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(54) **QUICK LOGIN TO USER PROFILE ON EXERCISE MACHINE**

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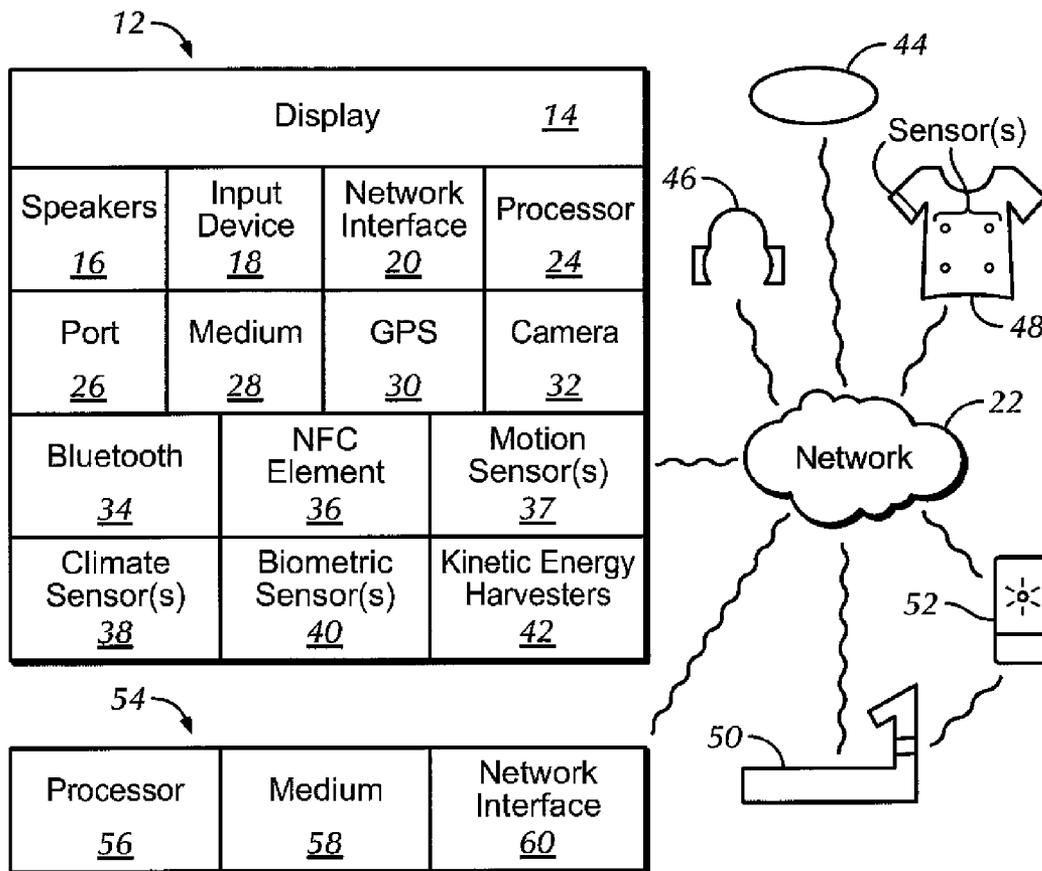
(57) **ABSTRACT**

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Related U.S. Application Data

(60) Provisional application No. 61/878,835, filed on Sep. 17, 2013.

A personal mobile device such as a music player or mobile telephone is equipped with the capability to easily authenticate users into a public gym and into individual exercise equipment at the gym.



