

METHOD AND SYSTEM FOR ADAPTATION OF MUSIC WITH USERS PACE

DESCRIPTION

[001] CROSS REFERENCE TO PRIOR APPLICATION:

[002] This application claims priority from Indian patent application with No. 201841000367 titled “Method and system for adaptation of music with users pace”, filed on 04th January 2018.

[003] FIELD OF THE INVENTION:

[004] The present invention relates to the field of adaptation of music with activity of a user. More specifically the invention relates to a method and a system for adaptation of music with respect to an activity of a user and/or a pace of a user.

[005] BACKGROUND OF THE INVENTION

[006] There are many methods for enhancing people's experience during physical activities like walking, jogging, running, swimming, cycling etc. One such experience is listening to music while doing such activities. Listening to similar sort of music while performing different physical activities may be monotonous and boring as different physical activity are associated with different pace. Tempo or beat of the music motivates a user to perform an activity efficiently. Hence, it would be desirable to enhance the music listening experience of the user by mapping the tempo or beat of music with respect to a pace of the user.

[007] Therefore, there exists a need to come up with a method and a system to provide the user with a real time experience of listening to music wherein, the tempo or beat of music is adapted with respect to an activity of the user and/or a pace of the user.

[008] SUMMARY OF THE INVENTION

[009] In an embodiment, the present invention discloses a method for adaptation of music with a pace of a user. The method includes the step of (a) tracking an activity of the user using a smart wearable device to provide an activity tracker data; (b) transmitting the activity tracker data to at least one mobile application comprising of at least one mobile device; (c) processing the activity of the user with respect to the pace of a user to provide a processed activity tracker data; (d) storing the processed activity tracker data in a database; and (e)

selecting, playing, changing or halting a music based on the pace of a user by a music player configured with the mobile application. The mobile device is configured with an application server, which is capable of performing at least one of monitoring, recording, and analysing the activity tracker data, through a communication network. In one embodiment, mobile application halts the music upon cessation of the pace of the user.

[010] In another embodiment, the present invention discloses a method for adaptation of music with a pace of a user. The method includes (a) tracking the activity of the user using a mobile application comprising of at least one mobile device configured with an application server which is capable of monitoring, recording, and analyzing the activity tracker data, to provide an activity tracker data; (b) transmitting the activity tracker data to the application server through a communication network; (c) processing the activity of the user with respect to a pace of a user to provide a processed activity tracker data; (d) storing the processed activity tracker data in a database; and (e) selecting at least one of playing, changing or halting the music based on the pace of the user by a music player. The music player is configured with the mobile application.

[011] In another embodiment, the present invention discloses a system for adaptation of music with a pace of a user. The system includes a smart wearable device connected to at least one mobile application comprising of at least one mobile device configured with an application server, wherein: the smart wearable device is capable of tracking an activity of the user to generate an activity tracker data and transmitting the activity tracker data to the mobile application through a communication network; a database to store the activity tracker data from the at latest one mobile application; and a music player to play a music, wherein the music player is configured with the mobile application, capable of performing at least one of selecting, playing, changing, pausing or halting the music based on the pace of a user, wherein the music is directly mapped with the pace.

[012] BRIEF DESCRIPTION OF DRAWINGS

[013] The foregoing and other features of embodiments of the present invention will become more apparent from the following detailed description of embodiments when read in conjunction with the accompanying drawings. In the drawings, like reference numerals refer to like elements.

[014] Fig 1: illustrates a block diagram of a method for adaptation of music with a pace of a user, in accordance with an embodiment of the invention.

[015] Fig 2: illustrates an exemplary system diagram for adaptation of music with a pace of a user, in accordance with an embodiment of the invention.

[016] Fig. 3 illustrates an exemplary system diagram for adaptation of music with a pace of a user, in accordance with an embodiment of the invention.

[017] Fig. 4: illustrates a heart rate of a user as an activity tracker data for determining a pace of the user- when a heart rate data is available.

