Title: METHODS AND SYSTEMS FOR PROVIDING INTERACTIVE LESSONS

Abstract: An Internet compatible system for providing data representing instructions, e.g., golf instructions is provided. A communication interface for receiving a message includes data representing a request for instruction. A message processor for examining the request provides an alert message to an instructor alerting the instructor to the received request. An input processor is present for receiving data that comprises a response to the alert message, and the distribution processor forwards the received response data to a destination system.
METHODS AND SYSTEMS FOR PROVIDING INTERACTIVE LESSONS

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application claims the benefit of the filing date of U.S. patent application serial number 11/189,640, the entire disclosure of which is incorporated by reference as if set forth fully herein.

FIELD OF THE INVENTION

The present invention relates to a method and system for providing interactive lessons, e.g., golf lessons with a professional instructor over the Internet.

DESCRIPTION OF THE PRIOR ART

Numerous ways for improving an individual's golf game exist in the prior art. Today, most golf instruction is accessed by taking a lesson with a golf instructor, watching an instructional video, or reading "self help" books and/or other periodicals. The benefits and shortcomings of each of the three main sources of golf instruction are obvious.

Taking lessons with a golf instructor is the most effective form; however, it is also the least practical. An individual is required to schedule a lesson at a time convenient for himself, as well as the golf instructor. Additionally, the individual's choice of golf instructors is limited to the distance that the individual is willing to travel to take his lesson. Furthermore, when an individual takes lessons from a golf instructor, he typically does not have the opportunity to write notes, nor is he typically allowed to video record the session. As a result, important points of the lesson may be forgotten as time passes.

Instructional videos, while easily accessible and relatively affordable, do not offer the same personalization that live instruction offers. While instructional videos address common faults in the golf swing, and offer instruction or drills to fix these faults, not all golfers are afflicted with the same swing faults.
Thus, instructional videos are not useful in addressing swing flaws unique to a particular golfer. Additionally, with the number of instructional videos available, it is a challenge for a golfer to choose the appropriate video to correct flaws in his or her individual game and swing.

Self-help reading material, similarly to instructional videos, does not offer the personalization feature needed to address unique swing flaws of a particular golfer. Additionally, the number of books and periodicals available makes it challenging to choose the most effective one.

Many variations of interactive golf lessons have been disclosed. One U.S. patent (U.S. Patent No. 5,486,001) describes an instructional aid for enabling and assisting a person to emulate a predetermined movement such as a golf swing including an image/data capturing device for scanning, capturing and storing the image/data signals of the person's golf swing or movement, and a transceiver for transmitting the image/data signals over a communications network to a remote computer. The remote computer contains a database that stores image signals and biomechanical data of a number of preselected swings or movements. The instructional aid may be used for analyzing or reporting on particular geographical regions or objects and provides a specialized presentation for development of that region or object from information stored in the computer database. While this design provides a remote instructional aid, this variation, does not disclose web based interactive golf lessons. Furthermore, this variation does not provide real time instruction from an instructor to a subscriber; instruction is provided from information already stored in the computer database.

Another U.S. patent (U.S. Patent No. 6,767,211) describes a system for improving and teaching decision-making skills in a sporting activity, specifically golf. The system provides at least one of real or hypothetical situations and includes examples of different actions to be taken in those situations. The user responds to the situation, and the actions chosen by the user are reviewable by an expert for evaluation thereof. The responses and evaluations are transmitted via a communication network between at least two personal computers. While this variation discloses features such as real time professional assistance provided for improving a golf game, it does not disclose capturing video data
that actually depicts a situation and transmitting the actual video data to be reviewed by a professional. Without the capturing and transmission of videos, the instructor is not able to utilize visual aids for the purpose of providing instructions. Furthermore, while multiple users may respond similarly to the real or hypothetical situations including examples of different actions to be taken in certain situations, not all of these users may have similar swings. Each user may have a unique swing fault that is not identifiable by analyzing the responses to hypothetical situations by these users. Under certain preferred embodiments, the present invention captures and transmits videos, thus allowing the instructor to utilize video representations of the user's swing for the purpose of analyzing the swing and providing individual personalized instruction.

Yet another U.S. patent (U.S. Patent No. 6,705,869) describes a system and method for interactive communication skill training. The system includes a user computer system having a memory, a display device, an input device, a video recording device and an audio device. The system also includes an e-learning web site with skill training software for interactively teaching a skill. The system further includes an expert's computer system. The method for interactive communications skill training includes the steps of accessing the e-learning website by the user, selecting a learning module for a communication skill by the user, interacting with the learning module and recording the user interaction using the video recording device. This variation, however, does not concern real time video data capture for the purpose of at least one of teaching and improving a user's golfing ability. This variation performs analyses via a computer e-learning website. This system provides a computer analysis of the information provided and automatically produces a lesson based upon stored information. This system does not provide for live interactive personal lessons tailored specifically for a subscriber. Furthermore, this variation does not disclose capturing video data that actually depicts a situation and transmitting the actual video data to be reviewed by a professional. Without the capturing and transmission of videos, the instructor is not able to utilize visual aids for the purpose of providing instructions.

Another two U.S. patents (U.S. Patent No. 6,224,387 and U.S. Patent No. 6,517,353) describe systems for collecting pictures to produce a pictorial tour of a golf course to be distributed over a communication network for the purpose of providing a
visual tour of the course. This system is run by an intermediary service bureau that coordinates obtaining the pictures and providing the pictures to the golfers, as well as controlling access thereto. This variation, however, only presents still picture visual data and is intended to give the golfer a shot-by-shot view of a golf course.

While these systems may be suitable for the purposes for which they were designed, they would not be as suitable for the purposes of the present invention, as hereinafter described.

**SUMMARY OF PRESENT INVENTION**

Under certain embodiments, the present invention relates to an Internet compatible system for providing data representing golf instructions (or other types of instructions). A communication interface receives a message including data representing a request for golf instruction. The communication interface may further receive data comprising at least one of video, audio, graphic and text information from e.g., the subscriber. A message processor for examining the request provides an alert message to an instructor alerting the instructor to the received request. An input processor receives data including a response to the request alert message, and the distribution processor forwards the received response data to a destination system. The response data may be forwarded by the communication interface. Preferably, the response data is formatted into an output format compatible with the destination system. This response data may comprise instructional information responding to video, audio, graphic and text information.

Additionally, an interactive system receives data representing golf instructions. A display processor generates a user interface display image on a display device. An input device processor enables a user to enter a request to receive golf instructions. (Examples of input devices include but are not limited to a keyboard, a mouse, a microphone, a touch pen and a video camera.) The message processor receives data representing a request for golf instruction entered by a user via the input device processor. A communication interface processes the request received from the distribution processor to provide a formatted request message for communication and initiates communication of a
formatted request message to a destination system. The communication interface also receives a message responsive to the communicated formatted request message, and initiates the communication of the responsive message to the user.

