A DEVICE SUITABLE FOR USE BY A USER FOR COMMUNICATING GRAPHIC DATA

Field Of Invention

The present disclosure generally relates to data processing. More particularly, various embodiments of the disclosure relate to a device suitable for use by a user for communicating graphic data.

Background

Learners of a language, such as the English language or the Chinese language, can learn the language by, for example, learning to write or pronounce a letter of the English alphabet or a character of the Chinese language. A letter or a character of a language can generally be formed by one or more basic strokes. A letter or a character of a language can also be generally associated with a pronunciation.

Conventional techniques to facilitate a learner's learning a language include requiring the learner to emulate a letter or a character of the language by reproducing strokes associated with the letter or character on writing materials such as paper.

Appreciably, a learner who is beginning to learn a language may not be able to accurately emulate a letter or character of the language at the first instance. Hence, the learner may be required to emulate the letter or character on a writing material in a repetitive manner. As such, depending on the learner's learning progress, more writing materials may be required.

Furthermore, a person familiar with the language, which the learner is learning, may be required to provide feedback based on the letter or character emulated, on the writing material, by the learner. Thus a person familiar with the language may be required to monitor the learner's learning progress.

Conventional techniques to facilitate a learner's learning a language further include requiring the learner to pronounce a letter or a character of the language. Appreciably, a person familiar with the language may similarly be required to provide feedback based on the letter or character pronounced.

As such, conventional techniques may not be capable of facilitating a learner's learning a language in a suitably efficient manner.

It is therefore desirable to provide a solution to address at least one of the foregoing problems of conventional techniques.

Summary of the Invention

In accordance with an aspect of the disclosure, a device is provided. The device can be suitable for use by a user for communicating graphic data. Graphic data communicated can be associated with font unique to the user.

The device includes an input portion and a processing portion coupled to the input portion.

Input signals can be communicated from the input portion. The input portion can include at least one of a graphic input segment for communicating graphic data and a control input segment for communicating control data. The input signals can correspond to at least one of graphic data and control data.

Input signals can be received at the processing portion and can be processed in a manner so as to produce output signals. The output signals can be capable of being based upon to produce display data corresponding to replication data.

Replication data can be substantially a replication of the graphic data which is associable with font unique to the user.

Brief Description of the Drawings

Embodiments of the disclosure are described hereinafter with reference to the following drawings, in which:

Fig. 1a shows a system which includes an input portion, a processing portion and a display portion, according to an embodiment of the disclosure;

Fig. 1b shows the system of Fig. 1a in further detail;

Fig. 2a to Fig. 2d show an exemplary application of the system of Fig. 1a which can be in the form of an electronic device 200;

Fig, 2e shows an exemplary implementation of the electronic device of Fig. 2a;

Fig. 3a to Fig. 3c illustrate, in accordance with an embodiment of the disclosure, numerical representation and graphical representation of indicator data which can be displayed at the display portion of the system of Fig. 1a;

Fig. 4a shows a first play mode of the electronic device of Fig. 2a;

Fig. 4b and Fig. 4c show a second play mode of the electronic device of Fig. 2a; and

Fig. 5 is a flow diagram illustrating a processing method which can be implemented in association with the system of Fig. 1a, in accordance with another embodiment of the disclosure.

Detailed Description

Representative embodiments of the disclosure, for addressing one or more of the foregoing problems associated with conventional techniques, are described hereinafter with reference to Fig. 1 to Fig. 5.

A system 100, in accordance with an embodiment of the disclosure, is shown in Fig. 1a. The system 100 includes an input portion 110, a processing portion 120 and a display portion 130. The system 100 can further include a communication portion 140. The input potion 110 is coupled to the processing portion 120. The processing portion 120 is coupled to the display portion 130. The communication portion 140 can be coupled to the processing portion 120.

The input portion 110 can be configured to data communicate with the processing portion 120 in a manner such that input signals can be communicated from the input portion 110 to the processing portion 120.

