Event Ticketing Software

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ABSTRACT

The evolution of the virtual world nowadays is an environment more favorable and in full up as regards the evolution of our cultural and technological development. Due to the possibility of online promotion, Internet-based business technology was born, a new, still moving process, representing companies and suppliers of goods and services a unique way to win as many potential customers as possible. The paper analyzes system requirements for online shopping in general and the specific requirements for on-line event ticket sales systems. The paper insists on the critical design and implementation issues for an Event Ticketing System and the potential problems for such a fully automated, high-availability system.

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1. Introduction

The Internet has changed the way of doing business, identifying new ways of earning revenue, getting new customers or driving the fundraising process. At the beginning of the new millennium, the ever-growing influence of the Web in the economy is amazing. Business people realize that it is one of the best ways to promote and expand their businesses. As proof, electronic commerce implements a new way of communication between business partners that has the infrastructure of the Internet and the web service, representing the way to carry out commerce activities using the electronic computing technique and the modern telecommunication means in the actual business process, in order to large scope of activity and speed of exchange of information. E-commerce is the platform for finding new ways for business people to sell products and services to consumers in a global marketplace.

The rapid expansion of the internet and the use of mobile devices in emerging markets is an important part of the growth in e-commerce, along with better payment options and advanced delivery methods.

From the point of view of selling and promoting the online environment with the development of information technology and e-commerce, electronic booking or online booking has proven to be one of the most popular ways of facilitating access to goods and services through the Internet.

Used most in the field of hotel, air transport and event industry of any type, electronic reservation services comply with the legal requirements stemming from the normative acts that refer to Internet and e-commerce services and the conclusion distance contracts (e-commerce / payment, electronic signature, online advertising). Among the advantages of online reservations are 24-hours online availability, saved time, confirmation is immediately sent using an automatic booking system and flexibility in changing booking details.

Due to the spectacular growth of interest in selling online services and promoting online booking events, the Ticketing System was used primarily by the hospitality industry, transport and cultural and musical events.

2. Ticketing System

The ticketing system is the ideal solution for solving some of the most important and common encountered problems: modeling public relations, agglomeration, inefficiency and lack of efficiency in receiving / delivering services.

The future of the ticketing system is represented by certain branches and essential qualities for a successful solution in this field, these being:

Accessibility

A ticketing system must be easy to use both of programmers it recommends a command line interface (CLI), and for users a graphical user interface (GUI). This ensures that everyone has a web browser

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can use the system and do not require client software dependent on the supplier, with the upgrades and software releases.

**Easy to use**
A ticketing system must be easy to use and intuitive to match the requirements of the developer's and the user.

**Multiuser**
A ticketing system must be able to manage more than one user and administrator at a time. The system is based on a central management software that provides communication with the hardware peripherals, allowing access to the facility on the basis of the rights granted in the system.

**The ability to display a history**
A ticketing system must be capable of tracing not only the current status of an object, but the whole history of the changes.

**Notifications**
A ticketing system must be able to inform all parties of the current status of the relevant tickets for them. Interface, custom designed, must have an ergonomic design, with large buttons and easily legible so that the elderly persons and be able to read the information displayed.

**Event Ticketing System**
An important branch of the ticketing system is the electronic one. This is a special, modern and economical system used worldwide especially for public or private institutions that carry out specific public relations activities. It is designed for applications with a large number of participants who can work stand-alone or together with online ticket issuance and large flow management.

Electronic tickets or "e-Tickets", as sometimes mentioned, are often delivered as PDF files or other downloadable format by email or through a mobile app. Electronic tickets allow users to download their tickets, as opposed to waiting for physical tickets to arrive in the mail.

A printed copy of these tickets or a digital copy on a mobile phone should be submitted to the arrival at the place of progress. These tickets were in the usual way and a unique barcode, which can be scanned at the entrance of the location to streamline the processing of the crowd. Electronic tickets have become more prevalent in the entertainment industry in the last decade.

Empowerment population has made that all these features of the Internet: electronic commerce, booking online, the type of electronic ticketing and to be increasingly used and foldable on users’ requirements by covering with ease of use, the speed of response and the increase in supply and the range of services/products reaching that all items to complete the course of a day to be developed and modernized.

Many sports events, or concerts, or cinemas uses the ticketing systems for their events. E-tickets, or "e-tickets" are increasingly used because they are easily accessible often supplied as PDF files or another format, easy to be downloaded.

Electronic tickets can be received by e-mail or through downloaded applications on the mobile phone. Electronic tickets allow viewers to have easy access to show, without the need for printed form.

It can make access to the show with a printed copy of these tickets or a digital copy on a mobile phone. Either of the two options could be presented in support of the concert day or film. These tickets also have a barcode, which must be scanned at the entrance to the courtroom show. Electronic tickets have become increasingly prevalent in the entertainment industry in the last decade.

![Event ticketing architecture](image-url)  
*Fig. 1 - Event ticketing architecture*
The system architecture exemplified in fig 1. starts from the idea that any ticketing event system works as an intermediary between the event organizer and the comparator, with reservation, online booking but also payment management and ticket management systems.