The present invention provides a system and method for providing web based (or other remote) interactive lessons (e.g., golf) that overcome the shortcomings of the prior art. Among the benefits of different embodiments of the present invention are: a system and method for providing web based interactive golf lessons whereby a subscriber communicates directly with a golf instructor; a system and method for providing web based interactive golf lessons whereby a subscriber selectively captures video data representing the subscriber's golf swing; a system and method for providing web based interactive golf lessons whereby a subscriber logs onto a central server uploading the captured video data for viewing by the instructor; a system and method for providing web based interactive golf lessons whereby the subscriber receives real time and/or delayed instruction from a golf instructor; a system and method for providing web based interactive golf lessons whereby the golf instructor is able to selectively edit the video data representing the subscriber's golf swing and provide the edited video data to the subscriber; a system and method for providing web based interactive golf lessons whereby the golf instructor compares video data of the subscriber to archived video data of professionals and/or archived video data of the subscriber; a system and method for providing web based interactive golf lessons whereby the golf instructor selectively edits the video data representing the subscriber's golf swing by adding alignment lines to the subscriber's video data; a system and method for providing web based interactive golf lessons whereby each subscriber is provided with a unique storage area for retaining data representing previous lessons and instruction for later review; a system and method for providing web based interactive golf lessons whereby the instructor creates a game plan for the subscriber based on the subscriber's skill level and the important swing thoughts taught in prior lessons; a system and method for providing web based interactive golf lessons including a handheld device able to communicate with the central server and receive instantaneous information; a system and method for providing web based interactive golf lessons including a handheld device able to communicate with the central server and receive information including club selection and the type of swing the subscriber should take; a system and method for providing web based interactive golf lessons for a group of subscribers using video conferencing; and a system and method for providing web based interactive golf lessons for a group of subscribers using video conferencing whereby transmission of video and audio is performed in real time.
The present invention overcomes the shortcomings of the prior art by providing remote, e.g., web based interactive golf lessons that may be provided in real time or delayed so that a user can learn at his or her convenience. By enabling the transmission of video data representing a subscriber's swing and the golf instructor's ability to receive the video data and provide comments thereon via the internet or other equivalent systems in real time and/or at a time of choosing by the subscriber and/or at a later arranged time, the present invention provides for customized lessons on demand. The efficiency of these customized lessons is far superior to those of instructional videos, books and periodicals, as personalized instruction is provided at any time in almost any place. Additionally, the use of web based interaction or other equivalent interactive systems provides a level of flexibility in terms of time and location that on site golf instruction from a teaching professional does not offer. Furthermore, the timesavings from the flexibility of scheduling, and the subscriber not having to travel to a golf instructor to take lessons, provides the subscriber more time to spend playing golf on a course.

The foregoing and other objects and advantages will appear from the description to follow. In the description reference is made to the accompanying drawings, which form a part hereof, and in which is shown by way of illustration, specific embodiments in which the invention may be practiced. These embodiments will be described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that structural changes may be made without departing from the scope of the invention, hi the accompanying drawings, like reference characters designate the same or similar parts throughout the several views.

Furthermore, although the detailed description focuses on the application of the present invention in the context of golf instruction, the invention may be applied to instructions in any activity for which remote real time or other remote instructions would be described. For example, the invention may be used to facilitate instructions in baseball, basketball, hockey, swimming, gymnastics, tennis, soccer, gymnastics, cooking, knitting, arts and crafts, home improvement and automobile repair.

The following detailed description is, therefore, not to be taken in a limiting
sense, and the scope of the present invention is best defined by the appended claims.

**BRIEF DESCRIPTION OF THE FIGURES**

In order that the invention may be more fully understood, it will now be described, by way of example, with reference to the accompanying drawing in which:

5 FIGURE 1 is an illustrative view of one embodiment of the present invention in use.

FIGURE 2 is an illustrative view of a subscriber's camera and computer setup.

FIGURE 3 is an illustrative view of a golf instructor's computer setup.

FIGURE 4 is a detailed view of a display screen.

10 FIGURE 5 is a flow chart of an embodiment the present invention in use.

FIGURE 6 is an illustrative view of a handheld device used for communicating with a central server and receiving information, _e.g._, concerning golfing.

FIGURE 7 is an illustrative view of a video conferencing setup for providing web based interactive group lessons, _e.g._, concerning golf.

15 FIGURE 8 is a flow chart of a game plan structure of the present invention.

FIGURE 9 is a chart of a membership structure of the present invention.

FIGURE 10 is a diagram of an Internet compatible system for providing data representing golf instructions of the present invention.

20 FIGURE 11 is a diagram of an interactive system for receiving data representing golf instructions of the present invention.
DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following discussion describes certain preferred embodiments of the present invention. This discussion should not be construed, however, as limiting the invention to those particular embodiments. Practitioners skilled in the art will recognize numerous other embodiments as well.

The present invention relates to a method and system for providing interactive lessons, preferably web based interactive such as golf lessons with a golf instructor. Under certain embodiments, the system comprises a central server that subscribers and golf instructors (or instructions of other sports as appropriate) can log onto and communicate with one another. A subscriber to the system selectively captures video data representing the subscriber's golf swing and logs onto the central server to upload the captured video data. A golf instructor is able to then download and analyze the swing and provide real time and/or delayed instruction to the subscriber through the central server. Alternatively, the user may obtain analysis and/or instruction in real time using a web camera to display his or her swing live to an instructor. Furthermore, a handheld device can be used by a subscriber to communicate with the central server to receive information concerning golfing anywhere, even while on the course. Another aspect of the present invention is to provide a video conferencing method and apparatus for providing web based interactive group golf lessons. Alternatively, users may schedule lessons at predetermined times and/or with specific instructors. A further aspect of the present invention provides personalized game plans for each type of shot and club that will be stored in a subscriber's personalized storage area. Each subscriber is provided a personalized storage area for retaining data representing previous lessons, instructions, analyses and game plans.

Optionally, one could use biometric services in connection with or instead of the aforementioned camera. One benefit of the incorporation of biometrics sensors (e.g. monitoring muscles) is that a participant could be monitored and aided in preventing strain or injury. Such systems may be particularly beneficial to athletes who are recouping from injury and/or aging and/or in the process of physical therapy.

The invention is described as preferably being used in connection with the
Internet. As persons of ordinary skill are aware, one of the benefits of the Internet is that remote persons (i.e. those not located in close physical proximity) can communicate quickly, and even essentially instantaneous. The present invention may be used with now known Internet technologies, as well as other technologies that come to be known that a person of ordinary skill in the art would appreciate as useful with the present invention. Further, the present invention is not limited to use with Internet based systems. Thus, other systems that allow for remote real time or delayed communications may also be used, including but not limited to technologies for use with cellular telephones that have e.g., video capabilities.

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, Figures 1-7 illustrate the web based interactive golf lesson system of the present invention indicated generally by the reference numeral 10.

Figure 1 is an illustrative view of a preferred embodiment of a web based interactive golf lesson system of the present invention in use. The system 10 of the present invention allows for at least one subscriber 12 to communicate with and obtain advice and instruction from an instructor 14 at any time and place of the subscriber's 12 choosing. The system includes a first computer 18 on the subscriber end linked to a second computer 20 on the golf instructor end via a communications link.