The processing portion 120 can be configured to receive and process the input signals in a manner so as to produce output signals.

The display portion 130 can be a screen. More specifically, the display portion 130 can either be a touch sensitive type screen or a non-touch sensitive type screen. Based on the output signals, display data can be displayed at the display portion 130.

The communication portion 140 can, for example, be a transceiver configured for one or both of wired communication and wireless communication over a communication medium or communication network.

Referring to Fig. 1b, the input portion 110 includes one or both of a graphic input segment 110a and a control input segment 110b. The input portion 110 can further include an audio input segment 110c.

The graphic input segment 110a can be configured to communicate graphic data to the processing portion 120. The control input segment 110b can be configured to communicate control data to the processing portion 120. The audio input segment 110c can be configured to communicate audio data to the processing portion 120. In this regard, the input signals can include any one of graphic data, audio data and control data, or any combination thereof.

The input portion 110 can be one or both of a software based implementation and a hardware based implementation, as will be further discussed with reference to Fig. 2.

The processing portion 120 can include one or both of a processor 120a and an audio processing module 120b.

In one embodiment, the processor 120a and the audio processing module 120b can be configured to receive and process the graphic data and the audio data respectively to produce indicator data. In another embodiment, the processor 120a can be configured to receive and process the graphic data and the audio data to produce indicator data. In yet another embodiment, the processor 120a can be configured to receive and process the graphic data to produce replication data. The replication data can be based on the graphic data.

The processor 120a can be further configured to receive and process control data such that character data can be displayed at the display portion 130. Additionally, based on indicator data,

the processor 120a can be configured to communicate consolidated data. Therefore the output signals can include one or both of indicator data and character data. Moreover, the output signals can further include consolidated data.

Earlier mentioned, based on the output signals, display data can be displayed at the display portion 130. In this regard, the display data can correspond to any one of the indicator data, character data and consolidated data, replication data or any combination thereof.

The system 100 will be described in further detail hereinafter with reference to an exemplary application which can be in the form of a device such as an electronic device 200 as shown in Fig. 2a to Fig. 2e. The electronic device 200 can, for example, be an electronic tablet which can be used by a user (not shown). Additionally, the electronic device 200 can be one of powered up and powered down via conventional power on/off arrangements which will not be further discussed for the purposes of brevity.

Fig. 2a provides a general overview of the electronic device 200. Fig. 2b provides an isometric view of the electronic device 200 of Fig. 2a. Additionally, the input portion 110 can be implemented and displayed by the electronic device 200 in one or more exemplary manners which will be further discussed with reference to Fig. 2c and Fig. 2d. Furthermore, the electronic device 200 will be discussed in further detail with reference to an exemplary implementation 202 with respect to Fig. 2e.

Referring to Fig. 2a and Fig. 2b, the electronic device 200 includes a casing 205, a screen 210 and a microprocessor 220. The electronic device 200 can optionally include an audio module 230, a transceiver 240 and an input module 245. The casing 205 can be dimensioned to house the screen 210 such that the screen 210 is visible to the user. Additionally, the casing 205 can be dimensioned to house the microprocessor 220, the audio module 230, the transceiver 240 and the input module 245. For example, as shown in Fig. 2b, the microprocessor 220 can be housed within the casing 205 and is not accessible to the user whereas the audio module 230, the transceiver 240 and the input module 245 can be accessible to the user.

The screen 210 can be coupled to the microprocessor 220 for signal communication therebetween. Additionally, the microprocessor 220 can be coupled to each of the audio module 230, the transceiver 240 and the input module 245.

The screen 210 can be either a touch sensitive type screen such as a touch screen or a non-touch sensitive type screen. The audio module 230 can, for example, be a microphone which can be configured to detect audio signals from a user. Based on the audio signals detected, the audio module 230 can be configured to communicate audio data to the microprocessor 220. The input module 245 can include, for example, a touchpad, buttons or switches for one or both of communicating graphic data and control data.

