A METHOD AND APPARATUS FOR TICKET RESERVATION AND PAYMENT

Technical Field

This invention relates to the field of electronic commerce and more specifically to a method and apparatus for ticket reservation and payment.

Background Art

Fee-based entertainment is typically delivered via reserved seating. Ways currently exist for a person to purchase tickets at an event, over the telephone or via a computer connected to a ticket broker over the Internet. Drawbacks to these current methods include: 1) Seats are typically chosen by the ticket broker based on the ticket broker's determination of the best available seating; 2) Inefficiencies of customer service personnel, which may contribute to customer frustration and higher ticket broker operating costs. The ticket broker's choice of what is considered to be the best available seating may not be satisfactory for every purchaser. Also, typically the only choice is whether to purchase the ticket or not. There is no option to reserve seating for a period of time during which the user can look for other tickets or make other arrangements.

Brief Description of Drawings

For a more complete understanding of the present invention and advantages thereof, reference is now made to the following descriptions, taken in conjunction with the following drawings, in which like reference numerals represent like parts, and in which:

FIG. 1 illustrates a plurality of personal devices coupled to a ticket server in accordance with the present invention;

FIG. 2 illustrates a more detailed block diagram of an exemplary personal device and ticket server of the FIG. 1 diagram:

FIG. 3 illustrates a flowchart illustrating the operation of a preferred method embodiment in accordance with the present invention;

FIG. 4 is a flowchart with an expanded illustration of how a view from the seats is provided according to the FIG. 3 method;

FIG. 5 is an exemplary illustration of how a view from a seat depends on the activity;

FIG. 6 is a flowchart illustrating reserving a selected seat in accordance with a method embodiment of the present invention; and

FIG. 7 is a flowchart illustrating procuring additional services according to the present invention.

Disclosure of the Invention

Turning first to the nomenclature of the specification, the detailed description which follows is represented largely in terms of processes and symbolic representations of operations by conventional computer components, including a central processing unit ("CPU") or processor associated with a general purpose computer system, memory storage devices for the CPU, and connected pixel-oriented display devices. These operations include the manipulation of data bits by the CPU and the maintenance of these bits within data structures resident in one or more of the memory storage devices. Such data structures impose a physical organization upon the collection of data bits stored within computer memory and represent specific electrical or magnetic elements. These symbolic representations are the means used by those skilled in the art of computer programming and computer construction to most effectively convey teachings and discoveries to others skilled in the art.

In addition, it should be understood that the programs, processes, methods, etc. described herein are but an example of one implementation of the present invention and are not related or limited to any particular computer, apparatus or computer language. Rather, various types of general purpose computing machines or devices may be used with programs constructed in accordance with the teachings described herein. Similarly, it may prove advantageous to construct a specialized apparatus to perform the method steps described herein by way of dedicated computer systems with hardwired logic or programs stored in non-volatile memory, such as read only memory.

Referring now in more detail to the drawings, FIG. 1 is a diagram in accordance with an embodiment of this invention illustrating a plurality of user devices 102 coupled to a remote ticket server 104 by communication links 110 (which can be a hard wired line or wireless means of communication). User devices 102 are connected to ticket server 104 in a variety of ways, based on the type of user devices.

User device 102 can be one of many different devices including, but not limited to, a standalone kiosk 112, a personal digital assistant 114, a user computer 116, an enhanced cellular phone 118, or any other device that is operable to connect, either wirelessly or through wired connections, to remote ticket server 104.

Ticket server 104, in one embodiment, is a computer such as a personal computer, file server, workstation, minicomputer, mainframe, or any other computer capable of communicating and interconnecting with other computers. Ticket server 104 preferably includes a processor, input/output device such as a mouse, modem, keyboard, monitor; as well as storage means such as a floppy and/or hard disk drive, and memory. Communication line 110 may be any type of communication link capable of supporting data transfer. For example, communication lines 110 may include any combination a hard wired line, a dial-up telephone link or a wireless radio-frequency or infrared connection, depending on the user device that is accessing ticket server 104.

In operation, the various user devices 102, such as a personal digital assistant 114, communicate with ticket server 104. For example, personal digital assistant 114 connects to ticket server 104 in order to request ticket information and enable seat selection.

FIG. 2 is a block diagram illustrating user device 102 (which may be, in this example, a personal digital assistant 114), and a remote ticket server 104. User device 102, in one embodiment, includes a processor 208, input/output ("I/O") devices 212, and memory 202. Processor 208, under the control of an operating system 204, controls the operation of user device 102 and is used to retrieve, process, store, and display data. Operating system 204 and a communication program 206 are stored in client memory 202. Client memory 202 may be a random access memory ("RAM"), Read-only memory ("ROM"), or other types of memory. Other programs may also be stored in client memory 202 such as a voice recognition program and a text to speech program.