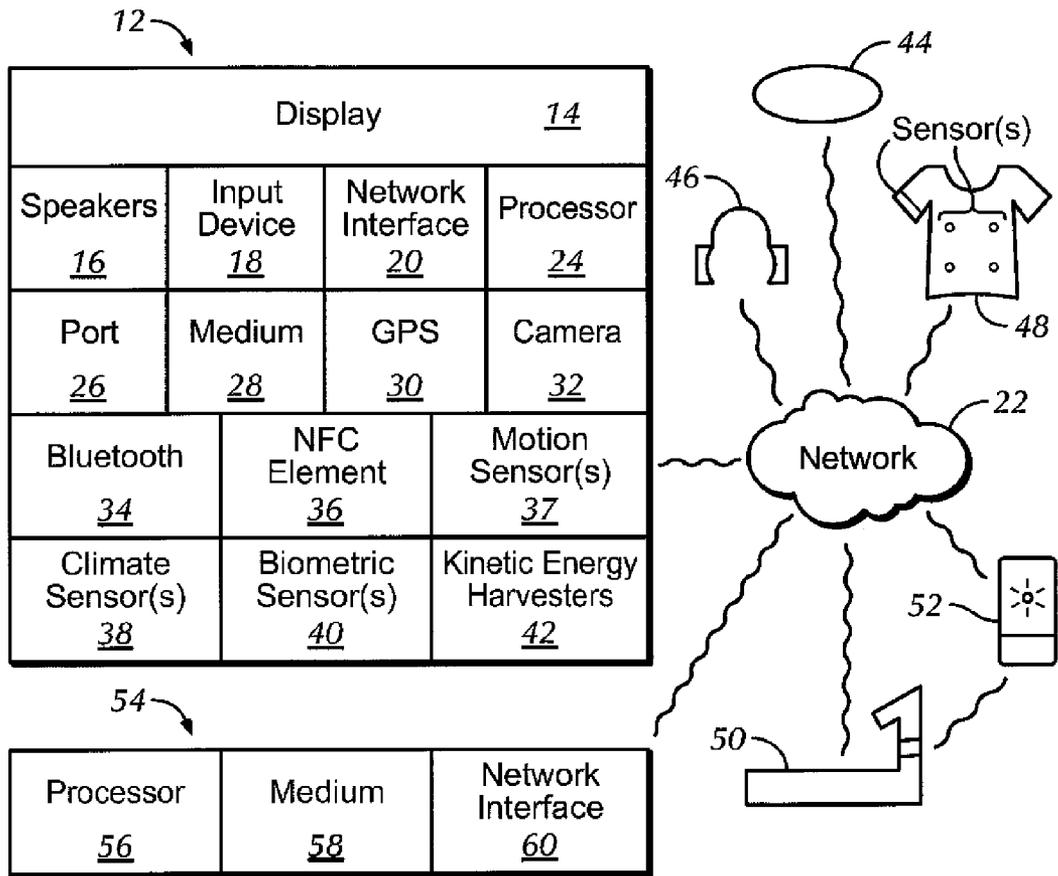


FIG. 1

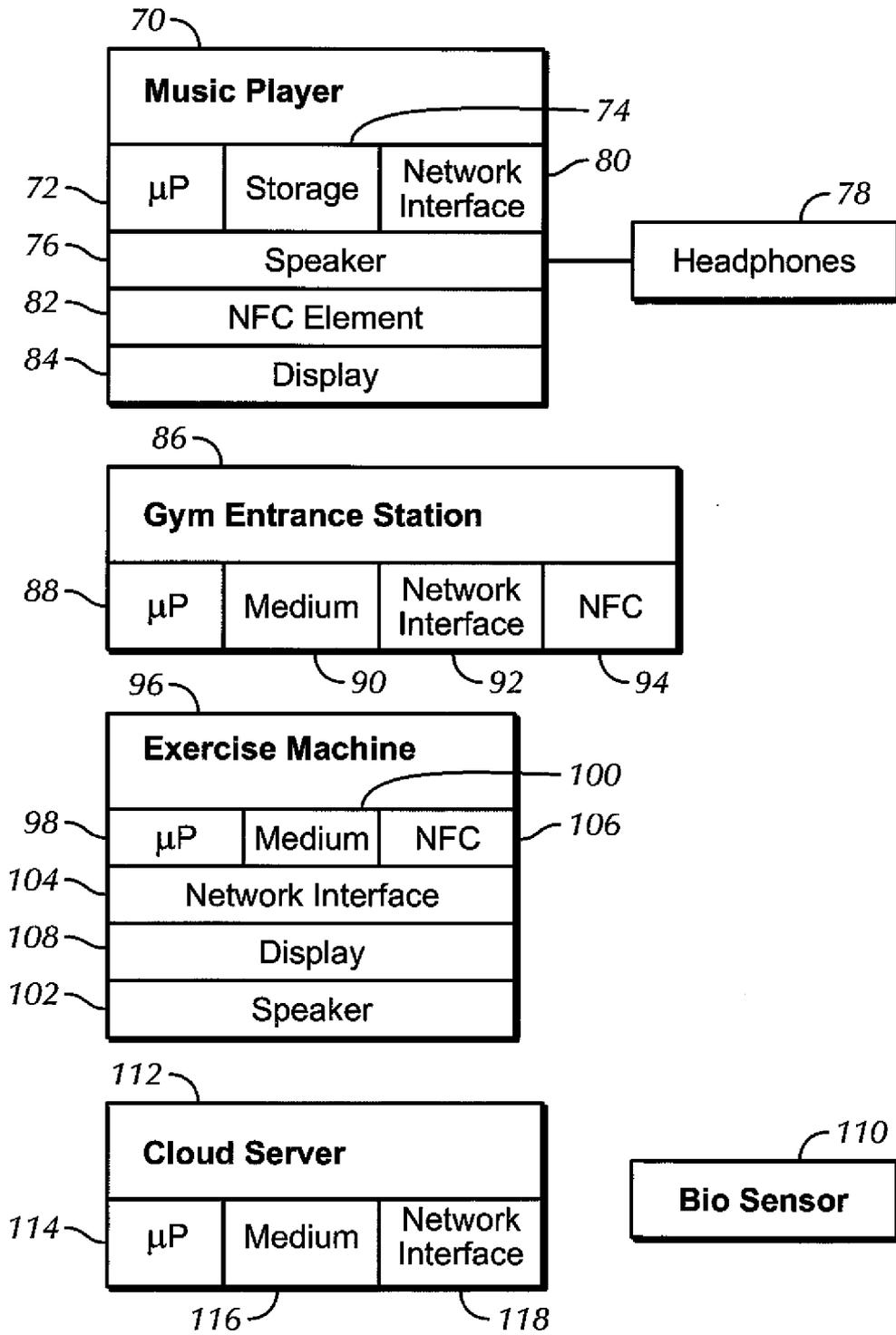


FIG. 2

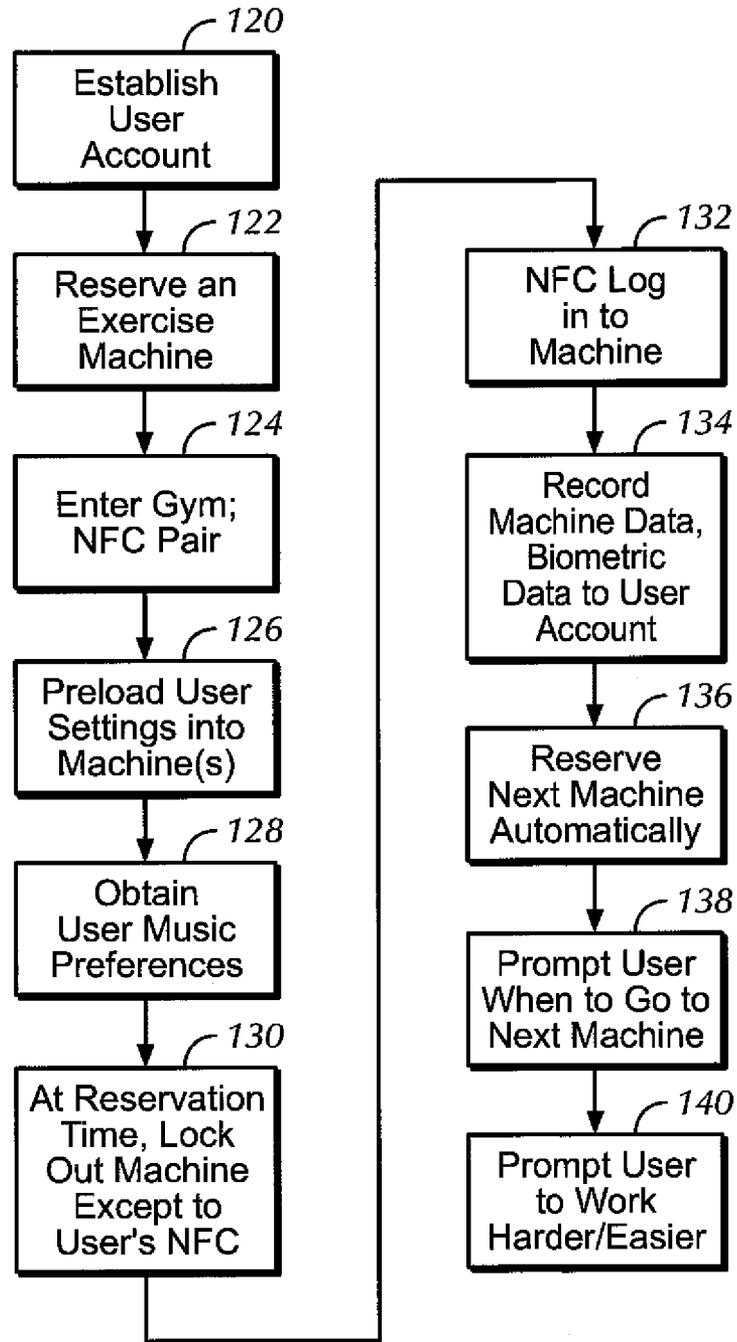


FIG. 3

QUICK LOGIN TO USER PROFILE ON EXERCISE MACHINE

[0001] This application claims priority to U.S. provisional patent application Ser. No. 61/878,835, filed Sep. 17, 2013.

FIELD OF THE INVENTION

[0002] The present application relates generally to digital ecosystems that are configured for use when engaging in physical activity and/or fitness exercises.

BACKGROUND OF THE INVENTION

[0003] Society is becoming increasingly health-conscious. A wide variety of exercise and workouts are now offered to encourage people to stay fit through exercise. As understood herein, while stationary exercise equipment often comes equipped with data displays for the information of the exerciser, the information is not tailored to the individual and is frequently repetitive and monotonous. As further understood herein, people enjoy listening to music as workout aids but the music typically is whatever is broadcast within a gymnasium or provided on a recording device the user may wear, again being potentially monotonous and unchanging in pattern and beat in a way that is uncoupled from the actual exercise being engaged in.

[0004] Furthermore, a user may wish to tie his or her performance and/or workout music to a particular exercise machine, to record the workout and add it to a workout history. This can require manual login with a user name and password on each machine the user seeks to employ, which is repetitive and frustrating.

SUMMARY OF THE INVENTION

[0005] Present principles provide a music player such as a Walkman® or MP3 player to enable easy authentication to enter a gymnasium (“gym”) to automatically confirm that the individual is a member and has access to the gym. This may be done using a near field communication (NFC) method that employs, for example, Bluetooth or radio frequency identification (RFID). By using a connection method such as NFC, individuals can use their music player to quickly set the exercise equipment to their personal account, which can be stored on a remote server for easy access via multiple devices and locations. The user’s personal account can include information such as workout/exercise history, exercise plan, workout goals, and basic user information such as heart rate target zones, weight, height, age, and gender. In addition, the account can be linked to the individual’s personal media library, which can then be streamed wirelessly to their headphones so that there is no need for the music to be locally stored on the music player. Following the workout, the equipment sends workout data to the individual’s personal account, which may be stored on an Internet server.