The screen 210 can correspond to the aforementioned display portion 130. The screen 210 can further correspond to the input portion 110 or a part of the input portion 110, depending on whether the input portion 110 is software implemented, hardware implemented or both hardware and software implemented.

Additionally, the microprocessor 220 can correspond to the aforementioned processing portion 120. Particularly, the microprocessor 220 can correspond to either one or both of the processor 120a and the audio processing module 120b.

Furthermore, where included, the audio module 230 and the input module 245, as with the screen 210, can correspond to the input portion 110 or a part of the input portion 110, depending on whether the input portion 110 is software implemented, hardware implemented or both hardware and software implemented.

Earlier mentioned, the input portion 110 can be one or both of software implemented and hardware implemented.

In one embodiment, as shown in Fig. 2c, the input portion 110 can be software implemented and the screen 210 can be a touch sensitive type screen. The input portion 110 can, for example, be software implemented in a form of a graphics user interface (GUI) 250 which is displayable on the screen 210. The GUI 250 can have a first interface portion 250a corresponding to the graphic input segment 110a and a second interface portion 250b corresponding to the control input

segment 110b. In this regard, the screen 210 can include a first touch screen area and a second touch screen area corresponding to the first and second interface portions 250a/250b respectively.

In this regard, the first and second interface portions 250a/250b can be used to communicate graphic data and control data respectively.

In another embodiment, further shown in Fig. 2c, the input portion 110 can be software and hardware implemented, and the screen 210 can be a touch sensitive type screen. The input portion 110 can, for example, be software implemented in a form of the aforementioned GUI 250. The input portion 110 can, for example, be hardware implemented using the audio module 230. In this regard, the GUI 250 can, in addition to the first and second interface portions 250a/250b, further include a third interface portion 250c corresponding to the audio input segment 110c. Thus, the screen 210 can further include a third touch screen area corresponding to the third interface portion 250c.

In this regard, the first and second interface portions 250a/250b can be used to communicate graphic data and control data respectively. Additionally, the third interface portion 250c can be used to communicate an activation signal to the audio module 230. Upon detection of the activation signal, the audio module 230 can be operated to detect and receive audio signals from the user.

In yet another embodiment, as shown in Fig. 2d, the input portion 110 can be hardware implemented. The input portion 110 can, for example, be hardware implemented using one or both of the audio module 230 and the input module 245. In this regard, the aforementioned GUI 250 having the first, second and third interface portions 250a/250b/250c can be displayed on the screen 210. However it may not necessary for the screen 210 to be of a touch sensitive type screen.

In this regard, the input module 245 which can, for example, be a touchpad, can be used to communicate one or both of graphic data and control data. For example, a user can contact the touchpad which can be capable of translating motion and position of the user's contact to a relative position on screen 210 corresponding to any of the first, second and third interface portions 250a/250b/250c. Thus, any of the graphic data, control data and audio data can similarly be communicated as discussed above.

Furthermore, the above mentioned input portion 110 can be configured such that graphic data can be communicated in an ergonomic manner. Specifically, the input portion 110 can be configured such that graphic data can be ergonomically communicated by either a user who is a left hander or a user who is a right hander. In one example, where the user is a left hander, the input portion 110 can be configured such that the first interface portion 250a can be located at the left side of the screen 210 relative to the user facing the screen 210. In another example, where the user is a right hander, the input portion 110 can be configured such that the first interface portion 250a can be located at the right side of the screen 210 relative to the user facing the screen 210.

Referring to Fig. 2e, the aforementioned exemplary implementation 202 can be such that the input portion 110 is software and hardware implemented, and the screen 210 can be a touch sensitive type screen, as discussed earlier. In the exemplary implementation 202, the electronic device 200 can be configured to operate in one or more of a plurality of operation modes. The plurality of operation modes can include a graphic recognition mode and a voice recognition mode. Thus, the electronic device 200 can be configured to operate in one or both of the graphic recognition mode and the voice recognition mode.