Processor 208 is typically implemented as a microprocessor, such as those manufactured by INTEL, MOTOROLA, or HITACHI. Processor 208 may include an arithmetic logic unit to assist in performing mathematical operations. Processor 208 communicates control, address, and data signals with operating system 204 and with the remaining components of user device 102. Processor 208 interprets and executes instructions that have been fetched or retrieved from client memory 202 and may be implemented as a single integrated circuit or as a combination of integrated circuits. Operating system 104 may be any operating system designed to operate on a handheld device.

I/O devices 212 may include any peripheral that allows data to be exchanged or entered into user device 102 and may include such devices as a keyboard, a monitor, a printer, a modem, a RF transmitter, a speaker, a microphone, a pointing device, such as a mouse, a floppy disk drive, a mass storage device, such as a hard disk drive, and the like.

Operating system 204 includes a set of computer programs that control the internal functions of user device or client 102, thereby allowing client 102 to run application programs. Operating system 204 is typically stored in and provided from a mass storage device, such as a hard disk drive, a floppy disk drive, a CD/ROM drive or a ROM chip. During start-up or initialization of client 102, operating system 204 is loaded into client memory 202. Application programs, such as communication program 206, may also be loaded into client memory 202 along with operating system 204.

Communication program 206, in one embodiment, allows user device 102 to connect to and communicate with remote ticket server 104 in order to initiate a ticket transaction.

Remote ticket server 104 typically includes a server memory 223, a processor 224, and a mass storage device 226. Remote ticket server 104 also preferably includes various I/O devices 228.

Operating system 220 and a ticket distribution program 222 are stored in mass storage device 226 and are shown loaded into server memory 223. Processor 224, in conjunction with operating system 220, controls the operation of remote ticket server 104. Processor 224 fetches and executes various instructions stored in server memory 223. Operating system 220 operates similarly to operating system 204 of user device 102 and includes a set of computer programs that control the internal functions of remote ticket server 104. Operating system 220 controls the allocation and usage of hardware resources such as server memory 223, processor 224, mass storage device 226, and optional I/O devices 228. Operating system 220 may be any of a variety of available operating systems depending on the hardware of ticket server 104. For example, operating system 220 may be implemented as MS-DOS, the Macintosh OS, OS/2, Windows NT, WINDOWS 95/98/2000, UNIX, LINUX or any of a variety of other operating systems.

Ticket distribution program 222 is an application program shown loaded into server memory 223. Ticket distribution program 222 is stored in mass storage device 226 and is then loaded into server memory 223 when initiated. In response to a request, ticketing information, including photos of the view from a particular seat or set of seats for each type of event hosted, can be sent to a user. The views from the seats may be stored in server memory 223 or in the mass storage device 226. Additionally, tickets for seats can be purchased or reserved.

FIG. 3 illustrates a flowchart illustrating the operation of a method in accordance with the present invention. In step 300 a user initiates contact with the remote ticket server. As

discussed earlier in connection with FIG. 1 through 2, the user may be at a dedicated ticket kiosk, at a home computer, utilizing a personal digital assistant, utilizing an enhanced cellular phone, or another user device. After accessing the ticket server hence and ticket distribution program 222, the user enters the event and/or date of the event in Step 302. In step 304, the user enters seat selection criteria or recalls already stored seat selection criteria. Step 304 encompasses the user presenting preferences to the ticket server as to any event of interest to the user and then criteria for selecting seats to that event. Example user criteria may include pricing, availability of a certain number of contiguous seats, venue section, etc. The selection of available seats by the ticket distribution program 222 for presentation to the user can be accomplished in several ways. Available seats could be chosen for the user based on a prestored best-available seat determination by the ticket distribution program 222. Alternatively a user might choose seats based on an overhead view of the event's venue. Or, the user may enter selected seat numbers based on stored user preference criteria or recommendations from others. Additionally, preference criteria stored or entered by a user can be used by the ticket distribution program 222 to pre-select seats that meet the user's preferences. Additionally, the user may request views from one or more representative available, alternative preliminary seating choices, which images/views portray the spatial geometry and visual scale of a selected event type visible from the preliminary seating choices, and this information may also contribute to the user's decision. In step 306 available seats matching the criteria or selection process in step 304 are provided and the user can select the desired seats. In step 308, an image of the view that a person in those seats would see from those seats can be sent to the user. This is explained in FIG. 4 in detail. The user is asked in step 402 if he/she wants to view a view from the seats. If yes, the view is provided in step 404. These images can be taken ahead of time and stored along with other information relating to the event venue. For venues that host different events and where seating arrangements may vary for the different events, images corresponding to the view which a person in those seats would see for those different arrangements would be stored also. These images can be sent to the user or stored in local cache memory. Alternatively, the views can be generated in near-real time by a fast computer and appropriate application program. After viewing the seats, the process continues in step 310 of FIG. 3. If the user does not want to view the seats, the process continues in step 310 of FIG. 3.

