Software Requirement Specification (SRS) for Intelligent Surveillance System (ISS)

1. Introduction

1.1 **Purpose:**

Intelligent Surveillance System is an online event organizing software to be used in academic institutions to organize different events which may include various types of events ranging from Conferences to events of national importance.
The software will be used to manage the different works to be done in events.

1.2 **Scope:**

We describe what features are in the scope of the software and what are not in the scope of the software to be developed.

In Scope:

a: Managing event venue booking, online participants registration and booking with a secure ticketing system.
b: Contacting Sponsors and managing the budget allocated for the event.
c: Keeping track of the budget and also the live analysis of the whole event.
d: Providing ticket for the events to the participants
e: User authentication

1.3 **Definitions, Acronyms, and Abbreviations:**

Acronyms and abbreviations:

a. ISS: Intelligent Surveillance System.
b. SRS: Software Requirements Specification.
c. WWW: World Wide Web.
d. GUI: Graphical user interface

Definitions:

a. Security : A set of all transactions pertaining to a bank account.
b. Sponsors : a person or organizations that pays for or contributes to the costs involved in staging an event.
c. Event: a planned public or social occasion includes Conferences, Academic, Technical,Cultural and events of national importance.
d. Budget: the amount of money or fund gathered by the organizer with the help of sponsors to make the event happen.
e. Analytics: Tracking of a particular event or task.
f. User: Participants who can register and book tickets for an event and also keep track of the event from his domain.
g. Administrator : the institute who is the main head of the event.

2. Overall Description:

2.2 Product Functions:

ISS should support the following use case:

Class of Use Case	**Use cases**	**Description**
Use Case related to installation	Installation	Creates and initializes working files
Use Case related to System authorization	Login	Login into ISS
	Change password	Change ISS password
Use Case related to event management	Create event	Creates a new event
	Edit event	Gives the flexibility in editing the created event

	Delete event	Removes or deletes the event
Use Case related to participant ticketing	Purchase event tickets	Allows the participant to view and purchase a ticket
	Validate event tickets	Validates the ticket after the participant response to event
Use Case related to event analysis	Generate event analysis report	Displays the report
	Monitor event analysis in real-time	Helps in monitoring the displayed report
Use Case related to managing sponsors	Contact sponsors	Gives the option of contacting the sponsors
	Manage sponsors	Manages the existing sponsors
Use Case related to managing Budget	Allocate budget	Allocates budget for the event by the admin
	Track budget	Keeps the check on the budget

3. Specific Requirements:

3.1 Functional Requirements:

We describe the functional requirements by giving various use cases.

Use case related to installation:

Use Case 1: **Installation**

Primary Actor: User and Administrator
Pre Condition: Internet connection available.
Main Scenario:

1. User or Administrator initiates ISS installation program.
2. User or Administrator is asked for the login credentials.
3. System starts authorizing via downloading the necessary information.

Alternate Scenario:

3(a). If there is a network failure:
3(a).1. Installation is aborted.
3(a).2. System displays an error message.

Use case related to system authorization:

Use Case 2: **Login**
Primary Actor: Administrator
Pre Condition: Nil
Main Scenario:

Administrator starts the application.
System prompts the Administrator for login credentials.
Administrator provides the login and password.
System authenticates the credentials.
Main screen is displayed upon successful authentication.

Alternate Scenario:

4(a). If authorization fails.
4(a).1. System prompts the administrator that they typed the wrong password.
4(a).2. System allows the administrator to re-enter the password with a maximum of three chances.

Use Case 3: **Change Password**
Primary Actor: Administrator
Pre Condition: Admin logged in
Main Scenario:

1. Administrator initiates the password change command.
2. Admin is prompted for the old password, new password and confirm new password.
3. Administrator gives the old password, new password and confirms the new password.
4. System does authentication.
5. New password is registered with the system.

Alternate Scenario:

4(a). If authorization fails.

4(a).1. System prompts the administrator that they typed the wrong password.

4(a).2. System allows the administrator to re-enter the password with a maximum of three chances.

4(b). If the new password and confirm the new password do not Match.

4(b).1. Allow him to re-enter the attributes with a maximum of three chances.

Use case related to event management:

Use Case 4: **Create Event**

Primary Actor: Admin

Pre Condition: Admin logged in.

Main Scenario:

1. Admin initiates the “create event” functionality.
2. System prompts the admin for the event name.
3. Admin enters the event name.
4. An empty event is created

Alternate Scenario:

4(a).If an event with the same name exists.

4(a).1. System prompts the admin for a different name.

4(a).2. Admin enters a different name.

4(a).3. Empty events get created with the new name.

Use Case 5: Edit Event Details

Primary Actor: Admin
Pre Condition: Admin logged in
Main Scenario:
1. Admin selects the event to edit from the list of existing events.
2. System displays the current details of the selected event.
3. Admin modifies the event details (e.g., name, date, description).
4. System updates the event with the modified details.