The subscriber's computer 18 is connected to the Internet via a telecommunications link such as a telephone line, a cable line, or a wireless connection. As is known in the art, the Internet includes providers such as Internet access providers and Internet Service Providers and Network Service Providers and routers that provide wired and wireless digital telecommunications throughout the world using TCP/IP networking protocol. It should be appreciated that the computer may access the Internet directly, or may be operatively connected to a local area network (LAN) over which information is transmitted to other computers on the same LAN or to computers on other LANs through a localized Intranet. The information can be transmitted between the user and the Internet via the Intranet.
Alternatively, a local area network (LAN), wide area network (WAN) or other type of network may be used to connect subscribers 12 with instructors 14. The system 10 is able to function using any means for connection including but not limited to dial-up, broadband, and satellite Internet connections. Furthermore, the system is optimized to operate using hard-wired and wireless connection to the Internet. A video camera or web cam 16 is connected to the first computer 18. The subscriber 12 orients the video camera 16 to capture video data representing at least a portion of a golf swing. The video camera 16 can also be oriented to capture video data of the subscriber’s 12 swing from different angles to provide different perspectives, as well as close up views of different parts of the subscriber's body (e.g. grip, foot position, head position, posture, swing plane angle, game plan, golf course conditions and lie position of the golf ball, etc.). The captured video data is uploaded to the first computer 18 for processing thereof. Processing of the video data may include but is not limited to conversion from analog to digital format, as well as compression of the video data for transmission thereof. When the data is in digital format on the first computer 18, the subscriber 12 can log onto the central server and upload the data representing the at least one golf swing to the central server 21. Alternatively, the subscriber 12 may first log onto the central server and establish a connection with an instructor 14. The subscriber 12 may then display a golf swing live to a golf instructor 14 at the opposite end of the connection. The camera 16 may be adjusted or zoomed in to view any portion of the subscriber's swing such as the grip or foot position, or the camera 16 may be zoomed out to allow the viewing of the entire swing sequence.

The central server 21 provides connectivity between subscribers 12 and golf instructors 14. Subscriber 12 and golf instructor 14 log onto the central server 21 to communicate with one another. Preferably in order to log on, subscriber 12 and golf instructor 14 must provide a username and password. This security feature prevents unauthorized use by non-subscribing parties. The user identification could optionally be maintained through other unique identifiers, e.g., a bar code or other digital tracking system. For example, a user could swipe his or her user card into an appropriate card reading device, which would identify the user and transmit the user's information over the communication link. Optionally, the user could simultaneously view a confirmation that he or she is the person associated with the card. A golf facility could have card-reading devices, located at one or more, e.g. all eighteen holes of a golf course. Associated with these user card-reading devices may be a camera or camera(s) described
above, as well as a video display terminal.

The central server 21 also serves as a storage medium to which subscribers 12 and golf instructors 14 upload data. Such data may include but is not limited to video data and time delayed text or voice messages. Additionally, previous lessons may also be stored on the central server 21 to be retrieved by the subscriber 12 or golf instructor 14 for review at any time. Upon logging onto the central server 21, the subscriber 12 may be connected with a golf instructor 14 at random or select an available golf instructor 14. If the subscriber 12 has a preference for a particular golf instructor 14, the subscriber 12 may choose that golf instructor 14 if available or schedule a lesson at a time when that golf instructor 14 is available.

Once data is uploaded by the subscriber 12, the golf instructor 14 is able to download the data from the central server 21, and view and analyze the data representing the subscriber's swing using the second computer 20. The golf instructor 14 is able to provide real time instruction to the subscriber 12. Such instruction may include but is not limited to altering the subscriber's 12 posture, stance, grip, tempo, and swing plane. Alternatively, the subscriber 12 can also choose to receive instruction through time-delayed mediums when it is inconvenient for the subscriber 12 and golf instructor 14 to communicate in real time. Additionally, the golf instructor 14 can also upload further video data onto the central server 21 for the subscriber 12 to view. This further video data includes but is not limited to marked up versions of the subscriber's original video data to highlight swing faults, or archived video data of swings with proper form for the subscriber 12 to use as visualization tools. Instruction may also be provided in real time via live video cameras 16 connected at each end of the communication link. (Both the instructor's and subscriber's cameras are denoted as 16 on Figures 1, and although they may be the same type of cameras they represent at least two different cameras not located in the proximity of each other.) The golf instructor 14 will thus be able to provide real time instruction to the subscriber 12 concerning grip, stance and swing as the subscriber 12 is practicing.

The golf instructor 14 is able to verbally communicate with the subscriber 12 by
telephone or through online voice communication. The second computer 20 may have a second video camera 16 connected thereto and the golf instructor 14 can communicate with the subscriber 12 via video conferencing. The golf instructor 14 can also use online text or instant messaging to converse with the subscriber 12. If the subscriber 12 chooses to receive instruction through a time-delayed medium, then the golf instructor 14 can send an instructional email or leave a voicemail for the subscriber 12. The golf instructor 14 may also replay the swing of the subscriber 12 and provide audio and visual instruction and commentary to the subscriber 12 during the replay of the swing. All communication between the subscriber 12 and the instructor 14 is stored on the central server 21 and is selectively accessible by each for later use. A benefit of utilizing web-based communication is the ability to archive the conversations and lessons on a computer. By having previous conversations and video data archived, the subscriber 12 can review past golf lessons administered by the golf instructor 14. This allows the subscriber 12 to quickly remedy a swing fault that has been addressed by the golf instructor 14 in a previous lesson. This would also make golf lessons more efficient as the golf instructor 14 may review the previous lessons and thereby eliminate the need for the golf instructor 14 to repeat previous lessons with the subscriber 12 during a current session. Alternatively, the golf instructor 14 may use the review of lessons to reinforce previous instruction as a review in a subsequent lesson to ensure the subscriber 12 has made the necessary correction and also to compare the prior swing of the user to a current swing. The instructor 14 may also provide voice, text and/or video messages in the storage area for the subscriber 12 for later viewing in response to a request for instruction. The subscriber 12 can be notified of the stored message via telephone call, pager or email.

Figure 2 is an illustrative view of the subscriber's cameras 16 and computer 18 setup. Herein, two cameras 16 are connected to the first computer 18. Two cameras are shown for purposes of example. However, in practice any desired number of cameras 16 may be used to provide a full view of all angles of the swing of the subscriber 12. The subscriber 12 sets up the video camera 16 to capture video data of the subscriber's swing. The plurality of video cameras 16 can be oriented to capture video data representing the subscriber's swing from different angles to provide different perspective to the golf instructor (not shown in Figure 2). The subscriber 12 uploads the videos onto his
computer 18. When the video is in digital format on the subscriber's computer 18, the subscriber 12 can log on to the central server (not shown in figure 2) and upload the captured video data of the golf swing onto a central server for the golf instructor to download and analyze. The subscriber 12 can use the keyboard 22 and/or mouse 23 as input devices for logging onto the central server, generating messages to transmit to the central server and instructor, editing video captured by the cameras 16 and navigating around and accessing data stored on the central server. The microphone 26 is provided for transmitting verbal messages to the central server 21 and communicating verbally with the instructor. The speakers 24 are provided to generate audible signals received from the instructor and/or central server. The central server also serves as a storage medium from which the subscriber can download data. Such data may include previous lessons and other instructions provided by the golf instructor. The subscriber can access the central server to retrieve previously administered golf lessons for review at any time.