Earlier mentioned, the first, second and third interface portions 250a/250b/250c can correspond to the graphic input segment 110a, the control input segment 110b and the audio input segment 110c respectively.

Thus control data can be communicated via the second interface portion 250b to the microprocessor 220 so as to control operation mode of the electronic device 200. In one example, control data can be communicated via the second interface portion 250b such that the electronic device 200 operates in the graphic recognition mode. In another example, control data can be communicated via the second interface portion 250b such that the electronic device 200 operates in the voice recognition mode. In yet another example, control data can be communicated via the second interface portion 250b such that the electronic device 200 operates in both the graphic and voice recognition modes.

In either one or both of the graphic recognition mode and the voice recognition mode, the microprocessor 220 can, upon receipt of control data, be configured to communicate output signals such that display data corresponding to character data can be displayed at the screen 210.

The character data can correspond to a graphic symbol 260 which can be displayed on the screen 210 as display data. The graphic symbol 260 can, in one example, be a character such as a letter of the English alphabet. For example, the graphic symbol 260 can correspond to the letter "A". The graphic symbol 260 can, in another example, correspond to a character in another language such as Mandarin. As shown, the graphic symbol 260 can correspond to the character "天" in Mandarin. In yet another example, the graphic symbol 260 can correspond to more than one character. More specifically, the graphic symbol 260 can correspond to a string of characters.

When in the graphic recognition mode, a user can emulate the displayed graphic symbol 260 by providing appropriate basic strokes 270 via the first interface portion 250a. In this regard, the basic strokes 270 provided are communicated as graphic data from the graphic input segment 110a to the microprocessor 220 which can be configured to determine whether or not the appropriate strokes have been provided.

For example, where the graphic symbol 260 displayed on the screen 210 is the character "天", a user is required to provide a first stroke 270a, a second stroke 270b, a third stroke 270c and a fourth stroke 270d in order to emulate the displayed graphic symbol 260. The first to fourth strokes 270a/270b/270c/270d can be communicated as graphic data from the graphic input segment 110a to the microprocessor 220.

Based on the graphic data communicated from the graphic input segment 110a, the microprocessor 220 can be configured to produce indicator data. More specifically, the microprocessor 220 can be configured to process the graphic data in a manner so as to produce indicator data. The indicator data can be indicative of various performance parameters. The performance parameters can include parameters such as accuracy in emulation of the graphic symbol 260, speed at which the graphic symbol 260 is accurately emulated and correctness in order of strokes provided. Other parameters such as penmanship can also be included.

In one example, the microprocessor 220 can be configured to determine whether or not the appropriate strokes have been provided based on whether or not the graphic symbol 260

displayed on the screen is emulated accurately. Where the microprocessor 220 makes a determination that the graphic symbol 260 has been emulated accurately, a positive indication signal can be communicated from the microprocessor 220. Otherwise, a negative indication signal can be communicated. Thus the indicator data can correspond to either the positive indication signal or the negative indication signal.

In another example, the microprocessor 220 can be configured to determine whether or not the appropriate basic strokes 270 have been provided based on whether or not order of strokes is provided correctly. For example, in the case of the character "天", for the order of strokes to be provided correctly, the first to fourth strokes 270a/270b/270c/270d should be provided in a sequential order starting with the first stroke 270a and ending with the fourth stroke 270d. If the first to fourth strokes 270a/270d/270c/270d are provided in the sequential order as described above, the microprocessor 220 can be configured to communicate a positive indication signal. Otherwise, a negative indication signal can be communicated. In this manner, the microprocessor 220 can be capable of determining whether or not the appropriate strokes have been provided, based on the order of strokes provided.