[018] Fig. 5 illustrates an hourly step speed as an activity tracker data for determining a pace of a user - when a heart rate data and a global positioning system (GPS) data are not available.

[019] Fig. 6 illustrates an hourly step speed as an activity tracker data for determining a pace of a user - when a global positioning system (GPS) data are available.

[020] DETAILED DESCRIPTION

[021] In one embodiment the present invention is related to the method for adaptation of music with a pace of a user by tracking an activity of the user using a smart wearable device to provide an activity tracker data which is transmitted to at least one mobile application comprising of at least one mobile device connected with an application server through a communication network. The activity of the user is processed to identify the pace of a user and to provide a processed activity tracker data which is stored in a database and based on the pace of the user a music player configured with the mobile application can perform at least one of selecting, playing, pausing, changing, halting the music.

[022] In the following detailed description, reference is made to the accompanying drawings that form a part hereof, and in which are shown by way of illustration specific embodiments that may be practiced. These embodiments are described in sufficient detail to enable a person skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that logical, mechanical, and other changes may be made within the scope of the embodiments. Also, the words “comprising,” “having,” “containing,” and “including,” and other similar forms are intended to be equivalent in meaning and be

open-ended in that an item or items following any one of these words is not meant to be an exhaustive listing of such item or items, or meant to be limited to only the listed item or items. The singular forms “a,” “an,” and “the” include plural references unless the context clearly dictates otherwise. The following detailed description is, therefore, not be taken as limiting the scope of the invention, but instead the invention is to be defined by the appended claims.

[023] Fig. 1 illustrates the block diagram of a method (10) for adaptation of music with a pace of a user, in accordance with an embodiment of the invention. The method (10) for adaptation of music with a pace of a user, comprises the steps of : tracking an activity of the user (100) using a smart wearable device (101) to provide an activity tracker data ; transmitting (110) the activity tracker data to at least one mobile application (103) comprising of at least one mobile device (105) configured with an application server (107) which is capable of monitoring, recording, and analysing the activity tracker data, through a communication network (109); processing (120) the activity of the user with respect to the pace of a user to provide a processed activity tracker data; storing (130) the processed activity tracker data in a database (111); and performing (140) at least one of selecting, playing, changing, pausing or halting (stopping) a music based on the pace of a user by a music player (113) configured with the mobile application (103). In an embodiment, mobile application (103) halts the music upon cessation of the pace of the user. In another embodiment, “music player” (113) is capable of automatically selecting, playing, changing, pausing, halting or performing a combination thereof of the music based on the pace of the user.

[024] In one embodiment of the present invention, processing of data includes but not limited to mapping, co-relating and analysing data. In another embodiment of the present invention, “smart wearable device” (101) includes but not limited to a smart watch, smart band, smart apparel and smart belt. In another embodiment of the present invention, the smart wearable device (101) is a smart watch. In another embodiment of the present invention, the smart wearable device (101) may have a display. In yet another embodiment, the smart wearable device (101) may not have a display but may display the information in a connected display device such as a mobile device. In one embodiment of the present invention, “Activity of the user” can include but not limited to walking, jogging, running, swimming, cycling, or performing any physical activity or a combination thereof. Typically, duration of the activity performed by the user is determined either manually or automatically by the

mobile application. Even though the term mobile application is used, it should be understood that it may be any application even without a mobile, wherein such applications can work in the smart wearable device itself.

[025] In one embodiment of the present invention, the “pace of a user” includes but not limited to slow pace, walking pace, medium pace, running pace, fast pace, athlete pace or any other pace cycles etc. Walking pace of the user includes but not limited to slow walk, power walk etc. Running pace of a user includes but not limited to slow run, power run, athletic run etc. In one embodiment of the present invention, the user can change the pace of the activity manually anytime during the activity. In another embodiment of the present invention, the pace of a user is also compared with real-time health data such as heart rate, pulse rate, past medical conditions, etc, of the user. In another embodiment of the present invention, for a user using the method at any point of time the mobile application may suggest music and/or music playlists based on the activity chosen by the user and /or selected pace of the user. In yet another embodiment of the present invention, for a user using the method for the first time (also referred to as a “first time user”) the mobile application may suggest music and/or music playlists based on the activity chosen by the user and /or selected pace of the user.

