



**Swami Keshvanand Institute of Technology,  
Management & Gramothan, Jaipur**  
Department of Information Technology  
Session 2024-25

**Students Kit**

**Project Title:** SOSTIFY(Women travellers safety application)

**Requirements Specification (RS)**

No.	Requirement	Essential / Desirable	Description of the Requirement	Remarks
RS1	Emergency SOS Activation	Essential	Trigger SMS with live location and phone call on triple power button press	-
RS2	Siren Alarm Activation	Essential	Trigger loud siren alarm on six power button presses	-
RS3	Siren Alarm Deactivation	Essential	Stop siren alarm on nine power button presses	-
RS4	Hidden Camera Detector	Desirable	Detect electromagnetic radiations from hidden cameras using phone's magnetometer	-
RS5	Manual Spy Cam Tips	Desirable	Provide manual tips for detecting hidden cameras	Add for better awareness
RS6	Contact and Share Features	Desirable	Enable contact, share app, and about us functionality	Consider for usability



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**Database Fields Specification**

No.	Field Name	Range of valid values for the field	Remarks
1	ContactId	Alphanumeric, unique identifier	Primary key
2	Name	Alphanumeric	Name of the emergency contact
3	Phone	Numeric	Phone number of the emergency contact
4	Location	Latitude/Longitude	Live location of user
5	Message	Alphanumeric	Emergency message content
6	SirenStatus	Boolean (0/1)	0 = Off, 1 = On

**High Level/Detailed Design (HLD/DD)**

**Design Components**

User:

- User Dashboard
- Sos
- Spy camera
- Siren Alarm
- App tour
- Contact us



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**Test-Plan (TP)**

No.	Test case Title	Description	Expected Outcome	The requirement in RS that is being tested	Result
1	Emergency SOS Activation	Tests SOS feature triggered by 3 power button taps	SMS with live location sent and phone call made to primary contact	RS1 - Emergency SOS Activation	Passed
2	Siren Alarm Activation	Tests siren alarm activation after 6 power button taps	Loud siren alarm starts playing	RS2 - Siren Alarm Activation	Passed
3	Siren Alarm Deactivation	Tests if siren alarm stops on 9 power button taps	Siren alarm stops playing	RS3 - Siren Alarm Deactivation	Passed
4	Hidden Camera Detection	Verifies EMF detection and beeping functionality using magnetometer sensor	Beep sounds if radiation exceeds threshold near hidden camera	RS4 - Hidden Camera Detector	Passed
5	Manual Spy Camera Tips	Tests display of manual detection tips in UI	User can read tips on identifying hidden cameras	RS5 - Manual Spy Cam Tips	Passed



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6	Contact and Share Functionality	Tests About Us, Share App, and Contact Us sections	Navigation and functionality work correctly (Email/Share Intent)	RS6 - Contact and Share Features	Passed
7	Background Service Functionality	Tests SOS activation when phone is locked	Power button tap still triggers functionality without unlocking phone	RS1 - Emergency SOS Activation	Passed
8	Permission Handling	Tests runtime permissions during first launch	App requests required permissions (SMS, Call, Location)	RS1, RS2, RS3 - All requiring permissions	Passed
9	Location Retrieval	Tests accuracy and availability of user's location	Location included in SMS via FusedLocationProviderClient	RS1 - Emergency SOS Activation	Passed