[0006] Accordingly, present principles avoid requiring a person to manually type in a username and password into every exercise machine the person employs, simplifying the experience of being in a gym with multiple pieces of equipment, since logging in to a machine (and to the gym entrance itself) is simply and quickly done using NFC. Present principles also make it easier to collect and store exercise data, so the individual can more easily have a complete picture of their activity.

[0007] In an aspect, a device includes a computer readable storage medium bearing instructions executable by a processor, and a processor configured for accessing the computer readable storage medium to execute the instructions to configure the processor for providing identifying data of a user automatically to an exercise facility using near field communication (NFC) facilitated by an NFC element communicating with the processor as the user enters the facility. The processor also provides identifying data of the user automatically to at least one exercise machine in the exercise facility using NFC.

[0008] In another aspect, a system for an exercise facility has one or more computer readable storage media bearing instructions executable by a processor, and one or more processors each being configured for accessing at least one of the one or more computer readable storage media to execute the instructions to configure the processors for receiving identifying data of a user automatically using near field communication (NFC) facilitated by at least one NFC element communicating with the one or more processor as the user enters the facility. The one or more processors also receive identifying data of the user automatically at one or more exercise machines in the exercise facility using NFC.

[0009] In another aspect, a method includes authenticating a user device at an exercise facility using NFC, and automatically locking out exercise machines at the exercise facility for exclusive use of a user of the user device at specific times based at least in part on information received using NFC.

[0010] The details of the present invention, both as to its structure and operation, can best be understood in reference to the accompanying drawings, in which like reference numerals refer to like parts, and in which:

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a block diagram of an example system including an example CE device in accordance with present principles;

[0012] FIG. 2 is a block diagram of an example system including a specific example CE device embodied as a music player in accordance with present principles; and

[0013] FIG. 3 illustrates logic that can be executed by various processors shown in FIG. 2.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0014] This disclosure relates generally to consumer electronics (CE) device based user information. With respect to any computer systems discussed herein, a system herein may include server and client components, connected over a network such that data may be exchanged between the client and server components. The client components may include one or more computing devices including portable televisions (e.g. smart TVs, Internet-enabled TVs), portable computers such as laptops and tablet computers, and other mobile devices including smart phones and additional examples discussed below. These client devices may employ, as non-limiting examples, operating systems from Apple, Google, or Microsoft. A Unix operating system may be used. These operating systems can execute one or more browsers such as a browser made by Microsoft or Google or Mozilla or other browser program that can access web applications hosted by the Internet servers over a network such as the Internet, a local intranet, or a virtual private network.

[0015] As used herein, instructions refer to computer-implemented steps for processing information in the system. Instructions can be implemented in software, firmware or hardware; hence, illustrative components, blocks, modules, circuits, and steps are set forth in terms of their functionality.

[0016] A processor may be any conventional general purpose single- or multi-chip processor that can execute logic by means of various lines such as address lines, data lines, and control lines and registers and shift registers. Moreover, any logical blocks, modules, and circuits described herein can be implemented or performed, in addition to a general purpose processor, in or by a digital signal processor (DSP), a field programmable gate array (FPGA) or other programmable logic device such as an application specific integrated circuit (ASIC), discrete gate or transistor logic, discrete hardware components, or any combination thereof designed to perform the functions described herein. A processor can be implemented by a controller or state machine or a combination of computing devices.

[0017] Any software modules described by way of flow charts and/or user interfaces herein can include various sub-routines, procedures, etc. It is to be understood that logic divulged as being executed by a module can be redistributed to other software modules and/or combined together in a single module and/or made available in a shareable library.

[0018] Logic when implemented in software, can be written in an appropriate language such as but not limited to C# or C++, and can be stored on or transmitted through a computer-readable storage medium such as a random access memory (RAM), read-only memory (ROM), electrically erasable programmable read-only memory (EEPROM), compact disk read-only memory (CD-ROM) or other optical disk storage such as digital versatile disc (DVD), magnetic disk storage or other magnetic storage devices including removable thumb drives, etc. A connection may establish a computer-readable medium. Such connections can include, as examples, hard-wired cables including fiber optics and coaxial wires and digital subscriber line (DSL) and twisted pair wires. Such connections may include wireless communication connections including infrared and radio.

[0019] In an example, a processor can access information over its input lines from data storage, such as the computer readable storage medium, and/or the processor accesses information wirelessly from an Internet server by activating a wireless transceiver to send and receive data. Data typically is converted from analog signals to digital and then to binary by circuitry between the antenna and the registers of the processor when being received and from binary to digital to analog when being transmitted. The processor then processes the data through its shift registers to output calculated data on output lines, for presentation of the calculated data on the CE device.

[0020] Components included in one embodiment can be used in other embodiments in any appropriate combination. For example, any of the various components described herein and/or depicted in the Figures may be combined, interchanged or excluded from other embodiments.