[026] In one embodiment of the present invention, the music player (113) is an external music player or may be configured internally within the mobile application. In another embodiment of the present invention, the music player (113) is configured to enable the user to create playlists, play music, and choose music according to the pace of a user. In yet another embodiment of the present invention, the music player (113) further comprises a player database comprising a list of music and capable of being mapped to the pace of the user. In some example embodiment of the present invention, the audio files (music) are listed in the player database and are displayed to the user. In another embodiment of the present invention, the audio files are mapped with the pace of the user along with other information such as for example music type, steps, duration of music etc. In one embodiment of the present invention, the user can create a playlist of music for different paces. In another embodiment of the present invention, the mobile application may suggest audio files or music for different pace of activity of the user preset in the database. In yet another embodiment of the present invention, the mobile application shall stop playing the music or pause the music, while the selected pace is not maintained by the user.

[027] According to an embodiment of the present invention, a display in mobile application or smart wearable device, can show the music beats for the selected pace. For example, bars or any other musical matching pattern are displayed (music beats) and are matched with the actual pace of the user. In one embodiment of the present invention the bars can be automatically varied in real-time, which may in-turn correlate with the tempo of the selected song. In another embodiment of the present invention, a display in mobile application or smart wearable device (101) shows the bars, beats or any other musical matching pattern of music for the selected pace of the user. In yet another embodiment of the present invention, the music player (113) may change the tempo of the music according to the current pace of the user or the music player selects the music with tempo matching to the current pace of the user.

[028] Fig. 2: illustrates an exemplary system (20) for adaptation of music with a pace of a user, in accordance with an embodiment of the invention. The present invention describes a system (20) for adaptation of music with a pace of a user. The system includes a smart wearable device (101) connected to at least one mobile application (103). The at least one mobile application (103) includes at least one mobile device (105) configured with an application server (107). The smart wearable device (101) is capable of tracking an activity of the user to generate an activity tracker data and transmitting the activity tracker data to the mobile application (103) through a communication network (109), a database (111) to store the activity tracker data from at least one mobile application (103); and a music player (113) is configured with the mobile application (103), which is capable of performing at least one of selecting, playing, changing, pausing or halting the music based on the pace of the user. In one embodiment of the present invention, the music is directly mapped with the pace of the user. In one embodiment of the present invention as used herein the term “connected” refers to wired and wireless connection that are appropriate for transferring data in the current set-up.

[029] In another embodiment, the present invention describes a system (30) (not shown in the figure) for adaptation of music with a pace of a user comprising: at least one mobile application (103) comprising of at least one mobile device (105) configured with an application server (107), wherein: the mobile application (103) is capable of tracking an activity of the user to generate an activity tracker data, and transmitting the activity tracker data to the application server (107) through a communication network (109), a database (111) to store the activity tracker data from the at latest one mobile application (103); and a music

player (113) mapped with respect to the pace of a user and configured with the mobile application (103), capable of selecting, playing, changing, pausing or halting the music based on the pace of a user.

[030] According to an embodiment of the invention, the activity tracker data helps to identify the standard activity cycle of a user while performing any physical activity. For any user there may be a specific way of doing the activity wherein the user starts the activity in a particular pace, progresses the activity in a one or more different pace and ends the activity in another pace. In one embodiment of the present invention provides a system which identifies the activity cycle and pace of the user and further adapts the music accordingly. For example, the system is capable to configure a pace activity cycle for each activity (walking, jogging, running, swimming, cycling or in combination thereof etc). In one embodiment of the present invention, the system records and monitors the walking pattern of the user for giving personalized suggestions or advices. Typically, the adaptation of the music is either by changing the musical characteristics to match the pace of the user or by changing the music itself. In another embodiment of the present invention, the system may enable the user to get continuous motivation from the music, which assists the user to advance further in the physical activities and help to achieve the goal in a more committed way.