3. Benefits of customers in event ticketing systems

- Easy access to your favorite events
- Multiple Purchase Points:
  - Outlet - Buying Tickets from Homes tickets
  - Web - buying tickets from the Internet (www.bilet.ro)
- Multiple purchase ways:
  - Cash - cash payment (in outlets)
  - Pay with the card (on the web and in the outlets allow this)
  - Reservations (phone reservations, web or homes of tickets)
- Different deliveries
  - Courier (card payment and delivery to an specific address)
  - Reimbursement (payment at the moment of delivery of the tickets to specific address)
  - Ticket pickup (in case of booking on the internet makes the payment to the ticket office where it is he / she will pick up his / her order in the case of card payment he goes to the ticket office just to pick up his tickets without it anymore need to pay)
- History of the purchased tickets
- Registering to the newsletter and regular information a new events and promotions in force.

Benefits for business

- They can offer for sale events of any kind (cultural events, concerts, theater, sports, etc.) on any kind of room (multiple areas, with / without places, places numbered in any way etc.) in any way (pre-sale, voucher, promotions etc.)
- They can see the sales situation at any time
- Online sales are earned directly by organizers (event owner) are growing so trust in our Company
- Have a complex reporting system through which they can see various graces to help them get some decisions to increase ticket sales
- The necessary information is automatically generated accounts with scale authorities
- High Diversity of Payment and Delivery Modes with implications in increasing ticket sales
- Courses and system user support are online (video and text)

4. The main features of the event ticketing system - An event ticketing system consists of several applications that are integrated and managed independently.

   WEB application
   This is the site itself and consists of displaying events that have tickets for sale, event splitting, user logging, card payment and delivery. Also displayed are halls, selected places, price categories and other useful information to the buyer (event description, location address, latest information, etc.).

   The outlet application
   It is the application that runs at the ticket offices and through which it can sell tickets, booking reservations, select places etc.

   Promoter application
   To help the promoter with real-time information, we provide console organizers with a console to track sales, view the room's load, earnings on a specific area / event / event, on time intervals, visual graphics, etc.

   Administrator application
   This is the main console of the system, through which it introduces and manages events / presentations, prints invitations, manages online orders, sets ads, runs a complex set of reports, introduces showrooms, etc.

   Mobile app
   The Mobile Ticketing application aims to access your favorite events directly from your mobile phone and to buy incoming tickets to these events. It will also allow access to the event using the phone that used it as a ticket. The mobile ticketing application will contain most of the functionality of the ticketing web application but also some extra features that are especially geolocation.

   The main features of the event ticketing system are:

- **Ticket sales** - This can be done both online and through ticket offices. It is done by generating the best available places in a certain area and by selecting them manually. Every online user must sign in to buy or book tickets. Promotions, discounts, etc. can be applied.
• **Ticket booking**
  - Reservation is a special feature required by most promoters, that is, a customer enters the site and reserves their tickets for a maximum set date. During this time, he can present himself at any ticket office to pick up his tickets (the promoter can set a processing fee based on the number of days he is present at the ticket office).
  - The booking facility can be canceled a few days before the event’s date, a date set by the system administrator.

• **Pay with the card** - Customers can choose to pay with the card for several reasons:
  - Do not lose seats until they reach the ticket office
  - Do not have time to go to a ticket office
  - Have no access to a ticket office in a certain area of the country

• **Delivery of tickets** - For some reasons, there are clients who want their tickets to be delivered to a specific address. The system allows managing online orders and delivering these tickets via the courier.

• **Delivery of tickets** - For some reasons, there are clients who want their tickets to be delivered to a specific address. The system allows managing online orders and delivering these tickets via the courier. or, in order to eliminate the extra cost of transport, go to any ticket office in the network to pick up your own ordered and paid tickets with the card.

• **Printing on various ticket formats** - Each ticket house can choose its ticket format, allowing the system to print on any format

• **Extended facilities**
  - Login with Facebook - Customers can see places purchased by friends
  - Update of your own calendar
  - Smartphone app that includes most of the features and benefits of the website
  - Customer alert when in an area where he can pick up his ticket
  - The customer uses the phone as a ticket
  - Noticing the customers the day before the event
  - Warning to go to the location of the event
  - Samsung SmartTV users can purchase their tickets directly from the TV using the remote control.

Therefore, a minimum ticketing system should have a system for creating, recording and invoicing events. Beginning with administrators: an administrator could register, create an event (with a name, start date, open registration date, etc.). This event would have several “levels”.

An event could have unlimited ‘levels’. A group leader can connect to the system, create a group for an event, put as many participants as he wants, saves, receives an invoice for payment, pays this invoice either online or by post.

![Database model](image-url)
Participants will receive confirmation emails and will be able to manage the number of applicants for which level. We assume that the only users are administrators and group leaders. Individuals can not register for events. They should be recorded as part of a group by the group leader. This will simplify the model a bit. In the model below, I assumed the following ideas:

- a customer can make a reservation for a group that contains more participants
- a reservation is made for places, events and locations.

5. Conclusions

Event logging and ticketing programs facilitate the registration of participants and enable event planners to track and manage their customers. Using these programs, participants can buy tickets or register for free events and planners have information about the guest list. These ticketing systems simplify the registration process for participants and can receive payment before an event and can organize the daily registration process.

With an online event ticketing system, you can create one or more ticket types for each event with flexible payment options (such as fixed or open prices, group tickets and free / no cost). You can gather as little information or information from participants as possible, including contact details, number, answers to personalized questions and even files.

Credit card processing is or can be integrated. Items such as discount codes, ticket reimbursement and foreign exchange policies, event frequent questions, and post-purchase confirmations and emails can be set. You can even provide files (such as event programs, instructions, etc.) that ticket participants can download after registration.

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