To illustrate the value of previewing seats, FIG. 5 illustrates a multi-event stadium 500 showing layouts for baseball and football. Horizontal lines 502 represent the yard markers

for football while curve 504 shows the outfield boundary for baseball and homeplate 506 shows the homeplate. When seats are selected views for those available seats can be sent to the user in order for the user to see if the seats are desirable. The desirability of the seats depends greatly on the specific event. The best seat for baseball may not be the best seat for football or for a music concert. For example, first seat 508 is near homeplate 506. This could be a good seat in baseball but is an end zone seat in football, which is usually not a good seat. On the other hand, second seat 510 is near the middle of the field for a football seat, typically a very good seat. However, it is towards the right field outfield for baseball, which is not considered a great seat. By allowing a user to select seats based on views from those seats for each specific event type, a user can make a more informed and satisfactory decision concerning seat selection.

Referring again to FIG. 3, after the user views the seats selected (in step 308) he or she can accept the seating assignment in step 310. If the user chooses not to accept the seats in step 310, the user is able to refine seating criteria or preferences in step 312 and the process continues again at step 306. If the user chooses to accept the seats, then in step 314 the user can choose to immediately pay for the tickets in step 318, after which the process continues in step 320.

Alternatively, the user can conditionally reserve seating in step 316 as addressed below for a time during which the user can consider other options, such as searching for other available seats that may better satisfy the user's preferences or consult with others about the choice of seats, etc. For example, the user could reserve available seats that the user initially prefers and then may e-mail the images provided from step 308 to another individual to see if the other person concurs with the selection temporarily reserved. If so, then the user may purchase these tickets at any time within the conditional reservation period. In one embodiment, the reservation price can be applied to the purchase price of the tickets. In any case, the ticket broker can determine the required payment and duration seats may be reserved based on, for example: Event popularity, time remaining before the event, desired profitability, or other criteria based on customary business rules. Alternative business operating practices may also be applied, in that reservation pricing may be partially or wholly applied to purchase of tickets, or alternatively may be forfeited whether or not a purchase is made. In another embodiment, once a reservation is made, it may be moved from one prospective seat to another, with or without a payment penalty. Seat reservation is further explained in FIG. 6.

In step 602, the user is asked if he or she wants to reserve the selected seats. If the user chooses not to reserve the seats, then the process continues to step 320.

If the user chooses to exercise the option to reserve the tickets, an optional reservation payment is accepted in step 604. As discussed above, the optional payment may be based on the popularity of the event, the scarcity of tickets, the location of the tickets or some other factor. Once the optional reservation payment is paid in step 604, a reservation timer starts (step 606) and the seating is removed in step 608 from the list of seating available for purchase or reservation by another user. In step 610, it is determined if the reservations time has expired. If the reservations time has expired, the seating is restored in step 612 to the list of available seating, and the process continues in step 320. If the time has not expired, the process continues at step 310 of FIG. 3, wherein the user can decide whether or not to continue to search for better seats. If the reservation time has expired, seating is restored to the availability list at 612 and the process returns to step 320.

Turning back to FIG. 3, step 314 is reached via step 310, wherein the user has either accepted a seating choice in step 310 or has temporarily reserved a seat in step 602. In step 314 it is determined if the user wishes to purchase the tickets. If so, the tickets are purchased in step 318. The tickets can be purchased by credit card, electronic payment, wire transfer or other payment method convenient for computer use. In step 320 it is determined if all transactions are completed for this event. If transactions for this event are not yet completed in step 320, the process continues back to step 304. If transactions for this event are completed in step 320, the process continues on to step 322 wherein the user is provided the opportunity to procure related services (FIG. 7), since these related services, whether of a nature such as must be purchased or reserved in advance, may be of interest to a user whether or not the user actually purchases tickets to the related event.

