



Ministry Of Higher Education  
& Scientific Research  
Erbil Polytechnic University  
Erbil Technical Engineering College  
Engineering Department

## ***Java Report***

### **EventEase - Football Stadium Ticket Management System**

**Miran Abdulqadr**

**Farman Othman**

**Abdullah Gailani**

**Ayad Omed**

**Dr:Kosrat**

**Dr:Dana**

## **1. Introduction**

**EventEase is a Java-based desktop application designed to assist football stadium organizers in managing ticket bookings, sales, and event data**

**efficiently. Unlike online ticketing platforms, EventEase is intended for use by administrative teams, who handle bookings manually with direct customer interaction.**

**By leveraging Object-Oriented Programming (OOP) principles and integrating Java Swing for the graphical user interface (GUI), EventEase ensures a seamless experience for organizers. The system also incorporates SQLite for data persistence, along with import/export functionality, event filtering, and sales analytics.**

---

## **2. Key Features**

### **2.1 Admin Authentication & User Management**

- **Secure Admin Login:** Ensures access is restricted to authorized personnel.
- **Role-Based Access Control:** Supports multiple admin roles (e.g., Manager, Cashier) with specific permissions.
- **Password Management:** Secure credential storage with a password reset feature.
- **User Credentials Database:** Admin credentials stored securely using SQLite.

### **2.2 Event Management**

- **Event CRUD Operations:** Create, update, and delete events (e.g., team names, dates, venues).
- **Event Listings:** Display all upcoming events in table or calendar format.
- **Advanced Filtering & Searching:** Search events by date, team, location, and more.
- **SQLite Storage:** Ensures persistent storage of event data.

## **2.3 Ticket Booking System**

- **Admin-Only Booking:** Admins manually book tickets for customers.
- **Ticket Categories & Pricing:** Supports multiple ticket types (e.g., VIP, Standard).
- **Booking Confirmation:** Pop-up notifications confirm successful bookings.
- **Receipts & Booking Details:** Option to print or save booking receipts.

## **2.4 Booking Management**

- **Booking Overview:** Provides a complete view of all event bookings.
- **Booking History & Customer Details:** Tracks past bookings with customer contact information.
- **Cancellation & Refund Management:** Admins can cancel bookings and process refunds.
- **Manual Adjustments:** Allows admins to modify bookings when necessary.

## **2.5 In-App Notifications & Alerts**

- **Real-Time Alerts:** Notifications for events such as "Booking Confirmed" and "Tickets Sold Out."
- **Automatic Communication:** Sends confirmation emails or messages to customers.
- **Availability Indicators:** Visually represents ticket availability status.

## **2.6 Data Persistence & Import/Export Functionality**

- **SQLite Integration:** Ensures secure and persistent storage of data.
- **Import Capability:** Allows event and ticket data to be imported from CSV/JSON files.
- **Export Functionality:** Enables exporting sales reports, event details, and booking data to CSV, JSON, or PDF.
- **Automatic Backups:** Scheduled database backups to prevent data loss.

## **2.7 Sales Reporting & Analytics**

- **Revenue Tracking:** Monitors ticket sales and revenue per event.

- **Customizable Reports:** Generates detailed sales, booking, and revenue reports.
- **Graphical Insights:** Presents data visually with bar charts, pie charts, and more.
- **Daily & Monthly Summaries:** Provides comprehensive breakdowns of sales performance.

## **2.8 Exception Handling & Validation**

- **Input Validation:** Ensures correct data entry (e.g., no blank fields, valid email formats).
- **User-Friendly Error Handling:** Displays clear error messages instead of system crashes.
- **Duplicate Booking Prevention:** Alerts admins to prevent double bookings.

## **2.9 Multithreading for UI Performance**

- **Background Data Loading:** Ensures the UI remains responsive while data loads in the background.
  - **Real-Time Updates:** Maintains up-to-date ticket availability without delays.
-

### **3. Conclusion**

**EventEase is an efficient and user-friendly football stadium ticket management system that empowers organizers to streamline event planning and ticketing operations. With its advanced security, comprehensive booking management, automated reporting, and real-time alerts, EventEase enhances efficiency while maintaining data integrity. By incorporating modern technologies such as SQLite and Java Swing, this system ensures smooth operations and improved customer satisfaction.**