Moreover, each stroke of the basic strokes 270 can be associated with a stroke direction. As shown in Fig. 2e, each of the first to fourth strokes 270a/270b/270c/270d is illustrated via an arrow which is indicative of correct stroke direction. For example, with regard to the second stroke 270b, in order to provide a correct stroke direction, the second stroke 270b should be provided starting with a start point 270e and ending with an end point 270f. Thus, in addition to determining whether or not the appropriate basic strokes 270 have been provided based on whether or not the order of strokes is provided correctly, it can also be useful to determine whether or not stroke direction of each stroke of the basic strokes 270 is provided correctly.

In yet another example, the microprocessor 220 can be configured to determine penmanship based on the graphic data. The microprocessor 220 can, for example, be configured to determine penmanship based on any of the aforementioned accuracy in emulation, correctness in the order of strokes provided and correctness of stroke direction, or any combination thereof. In one exemplary scenario, a positive indication signal based on each of accuracy in emulation, correctness in the order of strokes provided and correctness of stroke direction can be indicative of good penmanship. In another exemplary scenario, a positive indication signal and a negative

indication signal based, respectively, on accuracy in emulation and correctness in the order of strokes provided can be indicative of poor penmanship.

In yet a further example, where the graphic symbol 260 displayed on the screen is not emulated in an exact manner (i.e., emulated partially accurately), a user can communicate control data via the second interface portion 250b such that the microprocessor 220 makes a determination that the graphic symbol 260 has been emulated partially accurately. In this situation, a partial positive indication signal can be communicated from the microprocessor 220. Thus in addition to the aforementioned positive and negative indication signals, the indicator data can further correspond to a partial positive indication signal.

Moreover, earlier mentioned, when in the graphic recognition mode, a user can emulate the displayed graphic symbol 260 by providing appropriate basic strokes 270 via the first interface portion 250a. The basic strokes 270 provided are communicated as graphic data from the graphic input segment 110a to the microprocessor 220. In this regard, it is appreciable that graphic data communicated from the graphic input segment 110a can be associated with a writing style unique to a user. The writing style unique to a user can be the handwriting or penmanship of the user. Thus graphic data can be associated with a font unique to a user. Specifically, font unique to a user can be associated with handwriting or penmanship of the user.

Further earlier mentioned, the processor 120a can be configured to receive and process the graphic data to produce replication data. The replication data can be based on the graphic data. Thus replication data can, substantially, be a replication of the font of graphic data, the font being unique to a user.

Yet further earlier mentioned, the display data can correspond to replication data. Thus graphic data and its font in association thereto, can be displayed at a portion of the screen 210.

Moreover, the electronic device 200 can be configured to operate with another electronic device such as a computer having a screen (not shown). Specifically, the electronic device 200 can be configured to communicate with the computer via one or both of wired or wireless communication.

In this regard, the display data can, optionally, be communicated from the electronic device 200 to the computer such that replication data can be displayed at the screen of the computer.

In one embodiment, the electronic device 200 can be configured to communicate display data to another electronic device in a manner such that replication data can be displayed at the screen of the, for example, computer on a substantially real-time basis. For example, as basic strokes 270 are provided via the first interface portion 250a, replication data can be displayed at the screen of the computer substantially simultaneously.

In another embodiment, the electronic device 200 can be configured to communicate display data to another electronic device in a manner such that replication data can be displayed at the screen of the, for example, computer on a delayed basis. For example, as basic strokes 270 are provided via the first interface portion 250a, replication data can be displayed at the screen of the computer after a pre-determined delay.

In yet another embodiment, the electronic device 200 can be configured to communicate display data to another electronic device in a manner such that replication data can be displayed at the screen of the, for example, computer on a user controlled basis. For example, a user can, via the second interface portion 250b, communicate control data so as to determine when replication data should be displayed on the screen of the, for example, computer. In one example, a user can communicate control data such that replication data is displayed on the screen of the computer after the first stroke 270a and the second stroke 270b. In this regard, replication data can correspond to the first and second strokes 270a/270b. In another example, a user can communicate control data such that replication data is displayed on the screen of the computer after the first to fourth strokes 270a/270b/270c/270d. In this regard, replication data can correspond to the first to fourth strokes 270a/270b/270c/270d.