The central server provides connectivity between subscribers 12 and golf instructors. Subscribers 12 and golf instructors log onto the central server to communicate with one another. The subscriber 12 may establish a live connection with a golf instructor after logging onto the central server, thus allowing the subscriber 12 to display a golf swing live to a golf instructor at the opposite end of the connection. The cameras 16 may be adjusted or zoomed in to view any portion of the subscriber's swing such as the grip or foot position, or the cameras 16 may be zoomed out to allow the viewing of the entire swing sequence. The golf instructor may offer instruction to the subscriber 12 while viewing the video data in a live format.

The subscriber 12 can communicate with the golf instructor by telephone or through online voice and/or text communication. To communicate by voice over the communications link, the subscriber 12 utilizes a microphone 26 and speakers 24 connected to the first computer 18. The microphone 26 will capture a voice message from the subscriber 12 for transmission of the message to the central server and/or instructor. The speaker 24 will audibly relay a message received from the central server and/or instructor. The subscriber 12 can also use online text messaging such as using an instant messaging software application to converse with the golf instructor by utilizing the keyboard 22 and/or mouse 23. The subscriber 12 can also choose to send comments
and questions, and receive instruction, through a time-delayed medium such as email. The instructor may have an identical setup at the opposite end of the communication thereby allowing the instructor to communicate in a similar medium as the subscriber.

By taking videos from multiple angles, the subscriber 12 provides the golf instructor with a more detailed representation of his swing. For example, a video from a side view shows shoulder alignment and tilt, head position, width of stance, ball position relative to the subscriber's stance, and the club's shaft tilt. A video from the rear view reveals the golfer's spine angle, swing plane, knee flex, and arm position relative to the body. With this information, the golf instructor could more easily identify swing faults to provide more specific and accurate instruction to the subscriber 12. Additionally, videos from multiple angles also allow the subscriber 12 to see his own swing from different perspectives. Upon receiving the data representing multiple swing angles the instructor can more completely aid the subscriber 12 and provide more complete instruction. As these different angles provide full views of each body part and swing, the golf instructor is able to review each camera angle numerous times concentrating on different body portions and club positions during each viewing. This improves over live lessons as the golf instructor is only able to view the swing once live or the subscriber 12 must repeat the swing numerous times. The subscriber 12 is also able to edit the video captured by the cameras 16 to provide views such as a split screen showing all views at once, zooming in on a particular portion of the user's body, hands, arms, feet, legs, etc., by manipulating the keyboard 22 and/or mouse 23.

Figure 3 is an illustrative view of the golf instructor's computer setup. The golf instructor 14 uses the second computer 20 to download data representing a subscriber's golf swing over the Internet from the central server (not shown in figure 3). The golf instructor 14 can then view the data representing the subscriber's golf swing on a display screen 28 connected to the second computer 20. The golf instructor 14 analyzes the video data and provides comments thereon. Alternatively, the instructor 14 may utilize a software application directed toward golf swing analysis when providing comments and/or instruction to the subscriber. The golf instructor 14 may provide written commentary on the video of the subscriber's golf swing along with audio commentary describing the faults in the swing of the subscriber. The commentary may be provided in
real time over the established connection or recorded for later viewing by the subscriber.

A video camera or web cam 16 is connected to the second computer 18. The golf instructor 14 orients the video camera 16 to capture video data representing a golf swing, body position, a stance or a golf grip. The video camera 16 can also be oriented to capture video data of the golf instructor 14 from different angles to provide different perspectives. The captured video data is uploaded to the second computer 20 for processing thereof. Processing of the video data includes but is not limited to conversion from analog to digital format, as well as compression of the video data for transmission thereof. When the data is in digital format on the second computer 20, the golf instructor 14 uploads the video data along with commentary and/or instructions to the central server for viewing by the subscriber. The camera 16 may be used by the instructor 14 to capture video of the instructor's swing or may simply capture the instructor 14 positioned at the computer 20 to conduct a videoconference with the subscriber.

The central server provides connectivity between a golf instructors and subscribers. Golf instructors and subscribers log onto the central server to communicate with one another. The golf instructor 14 may establish a live connection with a subscriber after logging onto the central server, thus allowing the golf instructor to display a golf position, grip or swing live to a subscriber at the opposite end of the connection. The camera 16 may be adjusted or zoomed in to view any portion of the golf instructor's swing such as the grip or foot position, or the camera 16 may be zoomed out to allow the viewing of the entire swing sequence. The subscriber may ask questions to the golf instructor 14 while viewing the video data in a live format. Golf instructors 14 may be continually connected to the central server during times they are available to conduct lessons thereby allowing subscribers to know exactly which instructors are available at any particular time and provide for immediate contact with a desired instructor.

Similarly, as discussed above regarding Figure 2, a microphone 26, a keyboard 22, a mouse 23, and speakers 24 are connected to the second computer 20. The instructor 14 further has an electronic touch pen 25. The instructor 14 is able to utilize these elements to selectively communicate with the subscriber and provide instructional
comments and analysis thereto. The microphone 26 and speakers 24 are provided to establish audible communication between the instructor 14 and golfer. The keyboard 22 and mouse 23 can be used to log on and off the server, send text messages and emails, and edit the display, as well as provide written commentary and analysis. The instructor 14 further has an electronic touch pen 25 that is utilized to draw on a touch sensitive screen to highlight certain parts of the screen to aid in instructing.

Figure 4 is a detailed view of a display screen illustrating a split screen showing an image of a golfer, possibly the subscriber taking a swing on the right side 32 and a view of another golfer illustrating a swing on the left side. The left side image 30 is being analyzed during the lesson to show the proper form to be used. These images can be shown on both the displays of the first computer and the second computer. After the subscriber uploads the video data representing the subscriber's golf swing onto the first computer the subscriber then logs onto the central server and uploads the captured video data representing the subscriber's swing to the central server for the golf instructor to download and analyze. The golf instructor sets up the second computer to download the subscriber's video data from the central server. The golf instructor can then watch the video data representing the subscriber's golf swing on the display screen of the second computer.

Figure 4 shows an exemplary view of the display that may be used by the instructor during a lesson. In this view, the left side of the display screen 30 is dedicated to the professionals. The golf instructor (not shown in figure 4) has the functionality of accessing (and authorization to access) digital frame-by-frame swings of other golfers e.g., PGA Tour players from different angles. The golf instructor also has access to biodynamic statistics and measurements that mathematically describe the movement of the professional's swing. The right side of the display screen 32 is provided for amateurs. Depending on the level of membership, different features will be made available. Along the bottom of the display screen a rectangular information box 33 containing account information is provided. Account information may include, but is not limited to, one or more of the following: the subscriber's name, address, account balance, lesson timer and hyperlinks to golf instructions. Additionally, the information box 33 may be used to provide textual commentary during a comparison of the swings in the split screen.
The golf instructor is capable of making detailed analysis of the form of the subscriber's swing on the display screen. One way to critique the subscriber's swing with golf swing analysis software is to draw alignment lines 34 to analyze the deviation from ideal positions. The golf instructor can supplement his verbal or text instructions to the subscriber by utilizing the alignment lines 34. Alternative golf swing analysis methods compare and contrast the subscriber's swing on the left side of the display screen 30 with that of an ideal form swing on the right side of the display screen 32. By putting the two video images side by side, the golf instructor can not only easily point out swing faults, but he can also show the subscriber what is needed to correct the swing fault.

