Music Therapist

Motivation

In different context and environment, relaxing music makes people calm and motivate people doing corresponding moves.

Project’s Goal and Objectives

Motivate users to do some sports and helping them to relax when they are studying or sleeping.

Problem Addressed

The project aims to motivate people to exercise more with music and help people who have a hard time sleeping. As we discussed as a team when people are running, their bodies constantly repeat the same action, which may be very boring for many people, that can be one of the most common reasons for people to give up their plans and listening to music can effectively solve this problem. Additionally, fast-paced music can help our heart rate become faster, which helps us get into the rhythm of the exercise quicker and adapt to the high-intensity exercise quickly.

Solution to the Problem

we want to develop software that can gradually adjust the music theme according to the movement (depending on running or walking speed) of the User. The idea is to classify the music with different rhythms into three different themes and then switch them according to the speed of the User.

Functionality

The way it works is by collecting the number of steps taken by the user and dividing it by a period to get an approximate speed of movement for user. Then play the corresponding music according to the user's preset or default music list.

Login, logout and sign up

Songs selecting

Change theme and background

Step counting

Music playing and switching

Speed = steps / time (15 sec)

Functionalities DID NOT implement

Firebase

Since it’s easier for us to store the data in local and the data we collected from user were footsteps, we don’t think that will create security issues. Therefore, we just focus more attention on the other main features.

Diagrams



Activities

Graphical user interface, application

Description automatically generated

Text

Description automatically generated

A picture containing table

Description automatically generated

Those screenshot didn’t capture the entire screen so some part of the code isn’t contained, we have activities like background change, theme decide, etc.

Prototypes Differ

There’s not much different between our origin proposal and the final prototype, the only different is we don’t use firebase to store our data.

Security and Privacy

SQL database means we have some vulnerabilities for hackers. However, we didn’t collect any private data from user, only the steps, not even location because we don’t need location for the app to run. Therefore, we don’t have much security issue to worry.

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