[031] According to another embodiment of the invention, the system suggests an activity cycle for a user, for a specific time and distance. In an example embodiment of the present invention, the system may consider the health condition (for example, parameters such as heart rate, age, breathing, weight, height, bmi etc) of the user to give suggestions regarding the pace at which the user should perform the activity. In another embodiment of the present invention, the system may alter the pace of the music according to the selected activity cycle to help the user to stay motivated during the activity. For example, the user gives the input to the system, that the activity would be performed for a duration of about 20 minutes, the system shall auto-suggest the activities or pattern of activities or combination of activities that can be performed by the user for the given duration (20 minutes in this example). In one embodiment of the present invention, appropriate music is auto selected by the system or may be manually selected by the user. In another example embodiment of the present invention, the user enters the distance to be travelled (say 5km), the system provides appropriate suggestions to complete such travel. In another embodiment of the present invention, the user

can manually enter the activity or combination of activities to be performed in a given duration (say for example 20 minutes) or for a given distance to be traveled (say for example 5km).

[032] According to an embodiment of the invention, the user is provided with a capability to choose the activities to be performed; for example, only running and jogging and so on. In one embodiment of the present invention the system can automatically suggest suitable activity pace cycle based on the health condition (health parameters, for example heart rate etc) alone or in combination with the details regarding at least one past activity of the user. In another embodiment of the present invention, the system further monitors the activity and the pace of the user.

[033] According to an embodiment of the present invention, the user is provided with the capability to change the pace or mode of the activity or the activity cycle anytime during the activity. In another embodiment of the present invention, the tempo or beats of the music also changes or adapts to the changed pace or mode of the activity, immediately or with a time lag for example a time lag of 3 to 5 seconds. According to an embodiment of the present invention, the system may function in an auto mode, wherein, the system can suggest and automatically select the music or audio file to match the pace of the user either an increase and/or decrease in pace of the user. In yet another embodiment of the present invention, the system may automatically determine the duration of the activity of the user. In another embodiment of the present invention, the system may ask the user to enter input with regard to the duration for the activity and the pace of the user that need to be maintained. In another embodiment of the present invention, based on the user input, the system selects and collates the music or audio files for the selected duration and the pace of the user. In another embodiment of the present invention, the system may function in a manual mode. In one embodiment of the present invention, while the system functions in manual mode, the system monitors the activity of the user; pace chosen by the user and appropriately matches the music rhythm/pattern with the pace of the user while performing the activity. In yet another embodiment of the present, the system halts or stops the music when the chosen pace is not maintained by the user. In yet another embodiment of the present invention, the system pauses the music when the chosen pace is not maintained by the user. In another embodiment

of the present invention, the user can choose different pace patterns, time durations and preset the songs for particular pace.

[034] According to another embodiment of the invention, the movement of the user for example a positioning of a feet of the user is matched to the beat of the music over a period of time and ensure the user to maintain the required pace throughout the walk/run, or vice versa. In another embodiment of the present invention, the music played is matched with the pace maintained by the user, in real-time, tracked through the (movement of) smart wearable or mobile device.

[035] According to an embodiment of the invention, the user may adjust the pace of the music by pressing a button or make a gesture in the smart wearable device or a mobile device and the music player automatically adjusts the music to the selected pace. In yet another embodiment of the present invention, the overall activity of the user, i.e, the paces selected by the user, or the suggestions or automated made by the system may help the user when the user logs in another time to view the suggestions, enabling the user to select the appropriate activity cycle or a pace based on an historical data of the user.