Additionally, the subscriber can take videos of his swing from multiple angles. By taking videos from multiple angles, the subscriber provides the golf instructor with a more detailed representation of his swing. A video from a side view shows shoulder alignment and tilt, head position, width of stance, ball position relative to the subscriber's stance, and the club's shaft tilt. A video from the rear view reveals the golfer's spine angle, swing plane, knee flex, and arm position relative to the body. With this information, the golf instructor could more easily identify swing faults to provide more specific and accurate instruction to the subscriber. Additionally, videos from multiple angles also allow the subscriber to see his own swing from different perspectives. The split screen may be used to show images from each angle together and synchronized on the screen.

Figure 5 is a flow chart describing the method of imitating the interactive golf lesson system of the present invention in use. In step S101 the subscriber logs onto the central server by entering a username and password to access the system. After logging onto the central server, the subscriber chooses one of numerous instruction options in step S102. The choices include but are not limited to a live lesson, a group lesson, accessing the database/archive, schedule future lesson, download video for later analysis, on-the-run advice, etc. Items such as on-the-run advice are provided for users to obtain quick answers to specific questions. Such advice may be useful during a round of golf when a subscriber needs advice on how to hit specific types of shots with specific clubs (i.e. driving, hitting fairway woods and irons, putting, chipping, bunker shots, etc) in different types of conditions (weather, type of lie, condition of greens, fairways, and rough). The
on-the-run advice selection will allow either interactive advice from an instructor or access to the archives for a refresher lesson or a review of a lesson on the particular situation being encountered. When selecting a lesson, the lesson may provide a selection such as swing advice, which will provide a professional's suggestion of a particular swing and aid a golfer in establishing a "game plan" tailored to the skill level and abilities of the subscriber for best results on the course. This selection will provide both standard game plans for a course or may involve a subscriber and instructor establishing a personal game plan. This option will also help a subscriber learn how to best prepare a game plan tailored to their skill level, the course to be played, and the course and weather conditions for the day on which the subscriber plays the course.

When the subscriber selects the live lesson option, the subscriber is brought to step S103. At step S103, the subscriber is provided two options. If the subscriber had previously scheduled a live lesson with a particular golf instructor the subscriber selects the option to be directly linked to the live lesson with the scheduled golf instructor in step S104. If the subscriber, however, has not previously scheduled a lesson, the subscriber can select from a list of golf instructors presently available to administer a lesson at the time the subscriber is logged onto the central server in step S105. The list of available instructors may be sorted by expertise. For example, one instructor may specialize in short game while another specializes in putting. Additionally, if the subscriber is unfamiliar with the instructors available, the subscriber may click on a link to read a bio of the instructor(s), as well as comments from other subscribers who have taken lessons from the instructor. After the subscriber selects a golf instructor, the subscriber is connected to a live lesson with the selected instructor in step S106.

When the subscriber selects the group lesson option in step S107, the subscriber is provided two options. Similar to the live one-on-one lessons, if the subscriber scheduled a group lesson ahead of time, the subscriber selects the option to be directly linked to the group lesson with the scheduled group and golf instructor in step S108. If the subscriber, however, does not have a previously scheduled group lesson, the subscriber can select an option from a list of group lessons that are available at the time the subscriber is logged onto the central server in step S109. The list of available lessons is sorted by in categories such as skill level and area of game covered. For example one group lesson my cover iron
play for advanced golfers while another specializes on gripping a golf club for beginners.

If the subscriber is unfamiliar with the lesson being offered, the subscriber clicks on a link to read a brief description of the offered lesson, as well as comments from other subscribers who have taken that particular group lesson. After the subscriber chooses a group lesson to participate in, the subscriber is connected to the group lesson in step SIIO.

If the subscriber selects access the database/archive for general information or archived video data from previous lessons, the subscriber is subsequently connected to the database/archive containing the information the subscriber previously stored and intends to view in step SII. The available general information and archived video data are cataloged in the system. The subscriber can choose from a personal archive of lessons/notes or a general archive of lessons made available to all subscribers. The subscriber's previous lessons, instructions, analysis and game plans, as well as conversations and video data, are stored within the personal archive. The information and video data can be sorted by the subscriber by skill level and/or particular area of the golf game, such as short game, iron play, or putting. Once the subscriber selects a particular database, the subscriber can then either read the information and/or video data from the subscriber's display screen or the subscriber can download the information and/or video data from the central server onto the first computer for future viewing in step S112.

Figure 6 is an illustrative view of a handheld device used for communicating with the central server (not shown in figure 6) and receiving information concerning golfing. The handheld device 36 consists of a screen 38 and a keypad 40 and is used for communicating with the central server and receiving information concerning golf. The handheld device may be a conventional Personal Desk Assistant (PDA) or smart phone that is able to access the Internet. In a preferred embodiment, the handheld device 36 connects to the central server via wireless broadband. Alternatively, the connection may be established by dial up on a cellular phone line, wireless connection to a network router and modem (e.g., telephone modem or cable modem) or any other known wireless connections.

Subscribers may access the features of the system through a voice menu making
selections to an audio menu using either audio commands or depressing keys on the alphanumeric keyboard. The subscriber is able to access all features available through a similar connection described herein before with a computer such as club selection or the type of swing the subscriber should take depending on certain parameters including ball position and course conditions. Such information is available using the handheld device. However, the handheld device is normally used to obtain more immediate specific information and may be used in remote locations during play to receive advice on specific situations the subscriber is currently experiencing. Preferably the service of the system is the ability to achieve a wireless connection. The information is provided from a subscriber-specific database. This information can further include notes and images from previous lessons administered by the golf instructor. Real time information can also be provided over the Internet to the handheld device by a golf instructor. Additionally, the subscriber can utilize the handheld device 36 to communicate with the golf instructor either by voice or by text messaging. The compact size of the handheld device 36 makes it practical to be used while on the golf course, allowing the subscriber to look up or receive instruction in real time without geographic limitations. If the handheld device includes speaker phone, video capabilities and a camera, the subscriber will have access to all the functions provided by the system and obtainable at any computer workstation.

Figure 7 is an illustrative view of a video conferencing setup for providing web based interactive group golf lessons. Alternatively, the video conferencing setup may be used to establish chat groups between subscribers wherein subscribers may relay and share experiences with other subscribers. When being used for a videoconference, the video conferencing system 42 consists of the second computer 20 on the instructor’s end and two or more first computers 18 on the subscribers’ ends connected to the central server 21 for providing web based interactive group golf lessons. Alternatively, subscribers may connect directly to the central server 21 and may either establish or select a preformed chat group to join. Subscribers at different locations and the golf instructor are able to communicate with one another in real time and/or delayed by logging onto the central server 21. Once logged on, the subscribers are able to receive golf instructions from the golf instructor while the golf instructor 14 is able to receive comments and/or questions from the subscribers. The subscribers are able to upload video data to the central server 21 for viewing and analysis by the instructor 14. The golf instructor 14 is
able to perform video demonstrations by uploading videos to the central server 21 for viewing by the subscribers. All subscribers logged into a group lesson or chat rooms are able to view and/or listen to all communication by any subscriber or instructor 14 within the group lesson. All video conferences and chat groups are saved and cataloged on the central server so that subscribers may search the database and view the conferences or dialog from a chat group at a later time.

