**INSTITUTE OF PUBLIC ADMINISTRATION AND MANAGEMENT**

**(IPAM)**

**COURSE: BSc. INFORMATION SYSTEMS**

**YEAR: THREE (3)**

**MODULE: SOFTWARE ENGINEERING ||**

**SEMESTER: SECOND SEMESTER**

**GROUP: GROUP EIGHT (8)**

**PROJECT: STADIUM TICKET MANAGEMENT SYSTEM (eTICKET)**

**BUSINESS REQUIREMENT DOCUMENTATION (BRD)**

This is a Business Requirement Documentation made by Group Eight (8) for the development of a Digital Stadium Ticket Management System.

The system was created using HTML, CSS, JavaScrypt, PHP and MySqli database.

***GROUP EIGHT MEMBERS:***

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**eTICKET**

**PROBLEM STATEMENT**

Using the paper-based ticketing system always leads to challenges and inefficiencies for the sport committee in our country. It is costly, time consuming, and is difficult to track and manage tickets properly.

Issues of this paper-based system include:

* **Slow Ticket Creation:** There are thousands of fans visiting our stadium daily to watch their favorite sport, and with the manual ticketing system, it takes a very long time to print out tickets. Sometimes tickets run out, leaving a number of fans waiting for new prints so they can buy and enter the stadium.
* **Costly:** Printing tickets for every match can cost huge amount of money, this can lead to huge loss if game is postponed, cancelled or less people turn up for the game.
* **Difficulties in Tracking and Managing Tickets:** It’s hard to keep track of the total tickets printed or sold in the manual system, as staff may need to manually compile data from multiple ticket prints and sales, and the lack of organisation might lead to counterfeiting and conflict.

**PROPOSED SOLUTION**

* With our ticket management system, tickets are created online, providing room for as many tickets available for sales as possible. It cuts down the time consumption of printing tickets over and over again, as it’s only created once, with all the seats available to buy shown.
* With ticket printing out of the way, the system helps reduce expenditures used to print tickets.

**REQUIREMENT ANALYSIS**

**FUNCTIONAL REQUIREMENT:**

* **USER AUTHENTICATION:** The system should provide secured user authentication mechanism, so as to ensure that only authorized staff and admins can access, input or edit data in the system.
* **REAL-TIME DATA:** The system should provide real-time event records to admins, venue staff and spectators to view updates as soon as they are been updated.
* **REPORT:** The system should provide reports to admins and staff on ticket sales, available and sold tickets, game date and time, and so on.

**NON-FUNCTIONAL REQUIREMENT:**

* **USER-FRIENDLY INTERFACE:** The system should have a user-friendly interface, that is easy to navigate. Venue staff and admins should not find it difficult to learn and operate the system.
* **SECURITY AND DATA PRIVACY:** The system should ensure data privacy and protect sensitive information. Authentication mechanisms and data encryption should be in place, so as to prevent unauthorized access or purchase of tickets.
* **ACCESSIBILITY:** The system should be easily accessed by event organizers and staff concerned.
* **PERFORMANCE AND MANAGEMENT:** The system should be able to operate efficiently and handle a large number of events, tickets and fans accounts without degrading in performance.

**ACTORS**

* **EVENT ORGANIZER (ADMIN):** Responsible for planning and executing the event. They are in charge of selecting venue, setting date and time of events, and assigning venue staff to their various areas.
* **VENUE STAFF:** Responsible for gate taking, ensuring everyone entering the stadium has paid for a ticket. The venue staff also sells available tickets at the gate, incase a supporter wants to purchase one.
* **TICKET HOLDER (SPECTATOR):** Responsible for purchasing a ticket to an event and attending on the specific date and time.

**USE CASE**

**EVENT ORGANIZER**

**eTICKET**

**TICKET HOLDER**

MANAGE BOOKINGS

ADD EVENT

ADD AND MANAGE USERS

CANCEL BOOKING

Forgot Password

<<EXTENDS>>

User Authentication

<<INCLUDE>>

LOGIN AND LOGOUT

BOOK TICKETS

View Sold Tickets

**VENUE STAFF**

<<EXTENDS>>

SELL TICKETS

<<INCLUDE>>

**USER INTERFACE**

**LOGIN PAGE**

**HOME PAGE**

**ADD EVENT**

**SOLD TICKETS**

**AVAILABLE TICKETS**