[036] Fig. 3 illustrates an exemplary system (40) for adaptation of music with a pace of a user, in accordance with an embodiment of the invention. As shown there, the system includes a smart wearable device (301), a first communication network (303), a mobile device (305), a second communication network (307), an application server (309), and a database (311). In an embodiment of the present invention, a mobile application is configured in the mobile device (305). In another embodiment of the present invention, the mobile device (305) and smart wearable device (301) are connected to the application server through the second communication network (307). In another embodiment of the present invention, the smart wearable device (301) is connected to the mobile device (305) through the first communication network (303). In yet another embodiment, the mobile application is capable of displaying the activities of the user, in real-time. In yet another embodiment of the present invention, the first communication network and the second communication network may be a wired communication network or in a wireless communication network.

Example embodiments

[037] In one another embodiment of the present invention, the activity of the user such as walking, jogging, running, swimming, cycling, sleeping or any physical activity measured by various smart wearable devices (101) generates an activity tracker data. The smart wearable devices (101) employs sensors such as but not limited to pedometer, heart rate monitor, electrocardiography (ECG), global positioning system (GPS), sleep monitor, blood pressure sensors, blood sugar sensors or glucometer, oximeters, EMG sensor, pressure sensors, body temperature sensors, inertial navigation sensors etc. The activity tracker data includes but not limited to step counts, pace maintained by the user for each activity, average heart rate during the activity, fatigue level, sleep level, stress level, GPS data such as altitude variation, elevation, distance covered, body mass index (BMI) values, etc.

[038] In general, body mass index (BMI) values are a measure of body fat based on height and weight that applies to adult men and women. When BMI is below 18.5 then one is in the underweight range. When BMI is between 18.5 and 24.9 then one is in the healthy weight range. When BMI is between 25 and 29.9 then one is in the overweight range. When BMI is between 30 and 39 then one is in the obese range. Following paragraphs describes the determination of values in various sensors in an embodiment of the present invention. In one embodiment of the present invention the values include determination of threshold values for one or more sensors.

[039] $\text{Step counts} = \text{Number of steps every 10 seconds}$; $\text{hourly step speed} = \text{step speed} * 6 * 60$ and $\text{Optimal step speed} = (\text{step speed} * 25) / \text{BMI}$.

[040] Heart rate average is grouped into various heart rate zones determined using the following guidelines:

Heart Rate Zone 1 = 50% to 60% of Max Heart Rate

Heart Rate Zone 2 = 60% to 70% of Max Heart Rate

Heart Rate Zone 3 = 70% to 80% of Max Heart Rate

Heart Rate Zone 4 = 80% to 90% of Max Heart Rate

Heart Rate Zone 5 = 90% to 100% of Max Heart Rate

Wherein, Max Heart Rate = 220 - Age of person in years.

[041] Fatigue level is high in case any one of the listed parameters are fulfilled: (a) if average sleep (deep sleep & light sleep) for past three days is less than four hours; (b) if historical heart rate value is always in heart rate zone 3 or above for the 80% of the day or previous day, and (c) if historical stress data value is high for the 80% of the day or previous day.

[042] Sleep level is measured by calculating sleep pattern over last three days. Stress level is further determined in terms of average stress level over last three days on scale of 100. In an embodiment of the present invention, the stress level may depend on the average sleep data for past three days. The following table describes the various sensors and their interconnection in determining the activity tracker data.

Table 1: Activity tracker data

Sensor (Wearable device)	Activity tracker data	Short name	Comments	Mandato ry or not
Pedometer	step count / minute	sc		Yes
HR Monitor	Heart rate average	hr	average of readings over past 5 minutes	No
ECG or HR Monitor	Fatigue Level	fl	Determined from ECG / RR Interval or HR Value	No
GPS	Altitude Variation over past 30 seconds	ascent=true, descent=true	Ascent or descent	No
GPS	Distance covered	d	Exact distance covered	No
	BMI	bmi	user BMI data as	Yes

			per last entry	
Sleep Monitor	deep / light sleep	ls, ds	Sleep pattern over last 3 days	Yes
HR Monitor	Stress Levels	sl	Average Stress level over last 3 days on scale of 100	No

[043] The pace of a user by default is set into normal pace of user and subsequently it is altered based on the formula: Pace of user = (current activity tracker data / optimum activity tracker data) X normal pace of user. Wherein, the optimum activity tracker data is either calculated in real-time or is already set in the system which can be altered as and when required.