The golf instructor 14 and subscribers are able to communicate by telephone or through online voice communication via the central server 21. To communicate by voice, the golf instructor 14 utilizes the microphone 26 and speakers 24 attached to the instructor's computer 20. The golf instructor 14 can also use text messaging to converse with the subscribers by typing on the keyboard 22. The golf instructor 14 can also choose to send golf instruction, and receive question and comments, through a time-delayed medium. The subscribers and golf instructor 14 can exchange emails or leave voicemails for one another. A benefit of utilizing web-based communication is the ability to archive the conversations on a computer. By having previous conversations and videos archived, the subscribers can review past golf lessons administered by the golf instructor 14. This allows the subscriber to quickly remedy a swing fault that has already been addressed by the golf instructor 14 in a previous lesson. This would also make golf lessons more efficient as it eliminates the need for the golf instructor 14 to review previous lessons with the subscriber during a current session.

The ability to have a group of subscribers taking web-based lessons simultaneously with one golf instructor also has several benefits. One obvious benefit is the cost savings. While group lessons are offered at golf facilities today, it is a common occurrence that not enough subscribers sign up for group lessons to constitute a group, let alone enough subscribers of the same skill level. Offering group lessons through web based video conferencing eliminates the geographic limitations of having subscribers being from the same locale. With additional subscribers, it is also easier to create groups of the same skill level, thereby providing the most effective instruction for all subscribers. Furthermore, being exposed to the perspective of other subscribers of like skills can offer further insight on the golf instructions.
Figure 8 is a flow chart of an exemplary method for creating a game plan. In step S201 the subscriber creates a "game plan" to summarize the lessons in a format that can be used on any course for the purpose of helping the subscriber recall lessons while playing. In step S202 the subscriber chooses the skill level that best matches the subscriber's ability. Upon selecting "Beginner," "Intermediate" or "Professional", in steps S203, S205 and S207, respectively, the subscriber is provided with the option to further establish a game plan for each type of shot and club tailored to the skill level and abilities of the subscriber for best results in steps S204, S206 and S208, respectively. The game plan takes into consideration, but is not limited to, the following aspects of the subscriber's golf game: subscribers overall length with specific golf clubs (woods, irons, wedges), natural shot shape (draw, neutral, or fade), and playing to the subscriber's strengths (driving, iron play, short game, putting). The game plan instructs the subscriber on how to execute a particular golf shot in specific conditions/situations. The golf game plan further allows the subscriber plan to use previously learned lessons on any golf course. The game plan may be provided interactively with the system based upon the subscriber's answers to questions provided by the system concerning the subscriber's golf game or with an instructor in a personalized lesson. The system may also provide guidelines so the subscriber is able to develop a personalized game plan on their run.

The system of the present invention also includes website development and membership plans. The website is hosted on the central server. Information that may be available on the website includes but is not limited to subscriber's name, address, account balance, and hyperlinks to golf instructions. Other information stored on the central server includes membership info, usage data, and referral data.

Figure 9 is a depiction of an exemplary membership structure. The plan may include an initial a basic membership and an advanced membership. With an exemplary basic membership, a subscriber may receive a ten-minute analysis and storage capacity for video data representing two swings. A subscriber is further provided with storage capacity for two swing videos. With an advanced membership with different levels allowing access to different features, a subscriber may receive a twenty-minute initial swing consultation with the advisory staff. A subscriber also has access to developing a customized game plan for course/training to suit the subscriber's needs. Additionally,
with each additional ten-minute consultation booked by the subscriber, the subscriber receives additional disk space to store two additional video data. The subscriber also gains access to a golf tablet that stores each of the subscriber's lessons, as well as allows the subscriber to view pro's swings for self-analysis. Furthermore, the advanced membership provides access to group lessons, as well as an online chat room. By offering a variety of memberships, a subscriber can choose a membership that fits the subscriber's budget and needs. Additional memberships such as unlimited membership, which may grant a subscriber with unlimited access and use of all system features are also provided.

Figure 10 is a diagram of the Internet compatible system for providing data representing golf instructions of the present invention. The communication interface 44 receives a message that includes data representing a request for golf instruction from the distribution processor 46. The communication interface 44 transmits the data representing a request for golf instruction through the network, which connects the system to the subscriber end users. The data representing a request for golf instruction is sent by a subscriber. Such data may include but is not limited to text or video data. The message processor 48 examines the request provided by an input device/processor 52 and sends the request on to the distribution processor 46. The input devices/processors 52 include but are not limited to cameras, mouse, keyboards and microphones. The subscriber, using the input devices/processors 52 sends a request to be linked to the desired instructional link. The subscriber can choose to take individual lessons, group lessons, or review the archive. Once the subscriber is linked to the system, the subscriber can further us the input devices/processors 52 to send a video, text or audio request to the instructor. Upon receiving the data request, the instructor can provide analysis in video, text and or audio form to the subscriber in the same fashion the subscriber sends the request.

The message processor 48 also provides the signal to generate a display image on display devices 50 such as monitors, televisions or projectors. The display image provides a visual aid to the subscriber thus allowing the subscriber to make requests through the input devices/processors 52. The signal to generate a display image may also comprise a video used for analysis.
Figure 1 is a diagram of the interactive system for receiving data representing golf instructions pursuant the present invention. A display processor 60 generates a user interface display image on a display device 62 such as a monitor, television or projector, enabling a user to enter a request to receive golf instructions. The display image provides a visual aid to the subscriber thus allowing the subscriber to make requests through the input devices/processors 58. The signal to generate a display image may also comprise a video used for analysis. A message processor 56 receives data representing a request for golf instruction entered by a user via the input devices 58. The input devices/processors 52 include but are not limited to cameras, mouse, keyboards and microphones. The subscriber, using the input devices/processors 52, sends a request to be linked to the desired instructional link. The subscriber can choose to take individual lessons, group lessons, or review the archive. The communication interface 54 processes the request received from the message processor 56 to provide a formatted request message for communication and initiates communication of a formatted request message to a destination system. The communication interface 54 also receives a message responsive to the communicated formatted request message, and initiates the communication of the responsive message to said user. The communication interface 54 further transmits the data representing a request for golf instruction through the network, which connects the system to the subscriber end users. Data requests are sent from the communication interface 54 through the network. Additionally, analyses are also received by the communication interface 54 from the network.

The systems and methods of the present invention may further comprise a central database for storing all or some of the data received by the communication interface and forwarded by the distribution processor. The systems and methods may also further comprise a memory for storing data received and transmitted by the communication interface. The memory may be partitioned into a general memory section and individual memory sections. The individual memory sections may be accessible to the respective individuals, e.g., of whom particular video is shot or to whom a previous lesson applied.

