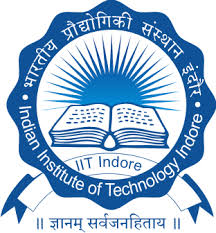
**IIT Indore Security Website Interactivity Project**

Software Requirements Specifications Document

Version 0.1

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# *Revision History*

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| ***Date*** | ***Description*** | ***Author*** | ***Comments*** |
| *21.01.2015* | *Main document created* | *Amey Ambade* | *Version 0.1 Revised* |
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|  |  |  |  |

# *Document Approval*

*The following Software Requirements Specification has been accepted and approved by the following:*

|  |  |  |  |
| --- | --- | --- | --- |
| ***Signature*** | ***Printed Name*** | ***Title*** | ***Date*** |
|  | *Mr. Ramakant Kaushik* | *Chief Security Officer* | *22.01.2015* |
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# 1. Introduction

This Software Requirement Specification (SRS) document provides an overview of the Software Engineering Project as per the guidelines set by the course instructor, Dr. Abhishek Srivastava.

We define its scope, purpose and characteristics and elaborate on the specific demands and expectations of our client, Mr. Ramakant Kaushik, Chief Security Officer, IIT Indore.

## 1.1 Purpose

This SRS is documented to shed light upon the implementation of a better, more interactive version of the Safety and Security Webpage of IIT Indore. The main purpose of this document is to ease the process of design and development by the team, and is imperative to make it more organized.

## 1.2 Scope

The final product of the project will be a well-organized, feature-rich, more responsive and highly interactive version of the present Safety and Security Website of the Indian Institute of Technology, Indore – *safety.iiti.ac.in*.

The enhanced website would make it easier for students and faculty members to communicate with the security division of the institute in a more systematic and direct manner. It will be designed in a format that would make it more pleasant to the eyes. The user interface will be made robust and clutter-free. Improving the visual appeal and the overall look and feel using designing the aesthetic qualities of the website is a concern to deal with as well.

A new section will be added that would be completely dedicated to facilitate better functioning and accession of the ‘Lost and Found’ page. System characteristics would be introduced to differentiate between general user and system administrators, who would be granted special privileges and permissions to make changes and substantiate better use. Increasing the number of available functions and enhancing the already present ones is also another important factor to be addressed.

The aforementioned functions will not allow general users from viewing site specific statistics or data as it may contain information that may not be of any definitive value to a general user and/or be relevant only to the administrator(s).

## 1.3 Definitions, Acronyms, and Abbreviations

HTML: Hypertext Markup Language – A simple web designing language

CSS: Cascading Style Sheets – a style sheet language used for describing the look and formatting of a document written in a markup language.

PHP: PHP: Hypertext Preprocessor – a ‘backronym’ of itself, PHP is a server-side scripting language designed for web development.

GUI: Graphical User Interface– a type of interface that allows users to interact with electronic devices through graphical icons and visual indicators such as secondary notation, as opposed to text-based interfaces.

HTTP: Hypertext Transfer Protocol – useful in connecting to a network.

OS: Operating System– provides common services for programs, for example: Windows 8, Linux Mint.

## 1.4 References

Regular definitions may be found at en.wikipedia.org among other websites.

No related papers for further assessment or reference exist.

## 1.5 Overview

The following SRS is fairly simple to understand in a methodized fashion.

It contains details regarding the arrangement of descriptive attributes, distinct characteristics, requirements and functionalities of the project.

Sections 2 and 3 highlight the main details systematically.

# 2. General Description

Some factors must be taken into consideration the effects of which may be substantial for the redesigned website. They are defined in this section.

It should be made clear that this section does not state specific requirements; it only makes those requirements easier to understand.

## 2.1 Product Functions

(a) Awareness generation among users regarding recent developments, related news and events through better image placement and display.

(b) Creating an easier interface for any user to request for a lost item(s) and a security personnel having access to administrative privileges to post details about found item(s).

(c) Proper division of key sections into menus and sub-menus to increase the productivity of the website and to make it more efficient by use of graphical elements.

(d) Keep track of the number of users visiting the website and notify the administrators accordingly using a dynamic visit counter mechanism.

(e)Better complaints and grievance redressal facilities, and feedback collection through interactive forms and better contact availability of the webpage.

## 2.2 User Characteristics

The users of this website are people in the IIT Indore community concerned with safety regulations, requesting lost items, wanting to address their security issues and giving feedback regarding any related problems.

The users need not have any technical knowledge regarding the functioning of the website.

## 

## 2.3 General Constraints

The main constraints on the development team for designing a more interactive website would be:

1. Time constraints – a duration of three months allotted for the project.
2. Scope constraints – the obvious inhibition of boundaries of the scope of the project leading to technical constraints.
3. Technical constraints – a limitation to the knowledge of the developers in programming, constraints arisen from the requirements, restricting the use of development tools/specific languages.
4. Display Constraints – the GUI is only available in English.

## 2.4 Assumptions and Dependencies

We have assumed that a suitable web browser supporting Flash Player and Apple Quicktime or Microsoft Silverlight is used. However, a web browser without these features could be used as well, without any significant repercussions on the website, apart from slight display changes.

We have also assumed that there will be few administrators for the website, and the incoming traffic for the website would be well below average.

# 3. Specific Requirements

## 3.1 External Interface Requirements

### 3.1.1 Hardware Interfaces

Minimum Requirements:

Client Side–

Processor - Intel Pentium III or AMD - 800 MHz

RAM - 128 MB

Disk Space - 100 MB

Server Side -

Processor - Intel Pentium III or AMD - 800 MHz

RAM - 1 GB / 256 MB

Disk Space - 3.5 GB / 500 MB (Excluding Data Size)

### 3.1.2 Software Interfaces

Client on Internet - Web Browser (IE/Chrome/Mozilla/Safari/Netscape), Operating System (any)

Client on Intranet - Web Browser (IE/Chrome/Mozilla/Safari/Netscape), Operating System (any)

Web Server – (any), Operating System (any)

Data Base Server – MySQL/Oracle, Operating System (any)

Development End - RAD (HTML, XML, AJAX), OS (Windows)

### 3.1.3 Communications Interfaces

1. Client (customer) on Internet will be using HTTP/HTTPS protocol.

ii. Client (system user) on Internet will be using HTTP/HTTPS protocol.

## 3.2 Functional Requirements

The specific features of the software project are:

(a)Drop-down menus and sub-menus

(b)User/Administrator login facility

(c)Better ‘Lost and Found’ section (Lost item requests, Found item descriptions)

(d)Floating pictures and information

(e)Dynamic visit counter

(f)Complaints and feedback forms

(g)Updated contact information of security officials

## 3.3 Non-Functional Requirements

### 3.3.1 Performance

The website must be interactive and the delays involved (especially in page loading) must be less. So in every action-response of the system, there are no immediate delays. In case of opening webpages, or popping error messages and saving the settings or sessions there is delay much below 2 seconds.

### 3.3.2 Reliability

As the website provides the right tools for safety and security measures, it must be made sure that it is reliable in its operations and for securing the sensitive details.

### 3.3.3 Availability

If the internet service gets disrupted while sending information to the server, the information can be sent again for verification.

### 3.3.4 Security

The main security concern is for admin accounts, and hence proper login mechanism should be used to avoid hacking.

### 3.3.5 Safety

Information should be securely transmitted to and from the server without any changes in the information.

## 3.4 Logical Database Requirements

A database management system may be used for administrator details (ID, password).Requirements like storage, data retention, redundancy, integrity, et.al may not be very high, since administrators are assumed to be low in number.