Although the foregoing discussion with regard to display of replication data via any of the aforementioned substantially real-time basis, delayed basis and user controlled basis relates to communication of the electronic device 200 and another electronic device, it is appreciable that replication data can also be displayed at a portion of the screen 210 of the electronic device 200 via any of the aforementioned substantially real-time basis, delayed basis and user controlled basis. In this regard, the forgoing pertaining to via the aforementioned substantially real-time basis, delayed basis and user controlled basis analogously applies.

When in the voice recognition mode, a user can provide audio signals corresponding to the pronunciation of the displayed graphic symbol 260. The audio signals are detected and processed by the audio module 230 in a manner so as to communicate audio data to the microprocessor 220.

Based on the audio data communicated from the audio module 230, the microprocessor 220 can be configured to produce indicator data. Earlier mentioned, in relation to graphic data, the indicator data can be indicative of various performance parameters. In the case of audio data, the performance parameters can be based on parameters such as accuracy in pronunciation of the displayed graphic symbol 260 and speed at which the displayed graphic symbol 260 is accurately pronounced. In this regard, the foregoing pertaining to the discussion of indicator data based on graphic data analogously applies.

As described above, the indicator data produced can be based on a displayed graphic symbol 260 at a first instance. Appreciably a plurality of sets of indicator data can be produced corresponding to a plurality of instances.

For example, when a user emulates a displayed graphic symbol 260 at a first instance, a first set of indicator data can be produced. When the user emulates another displayed graphic symbol 260 at a second instance, a second set of indicator data can be produced.

Thus based on the plurality of sets of indicator data, the microprocessor 220 can be configured to produce the earlier mentioned consolidated data. In this regard, the microprocessor 220 can be configured to tabulate the plurality of sets of indicator data to produce consolidated data. Appreciably, by tabulating the plurality of sets of indicator data, a user of the electronic device 200 can conveniently keep track of learning progress. The plurality of sets of indicator data tabulated by the microprocessor 220 can be displayed as display data at the screen 210 in the form of, for example, pie charts, bar charts or numerical statistics.

In this regard, the indicator data and the consolidated data can be one or both of numerically represented and graphically represented. For illustrative purposes, numerical representation and graphical representation of the indicator data will be discussed in further detail with reference to Fig. 3.

Furthermore, in either of the graphic recognition mode and voice recognition mode, the electronic device 200 is operable in one of a plurality of user preference modes. The plurality of user preference modes can include a beginner mode, an intermediate mode and an expert mode. The plurality of user preference modes can further include a training mode, a first play mode and a second play mode. Control data can be communicated via the second interface portion 250b to the microprocessor 220 such that the electronic device 200 can be operated in one of the plurality of user preference modes.

In one example, in the beginner mode, a user may only be required to emulate a simple character associated with four or less strokes such as the aforementioned character "天". In the intermediate mode, the user may be required to emulate a relatively more complicated character associated with more than four strokes. In the expert mode, the user may be required to emulate a yet more complicated character associated with yet more strokes as compared with a character in the intermediate mode.

In another example, a user may be required to emulate a single character in the beginner mode. In the intermediate mode, the user may be required to emulate a string of characters. In the expert mode, the user may be required to emulate a longer string of characters as compared to the string of characters in the intermediate mode.

In yet another example, in the training mode, the electronic device 200 can be configured to display indicator data in a manner, as will be discussed in further detail with reference to Fig 3, at the screen 210 so as to provide the user with an indication indicative of learning progress.

In yet a further example, the electronic device 200 can be operated in one of the first and second play modes, as will be discussed in further detail with reference to Fig. 4.