Additionally, it should be noted that according to the systems and methods of the present invention, an instructor can communicate with any of individual subscribers, a plurality of subscribers, or one or more select subscribers at any one time. In certain embodiments, subscribers may be defined as persons who have a subscription, which
may for example allow unlimited access for a period of e.g., a week, a month or a year. Alternatively, the subscription may allow for a fixed number of lessons.

Under another embodiment, the present invention is directed to an interactive system for receiving data representing instructions. The system comprises: (i) an input processor for receiving data representing a request for instruction that is entered by a user or subscriber; (ii) a display generator for generating a user interface display image that enables a user to enter a request to receive instructions; (iii) a message processor for processing the received request to provide a formatted request message for communication and initiating communication of a formatted request message to a destination system; and (iv) a communication interface for transmitting said request message to the destination system, receiving a message responsive to said request message from the destination system, and initiating communication of said message responsive to said user.

This system may for example be used with instruction that is related to at least one of golf, tennis, baseball, basketball, hockey, swimming, soccer, gymnastics, cooking, knitting, arts and crafts, home improvement, and automobile repair.

The system may further receive data including at least one of video, audio, graphic and text information from the subscriber and/or instructor. Further, the subscriber and the instructor may communicate in real time. Alternatively, they may communicate in delayed time. Either or both the instructor and user may use an input device, including but not limited to at least one of a keyboard, a mouse, a microphone, a touch pen and a video camera.

The system may further comprise response data, which is sent in response to a request received from a destination system and provided by an instructor. The response data may be provided through an input device. The response data may comprise at least one of video data, audio data, graphic data and text data.

Features of other embodiments of the present invention may be used in connection with this embodiment.

According to another embodiment the present invention provides an interactive
system for providing instruction comprising an instructor system, a subscriber system and a central database. The instructor system comprises an interactive system for providing data representing instructions. Preferably the instructor system comprises: (i) a first communication interface for receiving a message including data representing a request for instruction; (ii) a first message processor for examining the request and providing an alert message to an instructor alerting the instructor; (iii) a first input processor for receiving data comprising a response to the alert message from the instructor; and (iv) a distribution processor for forwarding the response to a first destination system via said first communication interface.

In this embodiment, preferably the subscriber system comprises an input processor for receiving data representing said request for instruction, wherein said request for instruction is entered by a user. More preferably said subscriber system comprises: (i) a second input processor for receiving data representing said request for instruction entered by said user, preferably via said displayed image; (ii) a display generator for generating a user interface display image enabling said user to enter said request for instruction; (iii) a second message processor for processing the received request to provide a formatted request message for communication and initiating communication of a formatted request message to a second destination system (e.g., the instructor system); and (iv) a second communication interface for transmitting said request message to the second destination system, receiving a message responsive to said communicated formatted request message from the second destination system, and initiating communication of said responsive message to said user.

Preferably the central database is connected between the instructor system and subscriber system and comprises a memory for storing data received and transmitted by the first communication interface and second communication interface wherein the memory is partitioned into a general memory section accessible by all instructors and subscribers and individual memory sections accessible by respective individual subscribers. Preferably, the first destination system to which the instructor system is capable of forwarding a response is the subscriber system and the second destination system from which the subscriber system receives a response is the instructor system. This system may for example operate over the Internet.
According to another embodiment the present invention provides a method of providing data representing instructions comprising: (i) receiving a message comprising data representing a request for instruction; (ii) examining the request and providing an alert message to an instructor alerting the instructor to the received message; (iii) providing instruction options to a user, said instruction options including live lesson, group lesson, and access database/archive; (iv) providing the user live lesson options including connect to preselected instructor and choose instructor from a list of a plurality of available instructors upon selection of live lesson; (v) connecting the user to a chosen instructor upon selection of live lesson option; (vi) receiving response data from the instructor comprising a response to the alert message; (vii) forwarding the response data to a destination system via said communication interface; (viii) connecting the instructor to the user upon accepting a request for live lesson; (ix) providing the user group lesson options including connection to preselected group lesson and choose group lesson from a list of a plurality of available group lessons upon selection of group lesson option; (x) connecting the user to a group lesson room including at least one instructor and at least one user upon selection of group lesson; (xi) connecting the instructor to a group lesson room upon accepting a request for group lesson; (xii) connecting the user to the memory representing the database/archive upon selection of access database/archive; and (xiii) storing the request data and response data at a central database, said stored request data and response data being accessible by at least one of a user at the destination system and the instructor.

The present invention is disclosed for use in providing individualized or group personal golf lessons and instructions. However, this system may be used for providing individualized or group personal lessons and instruction for any number of different activities including but not limited to tennis, baseball, basketball, hockey, soccer, tennis, gymnastics, cooking, knitting, arts and crafts, home improvement, and automobile repair.

While certain novel features of this invention have been shown and described and are pointed out in the annexed claims, it is not intended to be limited to the details above, because it will be understood that various omissions, modifications, substitutions and changes in the forms and details of the system and methods illustrated and in its operation can be made by those skilled in the art without departing in any way from the spirit of the present invention.
CLAIMS

What is claimed:

1. An interactive system for providing data representing instructions said system comprising: a communication interface for receiving a message including data representing a request for instruction; a message processor for examining the request and providing an alert message to an instructor alerting the instructor to the request; an input processor for receiving data comprising a response to the alert message from the instructor, wherein said response comprises response data; and a distribution processor for forwarding the response data to a destination system via said communication interface.

2. The interactive system of claim 1, wherein the instruction is related to at least one of golf, tennis, baseball, basketball, hockey, soccer, swimming, gymnastics, cooking, knitting, arts and crafts, home improvement, and automobile repair.

3. The interactive system of claim 1, wherein the request is prepared by a subscriber.

4. The interactive system of claim 3, wherein the communication interface further receives data comprising at least one of video, audio, graphic, and text information from the subscriber.

5. The interactive system of claim 1, wherein the response data is formatted into an output format compatible with the destination system.

6. The interactive system of claim 4, wherein the response data forwarded to the destination system comprises instructional information responding to the at least one of
video, audio, graphic, and text information.

7. The interactive system of claim 3, wherein the subscriber and the instructor communicate with one another in real time.

8. The interactive system of claim 1, further comprising an input device connected to the input processor, wherein the input device comprises at least one of a keyboard, a mouse, a microphone, a touch pen, and a video camera.

9. The interactive system of claim 8, wherein the response data forwarded to the destination system is provided by the instructor via the input device.

10. The interactive system of claim 9, wherein the response data forwarded to the destination system includes at least one of video data, audio data, graphic data and text data.

11. The interactive system of claim 1, wherein the distribution processor system comprises at least one of a telephone modem, cable modem, and wireless transmitter.

12. The interactive system of claim 1, wherein the system is compatible with at least one of Internet, LAN, and WAN.

13. The interactive system of claim 1, wherein the system further comprises a central database for storing all data received by the communication interface and forwarded by the distribution processor.

14. The interactive system of claim 1, wherein said instructor can communicate with any of individual subscribers, a plurality of subscribers, or one or more select subscribers at any one time.