[044] Fig. 4 illustrates an example of the method for adaptation of music with a pace of a user, in accordance with an embodiment of the invention. As shown there, the method (50) comprises a smart wearable device which according to step (401) receive a heart rate average from heart rate monitor and as per step (403) the system checks whether the heart rate average is within fat burn range (fat burn range already preset into the system). Step (405) is applicable in case step (403) is yes and then pace of user is set at normal and music is played accordingly. Step (407) is applicable if step (403) is no then the system checks whether the activity tracker data (heart rate average) is less than the heart rate zone 2. Step (409) is applicable in case step (407) is either yes or no. The music is either stopped or pace of user is re-evaluated using the formula: Pace of user = (current activity tracker data / optimum activity tracker data) X normal pace of user. In current scenario, current activity tracker data is current heart rate average, and optimum activity tracker data (heart rate average) is maximum value of heart rate in zone 2. As per step (411), new pace of user is determined and the music is played accordingly.

[045] Fig. 5 illustrates another example of the method (60) for adaptation of music with a pace of a user, in accordance with an embodiment of the invention. As shown there, the method (60) comprises a smart wearable device which according to step (501) receives body mass index (BMI) values, step counts, fatigue level from one or more sensors of the wearable device. In step (503) the system check BMI value and fatigue level. In case BMI value is less

than 25 and /or fatigue level is beyond threshold then the user is notified in step (505). However, in case things are optimum then the system in step (507) determines the optimal step speed using formula ($\text{optimal step speed} = (\text{step speed} * 25) / \text{BMI}$). In step (509), the system checks whether step speed is normal. In case speed is normal then in step (511) the pace of user is set at normal and music is played accordingly. Otherwise, in step (513) the system further checks whether hourly step speed ($\text{hourly step speed} = \text{step speed} * 6 * 60$) is less than the optimal step speed. In case hourly step speed is less than the optimal step speed then music is stopped or pace of user is re-evaluated in step (515) using the formula: $\text{Pace of user} = (\text{current activity tracker data} / \text{optimum activity tracker data}) * \text{normal pace of user}$. In current scenario, current activity tracker data is hourly step speed, and optimum activity tracker data is optimal step speed. Based on the formula new pace of user is determined and the music is played accordingly. In case hourly step speed is greater than the optimal step speed then in step (517) pace of user is re-evaluated using the formula stated above and user is indicated that heart rate is beyond cardio zone as per step (519).

[046] Fig. 6 illustrates another example of the method (70) for adaptation of music with a pace of a user, in accordance with an embodiment of the invention. As shown there, the method comprises a smart wearable device which according to step (601) receives body mass index (BMI) values, step counts, fatigue level from one or more sensors of the wearable device. In step (603), the hourly step speed using GPS displacement is calculated. In step (605), the system check BMI value and fatigue level. In case BMI value is less than 25 and /or fatigue level is beyond threshold then the user is notified in step (607). However, in case things are optimum then the system in step (609) determines the optimal step speed using formula ($\text{optimal step speed} = (\text{step speed} * 25) / \text{BMI}$). In step (611) the system checks whether step speed is normal. In case speed is normal then in step (613) the pace of user is set at normal and music is played accordingly. Otherwise, in step (615) the system checks whether hourly step speed ($\text{hourly step speed} = \text{step speed} * 6 * 60$) is less than the optimal step speed. In case hourly step speed is less than the optimal step speed then music is stopped or pace of user is re-evaluated in step (617) using the formula: $\text{Pace of user} = (\text{current activity tracker data} / \text{optimum activity tracker data}) * \text{normal pace of user}$. In current scenario, current activity tracker data is hourly step speed, and optimum activity tracker data is optimal step speed. Based on the formula new pace of user is determined and the music is played accordingly. In case hourly step speed is greater than the optimal step speed then in step (619)

pace of user is re-evaluated using the formula stated above and user is indicated that heart rate is beyond cardio zone as per step (621).

