

# ■ SOFTWARE REQUIREMENTS SPECIFICATION (SRS)

**System Name:** Tera Invitation System

**Version:** 1.0

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## 1. INTRODUCTION

### 1.1 Purpose

This document outlines the functional and technical requirements of the **Tera Invitation System**, an event invitation automation platform fully managed by the administrator. The platform streamlines invitation processing—from client registration and guest list management to invitation generation and attendance tracking. Clients interact only to:

- Submit event handling payment,
- Approve invitation templates,
- Access invitation and attendance reports.

### 1.2 Intended Audience

- **Admin (System Manager):** Has full control over the invitation system.
  - **Client (Event Owner):** Pays the event fee, confirms templates, and views reports.
  - **Guest/Invitee:** Receives the invitation, confirms attendance, and attends using a QR code or code.
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## 2. SYSTEM OVERVIEW

### 2.1 System Summary

- The entire process is centrally managed by the **Admin**.
- **Clients do not interact** with the backend directly.
- Admin receives the event request and guest list (via Excel) from the client.
- System processes the uploaded guest list by:
  - Generating unique QR codes,
  - Binding the QR codes into the selected invitation card template (PDF),
  - Sending personalized invitations via email/SMS.

- Guest confirmation and event attendance are tracked automatically.
- System generates final reports on attendance and delivery status.

## 2.2 User Roles and Permissions

### Role Permissions

|                |  |
|----------------|--|
| <b>Admin</b>   | Register/manage clients, upload templates, process guest lists, generate QR codes, send invitations, handle payments, track attendance, generate reports |
| <b>Client</b>  | Submit payments, confirm invitation templates, view status reports   |
| <b>Invitee</b> | Receive and confirm invitation, attend event via QR/name/code  |

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## 3. FUNCTIONAL REQUIREMENTS

### 3.1 Admin Features

- [✓] Register and manage clients.
- [✓] Upload event invitation templates (PDF).
- [✓] Receive guest list in Excel (Single, Couple, Group types).
- [✓] Upload and process guest list:
  - Validate records.
  - Generate unique QR codes.
  - Automatically bind codes into uploaded template.
- [✓] Send personalized invitations (via Email/SMS).
- [✓] Manually or automatically confirm client payments.
- [✓] Handle RSVP tracking.
- [✓] Confirm attendance through:
  - QR scanning,
  - Manual code or name input.
- [✓] Generate and export detailed reports:
  - Invitations sent,
  - RSVP responses,
  - Final attendance.

### 3.2 Client Features

- [✓] Submit payment for event service.
- [✓] Preview and confirm invitation template (PDF).
- [✓] Access:
  - Invitation delivery reports,
  - RSVP status,
  - Final attendance reports.

### 3.3 Invitee Features

- [✓] Receive invitation (Email/SMS).
  - [✓] Confirm RSVP (Accept/Decline).
  - [✓] Attend event using:
    - QR Code,
    - Unique Code,
    - Name.
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## 4. TEMPLATE BINDING & INVITATION AUTOMATION PROCESS

- After client registration and payment confirmation:
    - Admin uploads a **PDF invitation template** selected by the client.
    - Admin uploads the guest list in Excel format.
    - System generates unique **QR codes** for each guest/group.
    - QR codes are **automatically embedded** into the uploaded PDF template for each guest.
    - Personalized PDF invitations are sent to invitees via Email and/or SMS.
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## 5. MANDATORY NOTIFICATIONS & REMINDERS

The following features are core components and **not optional**:

- [✓] **WhatsApp Delivery Integration** – Invitations and reminders delivered via WhatsApp.
  - [✓] **Automatic Event Reminders** – Notifications sent before the event.
  - [✓] **No-Show Follow-Ups** – Automated messages to guests who did not attend.
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## 6. ATTENDANCE TRACKING

### 5.2 Invitation Types

| Type | Description |
|------|-------------|
|------|-------------|

|        |                    |
|--------|--------------------|
| Single | 1 Guest, 1 QR Code |
|--------|--------------------|

|        |                            |
|--------|----------------------------|
| Couple | 2 Guests, 1 QR Code shared |
|--------|----------------------------|

| Type  | Description                       |
|-------|-----------------------------------|
| Group | Multiple Guests, 1 QR Code shared |

### 5.3 Attendance Confirmation Options

- Scan QR code (auto-detect guest)
- Manual code entry (for verification)
- Name-based lookup (fallback option)

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## 7. REPORT OUTPUTS

The system supports generating and exporting the following reports:

| Report Type            | Description                            |
|------------------------|--|
| Invitation Sent Report | Shows all sent invitations and status  |
| RSVP Status Report     | Tracks which guests confirmed/declined |
| Attendance Report      | Lists all attendees and absentees      |

**Export Formats Supported:** PDF, Excel (.xlsx), CSV

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## 8. TECH STACK & DEVELOPMENT ENVIRONMENT

### 8.1 Technologies Used

| Layer          | Technology                          |
|----------------|-------------------------------------|
| Frontend (Web) | React.js (Admin and Client Portals) |
| Mobile App     | Flutter + Dart                      |
| Backend API    | Laravel 10                          |
| Database       | MySQL                               |
| DB Language    | SQL                                 |
| UI Design      | HTML5, Tailwind CSS                 |

### 8.2 Tools & Environment

| Tool/Device        | Purpose                    |
|--------------------|----------------------------|
| Visual Studio Code | Development IDE            |
| Android Studio     | Flutter Emulator & Testing |

| Tool/Device        | Purpose                     |
|--------------------|-----------------------------|
| USB+ Android Phone | Physical App Testing        |
| Personal Computer  | Primary Development Machine |

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## 9. CONCLUSION

The **Tera Invitation System** is a full-featured event invitation automation platform, reducing client workload to just payment and approval. The administrator controls the end-to-end process—from guest list preparation and template binding to invitation delivery and attendance tracking. Built with a modern tech stack, it ensures scalability, notification robustness, and seamless delivery via email, SMS, and WhatsApp.