15. The interactive system of claim 1, wherein a user is required to have a subscription to gain access.
16. The interactive system of claim 1, further comprising a memory for storing data received and transmitted by the communication interface wherein the memory is partitioned into a general memory section and individual memory sections,

17. The interactive system of claim 16, wherein the general memory section is accessible by a plurality of instructors and subscribers; and the individual memory sections are accessible by respective individual subscribers.

18. The interactive system of claim 4, wherein the instruction concerns golf and the received request includes a request for instructional assistance with at least one of grip, foot position, head position, posture, swing plane angle, game plan, golf course conditions, and lie position of the golf ball.

19. The interactive system of claim 18, wherein the response data provides instruction and commentary concerning the received request.

20. The interactive system of claim 1, wherein the request is received by a handheld device.

21. The interactive system of claim 1, wherein the request is transmitted from a handheld device.

22. An interactive system for receiving data representing instructions comprising: an input processor for receiving data representing a request for instruction entered by a user;

   a display generator for generating a user interface display image enabling a user to enter a request to receive instructions;

   a message processor for processing the received request to provide a formatted request message for communication and initiating communication of a formatted request message to a destination system; and
a communication interface for:
transmitting said request message to the destination system;
receiving a message responsive to said request message from the destination system; and
initiating communication of said message responsive to said request message.

23. The interactive system of claim 22, wherein the instruction is related to at least one of golf, tennis, baseball, basketball, hockey, swimming, soccer, gymnastics, cooking, knitting, arts and crafts, home improvement, and automobile repair.

24. The interactive system of claim 22 further comprising and alert message.

25. The interactive system of claim 22, wherein the communication interface further receives data including at least one of video, audio, graphic, and text information from a subscriber.

26. The interactive system of claim 22 further comprising response data, wherein the response data is formatted into an output format compatible with the destination system.

27. The interactive system of claim 25, wherein the response data is instructional information responding to the at least one of video, audio, graphic, and text information.

28. The interactive system of claim 22, wherein said system may be used by a subscriber and an instructor to communicate with one another in real time.

29. The interactive system of claim 22 further comprising an input device connected to the input processor, wherein the input device comprises at least one of a keyboard, a mouse, a microphone, a touch pen, and a video camera.
30. The interactive system of claim 29 further comprising response data, wherein the response data is responsive to said request message and provided by an instructor via the input device.

31. The interactive system of claim 30, wherein the response data comprises at least one of video data, audio data, graphic data, and text data.

32. The interactive system of claim 22, further comprising a distribution processor system comprising at least one of a telephone modem, cable modem, and wireless transmitter.

33. The interactive system of claim 22, wherein the system is compatible with at least one of Internet, LAN and WAN.

34. The interactive system of claim 22, wherein the system further comprises a central database for storing all data received by the communication interface and forwarded by the distribution processor.

35. The interactive system of claim 22, wherein an instructor can communicate with any of individual subscribers, a plurality of subscribers, or select subscribers at any one time.

36. The interactive system of claim 22, wherein the user is required to have a subscription to gain access.

37. The interactive system of claim 22 further comprising a memory for storing data received and transmitted by the communication interface, wherein the memory is partitioned into a general memory section and individual memory sections.

38. The interactive system of claim 36, wherein the general memory is accessible by a plurality of instructors and subscribers and the individual memory sections are accessible by respective individual subscribers.
39. The interactive system of claim 23, wherein the instruction concerns golf and is provided in the form of data comprising instruction for assistance with at least one of grip, foot position, head position, posture, swing plane angle, game plan, golf course conditions, and lie position of the golf ball,

40. The interactive system of claim 39 further comprising response data, wherein the response data provides instruction and commentary.

41. The interactive system of claim 22, wherein the request is received by a handheld device.

42. The interactive system of claim 22, wherein the request is transmitted from a handheld device.

43. An interactive system for providing instruction comprising:
   an instructor system including an interactive system for providing data representing instructions, wherein said instructor system comprises:
   a first communication interface for receiving a message including data representing a request for instruction;
   a first message processor for examining the request and providing an alert message;
   a first input processor for receiving data comprising a response to the alert message; and
   a distribution processor for forwarding the response to a first destination system via said first communication interface;
   a subscriber system including a second input processor for receiving data representing said request for instruction, wherein said request for instruction is entered by a user and said subscriber system comprises:
   said second input processor for receiving data representing said request for instruction entered by said user via a displayed image;
   a display generator for generating a user interface display image enabling said user to enter said request for instruction;
a second message processor for processing the received request to
provide a formatted request message for communication and initiating communication of
a formatted request message to a second destination system; and

a second communication interface for:

transmitting said request message to the second destination
system;

receiving a message responsive to said communicated
formatted request message from the second destination
system; and

initiating communication of said response to said user; and

a central database connected between the instructor system and subscriber
system, further comprising: a memory for storing data received and transmitted by the
first communication interface and the second communication interface wherein the
memory is partitioned into a general memory section accessible by all instructors and
subscribers and individual memory sections accessible by respective individual
subscribers.

44. A method of providing data representing instructions comprising:

receiving a message including data representing a request for instruction;

examining the request and providing an alert message to an instructor

alerting the instructor to the message;

providing instruction options to a user, said instruction options including
live lesson, group lesson, and access database/archive;

providing the user live lesson options including connect to preselected
instructor and choose instructor from a list of a plurality of available instructors upon
selection of live lesson;

connecting the user to a chosen instructor upon selection of live lesson
option;

receiving response data from the instructor comprising a response to the
alert message;

forwarding the response data to a destination system via said
communication interface;

connecting the instructor to the user upon accepting a request for live
lesson;
providing the user group lesson options including connection to preselected
group lesson and choose group lesson from a list of a plurality of available group lessons
upon selection of group lesson option;

connecting the user to a group lesson room including at least one instructor
and at least one user upon selection of group lesson;

connecting the instructor to a group lesson room upon accepting a request for
group lesson; and

connecting the user to memory representing the database/archive upon
selection of access database/archive; and

storing request data and response data at a central database, said stored
request data and response data being accessible by at least one of a user at the destination
system and the instructor.
FIG. 5
CREATE GOLFER GAME PLAN

CHOOSE GOLFER SKILL LEVEL

BEGINNER

DEVELOP GAME PLAN FOR EACH TYPE OF SHOT AND CLUB

INTERMEDIATE

DEVELOP GAME PLAN FOR EACH TYPE OF SHOT AND CLUB

PROFESSIONAL

DEVELOP GAME PLAN FOR EACH TYPE OF SHOT AND CLUB

FIG. 8
FIG. 9

MEMBERSHIP

BASIC MEMBERSHIP

10 MINUTE SWING ANALYSIS

STORAGE CAPACITY FOR TWO SWING VIDEOS

ADVANCED MEMBERSHIP

20 MINUTE SWING ANALYSIS

ADDITIONAL STORAGE CAPACITY WITH PURCHASE OF ADDITIONAL CONSULTATION

STORAGE CAPACITY FOR TWO SWING VIDEOS

GOLF TABLET

GROUP LESSONS

ONLINE CHAT
FIG. 10
FIG. 11