Referring to Fig. 3a, the electronic device 200 can be configured to display a score segment 310 at the screen 210. Earlier mentioned, the indicator data can be one or both of numerically represented and graphically represented. In particular, the indicator data can be one or both of numerically and graphically represented via the score segment 310 as will be further illustrated in Fig 3b and Fig. 3c respectively. Furthermore, indicator data can be one or both of numerically and graphically represented via a first representation scheme and a second representation scheme.

In the first representation scheme, in one example, indicator data can be one or both of numerically and graphically represented in a manner such that for every accurately emulated or pronounced displayed graphic character 260, a score can be awarded. In another example, indicator data can be one or both of numerically and graphically represented in a manner such that for every partially accurately emulated or pronounced displayed graphic character 260, another score can be awarded. Thus, the first representative scheme can be a scoring scheme in which a score can be awarded for every accurately emulated or pronounced displayed graphic character 260. The first representative scheme can also be a scoring scheme in which another score can be awarded for every partially accurately emulated or pronounced displayed graphic character 260.

In the second representative scheme, indicator data can be one or both of numerically and graphically represented in a progressive manner. Specifically, the indicator data can be one or both of numerically and graphically represented such that user learning progress can be indicated. For example, in the training mode where a user is required to emulate a displayed graphic character 260 corresponding to the character "天", for every stroke of the basic strokes 270 accurately provided, one or both of a numeric and graphic indication can be provided. In this manner, a user can be conveniently kept abreast of the user learning progress in real-time.

Referring to Fig. 3b, the numerical representation can, in one example, be in the form of scored points 320. In one scenario, for each character emulated accurately, a score of, for example, fifty points can be awarded. In another scenario, for each stroke accurately provided, a score of, for example, fifty points can be awarded. In yet another scenario, for each character emulated partially accurately, a score of, for example, ten points can be awarded. The numerical representation can, in another example, be in the form of percentages. In one scenario, for each character emulated accurately, a score of, for example, ten percent can be awarded. In another scenario, for each stroke accurately provided, a score of, for example, ten percent can be awarded. In yet another scenario, for each character emulated partially accurately, a score of, for example, five percent can be awarded.

Referring to Fig. 3c, the graphical representation can, in one example, be in the form of animated illustrations such as a plurality of treasure chests 330. Each of the plurality of treasure chests 330 can be initially presented in a form of a secured treasure chest 330a. In one scenario, for each character emulated accurately, the plurality of treasure chests 330 can be animated such that an

originally secured treasure chest 330a can become unsecured to become an unsecured treasure chest 330b. In another scenario, for each stroke accurately provided, the plurality of treasure chests 330 can be animated such that an originally secured treasure chest 330a can become unsecured to become an unsecured treasure chest 330b. In yet a further scenario, where a character is emulated partially accurately, the plurality of treasure chests 330 can be animated such that an originally secured treasure chest can become partially unsecured to become a partially unsecured treasure chest (not shown).

Earlier mentioned, the electronic device 200 can be operated on one of a first play mode and a second play mode. The first play mode is illustrated with reference to Fig. 4a. The second play mode is illustrated with reference to Fig. 4b and Fig. 4c.

Referring to Fig. 4a, the first play mode can, for example, be an online competition mode 400 where a user of the electronic device 200 can competitively compete with a user of another electronic device 410 which is analogous to the electronic device 200. In this regard, the aforementioned another electronic device 410 can include a communication portion (not shown) analogous to that of the communication portion 140 of the electronic device 200. Appreciably, the first play mode can be useful for applications such as online gaming.

Specifically, when in the online competition mode 400, the electronic device 200 and the aforementioned another electronic device 410 can be configured to communicate with one another. The electronic devices 200/410 can communicate with each other via a communication network 450. Thus the communication portions of the respective electronic devices 200/410 can be configured for one or both of wired communication and wireless communication over the communication network 450 such that the electronic device 200 and the aforementioned another electronic device 410 can communicate with one another for applications such as online gaming.