[0021] “A system having at least one of A, B, and C” (likewise “a system having at least one of A, B, or C” and “a system having at least one of A, B, C”) includes systems that have A alone, B alone, C alone, A and B together, A and C together, B and C together, and/or A, B, and C together, etc.

[0022] Before describing FIG. 1, it is to be understood that the CE devices and software described herein are understood

to be usable in the context of a digital ecosystem. Thus, as understood herein, a computer ecosystem, or digital ecosystem, may be an adaptive and distributed socio-technical system that is characterized by its sustainability, self-organization, and scalability. Inspired by environmental ecosystems, which consist of biotic and abiotic components that interact through nutrient cycles and energy flows, complete computer ecosystems consist of hardware, software, and services that in some cases may be provided by one company, such as Sony Electronics. The goal of each computer ecosystem is to provide consumers with everything that may be desired, at least in part services and/or software that may be exchanged via the Internet. Moreover, interconnectedness and sharing among elements of an ecosystem, such as applications within a computing cloud, provides consumers with increased capability to organize and access data and presents itself as the future characteristic of efficient integrative ecosystems.

[0023] Two general types of computer ecosystems exist: vertical and horizontal computer ecosystems. In the vertical approach, virtually all aspects of the ecosystem are associated with the same company (e.g. produced by the same manufacturer), and are specifically designed to seamlessly interact with one another. Horizontal ecosystems, one the other hand, integrate aspects such as hardware and software that are created by differing entities into one unified ecosystem. The horizontal approach allows for greater variety of input from consumers and manufactures, increasing the capacity for novel innovations and adaptations to changing demands. But regardless, it is to be understood that some digital ecosystems, including those referenced herein, may embody characteristics of both the horizontal and vertical ecosystems described above.

[0024] Accordingly, it is to be further understood that these ecosystems may be used while engaged in physical activity to e.g. provide inspiration, goal fulfillment and/or achievement, automated coaching/training, health and exercise analysis, convenient access to data, group sharing (e.g. of fitness data), and increased accuracy of health monitoring, all while doing so in a stylish and entertaining manner. Further still, the devices disclosed herein are understood to be capable of making diagnostic determinations based on data from various sensors (such as those described below in reference to FIG. 1) for use while exercising, for exercise monitoring (e.g. in real time), and/or for sharing of data with friends (e.g. using a social networking service) even when not all people have the same types and combinations of sensors on their respective CE devices.

[0025] Thus, it is to be understood that the CE devices described herein may allow for easy and simplified user interaction with the device so as to not be unduly bothersome or encumbering e.g. before, during, and after an exercise.

[0026] Now specifically referring to FIG. 1, an example system 10 is shown, which may include one or more of the example devices mentioned above and described further below to enhance fitness experiences in accordance with present principles. The first of the example devices included in the system 10 is an example consumer electronics (CE) device 12 that may be waterproof (e.g., for use while swimming). The CE device 12 may be, e.g., a computerized Internet enabled (“smart”) telephone, a tablet, computer, a notebook computer, a wearable computerized device such as e.g. computerized Internet-enabled watch, a computerized Internet-enabled bracelet, other computerized Internet-enabled fitness devices, a computerized Internet-enabled music

player, computerized Internet-enabled head phones, a computerized Internet-enabled implantable device such as an implantable skin device, etc., and even e.g. a computerized Internet-enabled television (TV). Regardless, it is to be understood that the CE device 12 is configured to undertake present principles (e.g. communicate with other CE devices to undertake present principles, execute the logic described herein, and perform any other functions and/or operations described herein).

[0027] Accordingly, to undertake such principles the CE device 12 can include some or all of the components shown in FIG. 1. For example, the CE device 12 can include one or more touch-enabled displays 14, one or more speakers 16 for outputting audio in accordance with present principles, and at least one additional input device 18 such as e.g. an audio receiver/microphone for e.g. entering audible commands to the CE device 12 to control the CE device 12. The example CE device 12 may also include one or more network interfaces 20 for communication over at least one network 22 such as the Internet, an WAN, an LAN, etc. under control of one or more processors 24. It is to be understood that the processor 24 controls the CE device 12 to undertake present principles, including the other elements of the CE device 12 described herein such as e.g. controlling the display 14 to present images thereon and receiving input therefrom. Furthermore, note the network interface 20 may be, e.g., a wired or wireless modem or router, or other appropriate interface such as, e.g., a wireless telephony transceiver, WiFi transceiver, etc.

[0028] In addition to the foregoing, the CE device 12 may also include one or more input ports 26 such as, e.g., a USB port to physically connect (e.g. using a wired connection) to another CE device and/or a headphone port to connect headphones to the CE device 12 for presentation of audio from the CE device 12 to a user through the headphones. The CE device 12 may further include one or more tangible computer readable storage medium 28 such as disk-based or solid state storage, it being understood that the computer readable storage medium 28 may not be a carrier wave. Also in some embodiments, the CE device 12 can include a position or location receiver such as but not limited to a GPS receiver and/or altimeter 30 that is configured to e.g. receive geographic position information from at least one satellite and provide the information to the processor 24 and/or determine an altitude at which the CE device 12 is disposed in conjunction with the processor 24. However, it is to be understood that that another suitable position receiver other than a GPS receiver and/or altimeter may be used in accordance with present principles to e.g. determine the location of the CE device 12 in e.g. all three dimensions.

