin aramanızdan çok daha kolaydır ve her zaman aklınıza bile gelmiyebilir. Bu yüzden bu projenin amacını, tavsiyelerin kullanıcıya göre kişiselleştirilmesi için yapmak istedik. Müzik türünü seçtik çünkü belirli şarkıları dinlerken çoğu insanın şu anda dinledikleri şarkıya çok yakın benzer şarkıları dinlemekten zevk alması yaygın bir durumdur. Bu yazıda, bununla ilgili süreçleri açıklamaya çalışıyoruz.

*Anahtar Kelimeler: tavsiyelerin kişiselleştirilmesi, müzik türü, şarkılar*

## 1.Introduction

MyFm is an application that adapts to the songs that the user listens to and create playlists based upon that information. This application will be exclusively available on Android systems due to the fact that we are using Android Studio, as our choice of development platform. The purpose of this project is mostly to keep the user interested in using the application by making sure that the accurate recommendations are made. This goal is achieved by considering the meta fields, previous songs that user listened to and so on.

## 2. Background

### 2.1 Personalized Playlist Generation

A personalized playlist is a list of songs that have been adapted to the user's preferred music style. Generation of these playlists requires certain information be collected and processed to output desirable playlists [\[1\]](#).

### 2.2 Mobile Application Development

Nowadays, there are a lot of options to choose from when it comes to development of mobile applications. In our project we decided Android Studio as it fit our needs the best. One of the reasons is that it allows for independent building, testing and debugging of the applications.

## 2.3 Android Studio

Android Studio is the official development environment for the operating system of Google, Android, built on JetBrains's IntelliJ IDEA software and was specifically designed for Android development. It provides visualization of an Android phone and allows for creation of applications on the platform [\[3\]](#).

## 3. Similar Applications

Other applications such as Spotify, a well-known music player, has a friendly user interface that allows for streaming music, playlist creation and also provides similar type of recommendation systems. For example, it looks at the length of a song that a user has listened to it for and make recommendations based upon that and more [\[2\]](#).

## 4. Conclusion

In the entertainment world of today, it is very useful for the user to be able receive accurate recommendations. While there are other applications that do similar recommendations, we would like to add different functionalities to this system and make it as unique as possible.

## References

- [1] [Online]. Available: <https://hellofuture.orange.com/en/music-recommendation-algorithms-what-influence-do-they-have-on-what-users-listen-to/>.
- [2] [Online]. Available: <https://ericboam.medium.com/i-decoded-the-spotify-recommendation-algorithm-heres-what-i-found-4b0f3654035b>.
- [3] [Online]. Available: [https://en.wikipedia.org/wiki/Android\\_Studio](https://en.wikipedia.org/wiki/Android_Studio).