Alternate Scenario:
1.(a) If the Admin encounters errors in the input:
1.a.1. System prompts the Admin to correct the errors.
1.a.2. Admin makes the necessary corrections and resubmits the changes.
1.a.3. System updates the event with the corrected details.

Use Case 6: **Delete Event**

Primary Actor: Admin
Precondition: Admin logged in.
Main Scenario:
1. Admin selects the event to delete from the list of existing events.
2. System prompts for confirmation to delete the selected event.
3. Admin confirms deletion.
4. System removes the event from the system.

Alternate Scenario:
3.(a). If Admin decides not to delete the event:
3.a.1. System cancels the deletion process.
3.a.2. No changes are made to the event.

Use Case related to participant ticketing:

Use Case 7: **Purchase Event Tickets**

Primary Actor: Participant
Precondition: Event registration completed.

Main Scenario:

1. Participants access the event ticketing page.
2. Participant selects the desired ticket type and quantity.
3. Participant provides payment details.
4. System processes payment and issues tickets to the participant.

Alternate Scenario:

4.a. If payment fails:

4.a.1. System prompts participants to retry payment or use an alternative payment method.

4.a.2. Participants retry payment or provide alternative payment details.

Use Case 8: **Validate Event Tickets**

Primary Actor: Event Staff

Precondition: Event in progress.

Main Scenario:

1. Event staff scans or checks participant's tickets.
2. System verifies the ticket validity.
3. Event staff grants access to the event venue.

Alternate Scenario:

2.a. If the ticket is invalid:

2.a.1. System alerts event staff of the invalid ticket.

2.a.2. Event staff directs participants to ticketing support for resolution.

Use Case related to event analysis:

Use Case 9: **Generate Event Analysis Report**

Primary Actor: Administrator

Precondition: Event concluded.

Main Scenario:

1. Administrator accesses the event analysis reporting module.

2. Administrator selects desired analysis parameters (e.g., attendance, engagement metrics).
3. System generates and presents an event analysis report based on the selected parameters.

Alternate Scenario:

3.a. If report generation fails:

3.a.1. System notifies the administrator of the failure.

3.a.2. Administrator troubleshoots or requests support for report generation.

Use Case 10: Monitor Event Analytics in Real-time

Primary Actor: Administrator

Precondition: Event ongoing.

Main Scenario:

1. Administrator accesses the real-time event analytics dashboard.
2. System displays real-time event metrics (e.g., attendance, engagement).
3. Administrator monitors event performance and analytics.

Alternate Scenario:

2.a. If real-time analytics data is delayed or unavailable:

2.a.1. System displays the last known data.

2.a.2. Administrator acknowledges the data delay and continues monitoring.

Use Case related to managing sponsors:

Use Case 11: Contact Sponsors

Primary Actor: Event Organizer

Precondition: Event planning initiated.

Main Scenario:

1. Event organizer accesses the sponsor management module.
2. Event organizer selects the option to contact sponsors.
3. System provides a contact form for the event organizer to fill in sponsor details and messages.
4. Event organizer submits the contact form.
5. System sends the message to the selected sponsors.

Alternate Scenario:

5.a. If there is an issue with sending the message:

5.a.1. System displays an error message.

5.a.2. Event organizer retries sending the message or contacts support for assistance.

Use Case 12: Manage Sponsorship Deals

Primary Actor: Event Organizer

Precondition: Sponsorship deal negotiation initiated.

Main Scenario:

1. Event organizer accesses the sponsorship management module.
2. System displays a list of sponsor offers and ongoing negotiations.
3. Event organizer reviews and responds to sponsorship proposals.
4. System updates the status of sponsorship deals based on event organizer's responses.

Alternate Scenario:

2.a. If negotiation fails or encounters issues:

2.a.1 System prompts event organizers to communicate the issue.

2.a.2. Event organizer communicates the issue and seeks resolution.

2.a.3. System logs the issue and updates the status accordingly.

Use Case related to managing budget:

Use Case 13: Allocate Event Budget

Primary Actor: Administrator

Precondition: Event planning initiated.

Main Scenario:

1. Administrator accesses the budget allocation module.
2. Administrator specifies the budget amount allocated for the event.
3. System updates the event budget allocation.

Alternate Scenario:

2.a. If the budget allocation exceeds available funds or encounters errors:

2.a.1 System prompts the administrator to review and adjust the budget allocation.

2.a.2. Administrator reviews and modifies the budget allocation accordingly.

2.a.3. System updates the event budget allocation with the corrected amount.

Use Case 14: Track Budget Expenses

Primary Actor: Event Organizer

Precondition: Event budget allocated.

Main Scenario:

1. Event organizer accesses the budget tracking module.
2. System displays current expenses and available budget.
3. Event organizer adds or modifies expense entries.
4. System updates the event budget status.

Alternate Scenario:

2.a. If there are discrepancies or errors in expense entries:

2.a.1. System prompts event organizers to review and correct the entries.

2.a.2. Event organizer reviews and rectifies the discrepancies.

2.a.3. System updates the event budget status with the corrected information.