[0029] Continuing the description of the CE device 12, in some embodiments the CE device 12 may include one or more scameras 32 that may be, e.g., a thermal imaging camera, a digital camera such as a webcam, and/or a camera integrated into the CE device 12 and controllable by the processor 24 to gather pictures/images and/or video in accordance with present principles (e.g. to share aspects of a physical activity such as hiking with social networking friends). Also included on the CE device 12 may be a Bluetooth transceiver 34 and other Near Field Communication (NFC) element 36 for communication with other devices using Bluetooth and/or NFC technology, respectively. An example NFC element can be a radio frequency identification (RFID) element.

[0030] Further still, the CE device 12 may include one or more motion sensors 37 (e.g., an accelerometer, gyroscope, cyclometer, magnetic sensor, infrared (IR) motion sensors such as passive IR sensors, an optical sensor, a speed and/or cadence sensor, a gesture sensor (e.g. for sensing gesture command), etc.) providing input to the processor 24. The CE device 12 may include still other sensors such as e.g. one or more climate sensors 38 (e.g. barometers, humidity sensors, wind sensors, light sensors, temperature sensors, etc.) and/or one or more biometric sensors 40 (e.g. heart rate sensors and/or heart monitors, calorie counters, blood pressure sensors, perspiration sensors, odor and/or scent detectors, fingerprint sensors, facial recognition sensors, iris and/or retina detectors, DNA sensors, oxygen sensors (e.g. blood oxygen sensors and/or VO2 max sensors), glucose and/or blood sugar sensors, sleep sensors (e.g. a sleep tracker), pedometers and/or speed sensors, body temperature sensors, nutrient and metabolic rate sensors, voice sensors, lung input/output and other cardiovascular sensors, etc.) also providing input to the processor 24. In addition to the foregoing, it is noted that in some embodiments the CE device 12 may also include a kinetic energy harvester 42 to e.g. charge a battery (not shown) powering the CE device 12.

[0031] Still referring to FIG. 1, in addition to the CE device 12, the system 10 may include one or more other CE device types such as, but not limited to, a computerized Internet-enabled bracelet 44, computerized Internet-enabled headphones and/or ear buds 46, computerized Internet-enabled clothing 48, a computerized Internet-enabled exercise machine 50 (e.g. a treadmill, exercise bike, elliptical machine, etc.), etc. Also shown is a computerized Internet-enabled gymnasium entry kiosk 52 permitting authorized entry to a gymnasium housing the exercise machine 50. It is to be understood that other CE devices included in the system 10 including those described in this paragraph may respectively include some or all of the various components described above in reference to the CE device 12 such but not limited to e.g. the biometric sensors and motion sensors described above, as well as the position receivers, cameras, input devices, and speakers also described above.

[0032] Thus, for instance, the headphones/ear buds 46 may include a heart rate sensor configured to sense a person's heart rate when a person is wearing the head phones, the clothing 48 may include sensors such as perspiration sensors, climate sensors, and heart sensors for measuring the intensity of a person's workout, and the exercise machine 50 may include a camera mounted on a portion thereof for gathering facial images of a user so that the machine 50 may thereby determine whether a particular facial expression is indicative of a user struggling to keep the pace set by the exercise machine 50 and/or an NFC element to e.g. pair the machine 50 with the CE device 12 and hence access a database of preset workout routines, and the kiosk 52 may include an NFC element permitting entry to a person authenticated as being authorized for entry based on input received from a complimentary NFC element (such as e.g. the NFC element 36 on the device 12). Also note that all of the devices described in reference to FIG. 1, including a server 54 to be described shortly, may communicate with each other over the network 22 using a respective network interface included thereon, and may each also include a computer readable storage medium that may not be a carrier wave for storing logic and/or software code in accordance with present principles.

[0033] Now in reference to the afore-mentioned at least one server 54, it includes at least one processor 56, at least one tangible computer readable storage medium 58 that may not be a carrier wave such as disk-based or solid state storage, and at least one network interface 60 that, under control of the processor 56, allows for communication with the other CE devices of FIG. 1 over the network 22, and indeed may facilitate communication therebetween in accordance with present principles. Note that the network interface 60 may be, e.g., a wired or wireless modem or router, WiFi transceiver, or other appropriate interface such as, e.g., a wireless telephony transceiver.

[0034] Accordingly, in some embodiments the server 54 may be an Internet server, may facilitate fitness coordination and/or data exchange between CE device devices in accordance with present principles, and may include and perform “cloud” functions such that the CE devices of the system 10 may access a “cloud” environment via the server 54 in example embodiments to e.g. stream music to listen to while exercising and/or pair two or more devices (e.g. to “throw” music from one device to another).

[0035] FIG. 2 shows a specific CE device embodied as a music player 70 in a gym environment. The music player 70 may have a player processor 72 accessing executable instructions on a computer readable storage medium 74 to output music on speakers 76 and/or user-wearable headphones 78. The processor may also access music and other communication using a network interface 80 such as a WiFi transceiver or wireless telephony transceiver. The processor may exchange information with other devices through a near field communication (NFC) element 82 and may also present visual information on a display 84, which may be a touch screen display.