Additionally, when in the online competition mode 400, one or both of the electronic device 200 and the aforementioned another electronic device 410 can also be configured to communicate with a plurality of other electronic devices 460 via the communication network 450. In this regard, the above description pertaining to communication between the electronic device 200 and the aforementioned another electronic device 410 analogously applies.

Referring to Fig. 4b, the second play mode can, for example, be an offline competition mode 470 where a plurality of users 480 can compete with one another via the electronic device 200. For example each user from the plurality of users 480 can take turns using the electronic device 200 and the score associated with each user can be compared thereafter.

Referring to Fig. 4c, the second play mode can, for example, be a standalone mode 490 where the electronic device 200 is configured for use by a single user 495. When in the standalone mode 490, the single user 495 can operate the electronic device 200 in one of the aforementioned plurality of user preference modes such as the beginner mode, the intermediate mode, the expert mode and the training mode.

In accordance with another embodiment of the disclosure, as shown in Fig. 5, a processing method 500 can be implemented in association with the system 100.

The processing method 500 includes providing control input 510 wherein control data can be communicated from the input portion 110 to the processing portion 120. As mentioned earlier, control data can be communicated from the control input segment 110b.

The processing method 500 further includes displaying graphic symbol 520 wherein based on the control data the processing portion 120 can be configured to produce output signals. The output signals can include character data corresponding to the graphic symbol 260.

Additionally, the processing method 500 can also include receiving user input 530 wherein based on the graphic symbol 260, input signals corresponding to one or both of graphic data and audio data can be communicated to the processing portion 120. The graphic data and the audio data can be communicated from the graphic input segment 110a and the audio input segment 110c respectively.

The processing method 500 further includes determining performance characteristics 540 wherein the processing portion 120 can be configured to process one or both of the graphic data and the audio data to produce indicator data.

The processing method 500 yet further includes displaying performance result 550 wherein indicator data can be displayed as display data at the display portion 130.

In the foregoing manner, various embodiments of the disclosure are described for addressing at least one of the foregoing disadvantages. Such embodiments are intended to be encompassed by the following claims, and are not to be limited to specific forms or arrangements of parts so described and it will be apparent to one skilled in the art in view of this disclosure that numerous changes and/or modification can be made, which are also intended to be encompassed by the following claims.

Claims

1. A device suitable for use by a user for communicating graphic data, graphic data communicated being associable with font unique to the user, the device comprising:

an input portion from which input signals are communicable, the input portion having at least one of a graphic input segment for communicating graphic data and a control input segment for communicating control data, the input signals corresponding to at least one of graphic data and control data;

a processing portion coupled to the input portion such that input signals are receivable therefrom and processed in a manner so as to produce output signals, the output signals being capable of being based upon to produce display data corresponding to replication data, replication data being substantially a replication of the graphic data which is associable with font unique to the user.

2. The device as in claim 1 further comprising a display portion coupled to the processing portion such that output signals are receivable therefrom and displayable via at least a portion of the display portion as display data corresponding to replication data.

3. The device as in claim 2, wherein replication data is displayable via at least a portion of the display portion on a substantially real time basis.

4. The device as in claim 2, wherein replication data is displayable via at least a portion of the display portion on a delayed basis.

5. The device as in claim 2, wherein replication data is displayable via at least a portion of the display portion on a user-controlled basis.

6. The device as in claim 5, wherein control data is communicable from the control input segment such that replication data is displayable via at least a portion of the display portion on a user controlled basis.

7. The device as in claim 1 wherein the device is configurable to communicate display data to another device having a screen.

8. The device as in claim 7, wherein replication data is displayable at the screen on a substantially real time basis.

9. The device as in claim 7, wherein replication data is displayable at the screen on a delayed basis.

10. The device as in claim 7, wherein replication data is displayable at the screen on a user-controlled basis.

11. The device as in claim 10, wherein control data is communicable from the control input segment such that replication data is displayable at the screen on a user controlled basis.

12. The device as in claim 1, wherein font unique to the user is associable with one of handwriting and penmanship of the user.