[047] The foregoing description of the preferred embodiment of the present invention has been presented for the purpose of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed. Furthermore, all examples recited herein are principally intended expressly to be only for pedagogical purposes to aid the reader in understanding the principles of the present subject matter and are to be construed as being without limitation to such specifically recited examples and conditions. Many modifications and variations are possible in light of the above teachings. It is intended that the scope of the present invention not be limited by this detailed description

CLAIMS

We claim:

1. A method (10) for adaptation of music with a pace of a user, the method comprises the steps of,
 - a. tracking (100) an activity of the user using a smart wearable device (101) to provide an activity tracker data;
 - b. transmitting (110) the activity tracker data to at least one mobile application (103) comprising of at least one mobile device (105) configured with an application server (107) through a first communication network (109);
 - c. processing (120) the activity of the user with respect to the pace of a user to provide a processed activity tracker data;
 - d. storing (130) the processed activity tracker data in a database (111); and
 - e. performing (140) at least one of selecting, playing, changing, pausing or halting a music based on the pace of the user by a music player (113) configured with the mobile application (103).
2. A method for adaptation of music with a pace of a user as per claim 1, wherein activity of the user includes but not limited to walking, jogging, running, swimming, cycling.
3. A method for adaptation of music with a pace of a user as per claim 1, wherein smart wearable device (101) includes but is not limited to smart watch, smart band, smart apparel and smart belt.
4. A method for adaptation of music with a pace of a user as per claim 1, wherein activity tracker data includes but not limited to, step counts, pace maintained by the user for each activity, average heart rate during the activity, fatigue level, sleep level, stress level, GPS data such as altitude variation, elevation, distance covered, body mass index (BMI) values.
5. A method for adaptation of music with a pace of a user as per claim 1, wherein the application server (107) is capable of monitoring, recording, and analysing the user data.
6. A method for adaptation of music with a pace of a user as per claim 1, wherein the music player (113) is capable of automatically selecting, playing, changing, pausing or halting the music based on the pace of user.
7. A method for adaptation of music with a pace of a user as per claim 1, wherein the mobile application (103) halts the music upon cessation of the pace of user.

8. A method for adaptation of music with a pace of a user as per claim 1, wherein the user can change pace of user manually anytime during the activity of user.
9. A system (20) for adaptation of music with a pace of a user, comprising:
 - a smart wearable device (101) connected to at least one mobile application (103) comprising of at least one mobile device (105) configured with an application server (107), wherein:
 - the mobile application (103) is capable of tracking an activity of the user to generate an activity tracker data and transmitting the activity tracker data to the through a communication network (109); a database (111) to store the activity tracker data from the at latest one mobile application (103); and a music player (113) to play a music, wherein the music player (113) is configured with the mobile application (103), capable of performing at least one of selecting, playing, changing, pausing or halting the music based on the pace of a user, wherein the music is directly mapped with the pace.
10. A system (30) for adaptation of music with a pace of a user, comprising:
 - at least one mobile application (103) comprising of at least one mobile device (105) configured with an application server (107), wherein:
 - the mobile application (103) is capable of tracking an activity of the user to generate an activity tracker data and transmitting the activity tracker data to the application server (107) through a communication network (109); a database (111) to store the activity tracker data from the at latest one mobile application (103); and a music player (113) to play a music, wherein the music player (113) is configured with the mobile application (103), capable of performing at least one of selecting, playing, changing, pausing or halting the music based on the pace of a user, wherein the music is directly mapped with the pace.