[0036] A person bearing the music player 70 may enter a gym by passing a gym entrance station 86 having an entrance processor 88 accessing executable instructions on a computer readable storage medium 90. The entrance station may be implemented as a kiosk, a desk, a barrier, etc. The processor 88 may communicate with a network using a network interface 92 such as a WiFi transceiver or wireless telephony transceiver. The processor may exchange information with other devices through a near field communication (NFC) element 94.

[0037] The gym typically includes multiple exercise machines and one example machine 96 is shown in FIG. 2 for simplicity of disclosure. The machine 96 may be without limitation a treadmill, elliptical machine, cycle machine, rowing machine, weight machine, and the like. In the example shown the exercise machine 96 has a machine processor 98 accessing executable instructions on a computer readable storage medium 100 to output sound on speakers 102. The processor may also access music and other communication using a network interface 104 such as a WiFi transceiver or wireless telephony transceiver. The processor may exchange information with other devices through a near field communication (NFC) element 106 and may also present visual information on a display 108, which may be a touch screen display.

[0038] A biometric sensor 110 such as but not limited to a heart rate sensor may be included in the system shown and may be worn by the person bearing the music player 70, or it may be part of the music player 70, or it may be mounted on the exercise machine 96. In any case the sensor 110 communicates biometric information via a wired or wireless link to one or more of the processors shown herein.

[0039] The components of FIG. 2 discussed above may communicate, via their respective network interfaces, with one or more cloud servers 112 using a network such as the Internet. A server 112 typically includes one or more server processors 114 accessing computer readable storage media 116, and can communicate with other network components using a communication interface 118.

[0040] FIG. 3 illustrates logic according to present principles. Commencing at block 120, a user account is established for the person associated with the music player 70. The user account may be established with gym and may be accessible to both the user and the gym via the cloud, i.e., the data in the user account may be stored locally at the gym and also on a cloud server 112. The account data typically includes billing data and identifying data of the user, as well as the user’s exercise history, exercise preferences, music preferences/song list, exercise goals, exercise plan, preferred exercise machine settings, heart rate target zones, weight, height, age, and gender. The account may be established by means of the user providing the requisite information to a gym worker who enters the account information into, e.g., the gym entrance station 86, or the user may establish the account himself.

[0041] In any case, proceeding to block 122 the user may reserve use of one or more exercise machines 96. In one example, the user does this by establishing communication with the gym entrance station 86 or with a cloud server associated with the gym using the music player 70 (or other user device), entering authentication information such as user name and password, and then accessing a reservation web page to select a particular exercise machine(s) and time and date.

[0042] When the user is ready to exercise, the user enters the gym at block 124. The user need not sign in or manually authenticate himself but need only bring the NFC element 82 of the music player 70 near the NFC element 94 of the gym entrance station 86 to establish a pairing between the elements, with the respective processors 72, 88 exchanging necessary check in and authentication information through their respective NFC elements.

[0043] In response, the gym processor 88 may, at block 126, preload the user’s preferred settings onto one or more exercise machines 96. This can be done by causing the relevant exercise machine processors 98 to access or receive the user’s profile information in the user account, either by sending the information to the exercise machine(s) from the entrance station 86 via the network interfaces 92, 104 or from a cloud server 112 over a network. In some embodiments the exercise machine(s) may store the user setting data locally and simply be informed by the gym entrance station that the user has arrived and to preload the user’s settings into the machines.

[0044] Also, if desired the music player 70 and/or gym station 86 and/or exercise machine 96 can, by accessing the user profile or other data structure, obtain the user’s music preferences at block 128. When the music player does this it typically accesses local memory to prepare to play the songs the user has designated to be “workout songs” from a more general user playlist. Or, the entire user playlist may be used. The gym entrance station 86 likewise can obtain the user’s music preferences from the user account (by way of accessing the music on the cloud server 112, for example, by presenting credential information obtained during NFC pairing) and play the user’s song list on loudspeakers in the gym.

[0045] Proceeding to block 130, at the reservation time established at block 122 the reserved exercise machine 96 locks itself out to other users, and can be activated only by a pairing being established between the NFC elements 82, 106. In other words, at the reservation time the reserved machine 96 will not respond to any other NFC elements except the user's NFC element 82 on the music player 70. This is possible because when the user walks authenticates by NFC with the gym entrance station 86, the gym entrance station 86 can provide to the machine 96 the user's NFC code, so the machine knows it is to unlock at reservation time only upon receipt of the user's NFC code.

[0046] The user then places his music player 70 in proximity to the exercise machine 96 at block 132 to establish an NFC pairing between the music player and machine and unlock the machine. The workout commences and at block 134 machine operational data reflecting the user's activity on the machine (RPMs, miles walked, pace, whether an interval program was used, etc.) as well as information from the biometric sensor 110 are uploaded continuously, periodically, or in a batch at the end of the workout to the user's account via the network.