In step 322 the user has the option to purchase or reserve additional services whether or not tickets have been purchased. This is explained in FIG. 7 which illustrates providing the opportunity to purchase additional services. In step 702, the opportunity to receive information regarding an opportunity to receive information regarding related services such as pre- or post-event dinner reservations, transportation to or from the event, admission to nightclubs, offers to buy additional tickets and the like is provided to the user. In step 704 it is determined if the user desires to receive additional information on any related service. If not, then the process continues at step 708. If the user wants additional information, it is provided in step 706.

In step 708 it is determined if the user wants to obtain, either by purchasing or reserving (or reserving and then purchasing), in accordance with the processes described above, additional related services. If so, the user purchases or reserves the related services in step 710. If not, then the process continues in step 712. In step 712 it is determined if the related services transactions are completed. If not, the process continues again back to step 704. If so, then the process continues to step 324 of FIG. 3.

Turning back to FIG. 3, after the opportunity to purchase or reserve additional services is completed in step 322, it is determined in step 324 if another event transaction for this account is needed. If so, the process returns to step 302. If not, then the process terminates.

Although several embodiments in accordance with the present invention have been described, a myriad of changes, variations, alterations, transformations and modifications may be suggested to one skilled in the art. It is intended that the present invention encompasses such changes, variations, alternations, transformations and modifications and that they fall within the spirit and scope of the appended claims.

Claims

What is claimed is:

1. A method for purchasing tickets to an event comprising:

accessing a ticket server;

selecting one or more seats;

reserving an option to buy tickets for seats for a set period of time.

2. The method of Claim 1, further comprising the step of exercising the option if desired.

3. The method of Claim 1, wherein the step of selecting one or more seats further comprises viewing an image of the view of the event from the selected seats.

4. The method of Claim 1, wherein the step of accessing a ticket server further comprises connecting to the ticket server using one of a personal digital assistant, a stand-alone kiosk, a personal computer, and an enhanced cellular phone.

5. The method of Claim 1, wherein the step of reserving an option to purchase tickets for the selected seats further comprises transferring an electronic payment to reserve the option.

6. The method of Claim 1, further comprising the step of obtaining related services.

7. The method of Claim 1, wherein the step of selecting one or more seats further comprising reserving a spot on a waiting list if the desired seats have been previously sold or reserved.

8. The method of Claim 3, wherein the view is computer generated.

9. An apparatus for reserving tickets to an event comprising:

a ticket server operable to:

receive a request to reserve tickets;

send ticket information to a remote user;

receive a request to reserve an option to purchase tickets; reserve the tickets for a set time; and receive payment in exchange for the ticket.

10. The apparatus of Claim 9, wherein the ticket server is further operable to provide an image of the view of the event from the selected seats.

11. The apparatus of Claim 9, wherein the ticket server is accessed using one of a personal digital assistant, a stand-alone kiosk, a personal computer, and an enhanced cellular phone.

12. The apparatus of Claim 9, wherein an electronic payment is transferred to reserve the tickets for a set time.

13. The apparatus of Claim 9, wherein the ticket server is further operable to offer related services.

14. The apparatus of Claim 9, wherein the ticket server is further operable to reserve a spot on a waiting list if the desired seats have been previously sold or reserved.

15. The apparatus of Claim 10, wherein the image is computer generated.

16. A method for purchasing tickets comprising:

receiving a request to search for tickets from a user;

sending ticket information to the user;

receiving a request to reserve an option to purchase tickets; and reserving the tickets for a set period of time.

17. The method of Claim 16, wherein the step of sending ticket information further comprises sending an image of the view of the event from selected seats.

18. The method of Claim 16, wherein the request to search for tickets is sent using a personal digital assistant, a stand alone kiosk, a personal computer, and an enhanced cell phone.

19. The method of Claim 16, wherein the step of reserving the tickets further comprises receiving and processing an electronic payment to reserve the option.

20. The method of Claim 16, further comprising the step of obtaining related services.

21. The method of Claim 16, further comprising the step of reserving a spot on a waiting list if the desired seats have been previously sold or reserved.

22. An apparatus for reserving tickets comprising a remote device operable to:

send a ticket request;

receive information regarding the ticket request;

request an option to buy tickets for the seats; and

send an electronic payment to purchase and reserve tickets.

23. The apparatus of Claim 22, wherein the remote device is further operable to receive an image of the view from the events from a particular seat.

24. The apparatus of Claim 22, wherein the remote device is one of a personal computer, a stand alone kiosk, a personal digital assistant, and an enhanced cellular phone.

25. The apparatus of Claim 22, wherein the remote device is further operable to send a request to obtain additional services.