[0047] Block 136 indicates that if desired, either the machine currently being used by the user or the gym entrance station 86 may, based on the exercise plan in the user's account, automatically reserve a next exercise machine by communicating the reservation time over a network to the next machine, which locks out users other than the current user at the next machine reservation time. Or, the music player upon entering the gym entrance station may publish the exercise plan to the gym entrance station, which can immediately schedule various exercise machine reservations based thereon. For example, the exercise plan might indicate 15 minutes on machine "A" followed by 15 minutes on machine "B", in which case when the gym network detects the user starting a workout on machine "A", machine "B" is alerted to lock itself out to other users starting in 15 minutes (i.e., when the plan indicates the user will move to machine "B").

[0048] At block 138 the current exercise machine 96 can prompt the user to move to the next machine in the plan. This may be done by accessing the exercise plan and at the end of the planned period on the current machine, presenting a prompt on the visual display 108 or speakers 102 that it is time for the user to move to the next machine. Also based on the exercise plan and if desired goals and past exercise data in the user account, at block 140 the current exercise machine 96 can prompt the user to work harder or easier, depending on signals from the biometric sensor 110 (e.g., indicating a heart rate below or above, respective, the target zone indicated in the user account) and/or from the exercise machine operational data reflecting the user's activity on the machine (indicating, e.g., whether the user is working unusually slow or fast, respectively, on the machine compared to the user's historical usage.)

[0049] While the particular QUICK LOGIN TO USER PROFILE ON EXERCISE MACHINE is herein shown and described in detail, it is to be understood that the subject matter which is encompassed by the present invention is limited only by the claims.

What is claimed is:

1. A device comprising:

at least one computer readable storage medium bearing instructions executable by a processor;

at least one processor configured for accessing the computer readable storage medium to execute the instructions to configure the processor for:

providing identifying data of a user automatically to an exercise facility using near field communication (NFC) facilitated by at least one NFC element communicating with the processor as the user enters the facility; and providing identifying data of the user automatically to at least one exercise machine in the exercise facility using NFC.

2. The device of claim 1, wherein the processor when executing the instructions is configured for:

providing exercise information to at least one processor in the exercise facility using NFC.

3. The device of claim 2, wherein the exercise information includes a schedule of machine use in the facility, and machines on the scheduled are automatically locked out to use by people other than the user according to the schedule of machine use.

4. The device of claim 3, wherein the processor when executing the instructions is configured for unlocking a first exercise machine in the exercise facility by establishing NFC pairing with the first exercise machine.

5. A system for an exercise facility comprising:

one or more computer readable storage media bearing instructions executable by a processor;

one or more processors each being configured for accessing at least one of the one or more computer readable storage media to execute the instructions to configure the processors for:

receiving identifying data of a user automatically using near field communication (NFC) facilitated by at least one NFC element communicating with the one or more processor as the user enters the facility; and

receiving identifying data of the user automatically at least one exercise machine in the exercise facility using NFC.

6. The system of claim 5, wherein the one or more processors when executing the instructions are configured for permitting the user to access the facility based only upon receiving the identifying data via NFC without requiring the user to manually sign in or manually authenticate himself.

7. The system of claim 5, wherein at least one processor in the system when executing the instructions is configured for preloading preferred settings of the user onto one or more exercise machines in the system responsive to receiving identifying data of the user automatically using NFC.

8. The system of claim 5, wherein at least one processor in the system when executing the instructions is configured for playing music from a play list associated with the user on at least one speaker in the facility responsive to receiving identifying data of the user automatically using NFC.

9. The system of claim 5, wherein at least one processor in the system when executing the instructions is configured for sending, to a user account, machine operational data reflecting the user's activity on the machine, the user account being identified in the identifying data of the user received automatically using NFC.

10. The system of claim 5, wherein at least one processor in the system when executing the instructions is configured for, based on an exercise plan in a user's account identified in the identifying data of the user received automatically using NFC, automatically reserving a next exercise machine for use by the user.

11. The system of claim **5**, wherein at least one processor in the system when executing the instructions is configured for, based on an exercise plan in a user's account identified in the identifying data of the user received automatically using NFC, automatically prompting the user to move to a next machine in the exercise plan.

12. A method comprising:
authenticating a user device at an exercise facility using NFC; and

automatically locking out exercise machines at the exercise facility for exclusive use of a user of the user device at specific times based at least in part on information received using NFC.

13. The method of claim **12**, further comprising:
permitting the user to access the exercise facility based only upon receiving identifying data via NFC without requiring the user to manually sign in or manually authenticate himself.

14. The method of claim **12**, further comprising:
preloading preferred settings of the user onto one or more exercise machines in the exercise facility responsive to

receiving identifying data of the user automatically using NFC.

15. The method of claim **12**, comprising playing music from a play list associated with the user on at least one speaker in the exercise facility responsive to receiving identifying data of the user automatically using NFC.

16. The method of claim **12**, comprising sending, to a user account, machine operational data reflecting the user's activity on the machine, the user account being identified in identifying data of the user received automatically using NFC.

17. The method of claim **12**, comprising, based on an exercise plan in a user's account identified in identifying data of the user received automatically using NFC, automatically reserving a next exercise machine for use by the user.

18. The method of claim **12**, comprising, based on an exercise plan in a user's account identified in identifying data of the user received automatically using NFC, automatically prompting the user to move to a next machine in the exercise plan.

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