

Indian Wildlife	Version 1.0
Software Requirements Specification	12/3/2015
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Indian Wildlife

Software Requirements Specification

Version 1.0

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Revision History

Date	Version	Description	Author
12/3/2015	1.0	SRS document	MAK

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Software Requirements Specification

1.0 Introduction

1.1 Purpose

The purpose of the Software Requirements Specification is to describe the specific requirements of the 'Indian Wildlife' project that are to be met. Included with the description of the requirements is a description of any constraints or assumptions that the project is working within.

This document also specifies the functional and non-functional requirements. Also, it includes the planning of the project through various charts such as the Project evaluation and review technique (PERT), Timeline chart, and Gantt chart.

It also describes the design technologies that are to be considered when the system is to be designed, and other factors necessary to provide a complete description of the requirements for the system. This Software Requirements Specification (SRS) captures the complete software requirements for the system. Requirements described in this document will be used as guidelines to develop the 'Indian Wildlife' system.

1.2 Scope

It is within the scope of the Software Requirements Specification to describe the specific system requirements of the 'Indian Wildlife' project. This would include performance requirements, system constraints, and project assumptions. Any specific detail that is needed about the standards or technology used to define these requirements, constraints, and assumptions are within the scope of this document.

It is outside the scope of this document to describe electronic mail systems and technology or the general problem with unwanted electronic mail. It is also outside the scope of this document to describe in any detail at all how certain mentioned standards or technologies work and operate.

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1.3 Definitions, Acronyms, and Abbreviations

Acronyms Table 1

Definition, Acronyms and abbreviations	Description
PHP	Pre Hyper-Text Preprocessor
SRS	Software Requirements Specifications
HTTP	Hyper Text Transfer Protocol
SMTP	Simple Mail Transfer Protocol
MySQL	My Structured Query Language
UML	Unified Modeling Language
Admin	Administrator
AJAX	Asynchronous JavaScript and XML
WAMP	Windows Apache MySQL PHP
HTML	Hyper Text Markup Language
CSS	Cascading Style Sheets

1.4 References

- SRS format referred by IBM
(<https://www.ibm.com/.../community/.../srs%20format.pdf>)
- Software Engineering 9th edition by Ian Sommerwillie.
- Software Engineering- A Practitioner's approach by Roger S. Press

1.5 Technologies to be used

- **Microsoft Visio** It is a powerful diagramming platform with a rich set of built-in stencils. It helps users to simplify complex information through simple, easy-to-understand diagrams. Visio Standard includes stencils for business, basic network diagrams, organization charts, basic flowcharts, and general multi-purpose diagrams.

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- **Rational Rose Enterprise Edition** It offers a common modeling tool and language to simplify the work environment and enable faster creation of quality software.
- **PHP designer 8** It is a fast PHP IDE and PHP editor with built-in HTML5-, CSS3- and JavaScript editors boosted with features to help you create amazing websites. phpDesigner 8 helps you with all from editing, analyzing, debugging to publishing websites powered by PHP, HTML5, CSS3 to JavaScript.
- **MySQL Query browser** Windows version of the MySQL query browser, a nice interface for constructing mysql queries and browsing mysql tables.

1.6 Overview

Indian Wildlife is a resourceful website for promoting awareness and conservation of India's diverse and rich wildlife, by establishing a hub for organizing local meetings, wildlife forums, periodicals and wildlife camps. It's an online platform to promote wildlife conservation and spread awareness of our rich natural heritage. This online portal will ensure continuous efforts towards making a difference to this cause and invite active participation of people to this noble field.

2.0 Overall Description

2.1 Product Perspective

The website will provide secure registration and profile management facilities with registered members, government and NGOs. It will help to monitor statistics related to endangered species, jeopardized habitats, unbalanced ecosystems and unfavorable climate changes. It will facilitate members to form groups to organize local meetings, wildlife forums, periodicals and wildlife camps. It will also enable registered members to post relevant photos, videos and other data. Regular updates and news flashes about recent events in the field will make the people aware about the importance of conservation of wildlife. It will attract users towards opportunities and job prospects in the field of wildlife through lucrative advertisements and campaigns.

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2.2 Software Interface

- Client on Internet and Intranet
Web Brower - Internet Explorer, Chrome, Mozilla Firefox, Safari, Opera
Operating System – Windows, Linux, UNIX, IOS
- Data Base Server : WAMP (Windows Apache mysql php)
- Database Software : mySQL
- Rational Rose Software
- Microsoft VISIO
- phpDesigner 8

2.3 Product Functions

Functional Requirements It consists of the statement of services that the system should provide. How system should react to particular input or behave in particular situation.

- Post Data - To provide a space for registered users to post interesting photos, videos and presentation on Indian wildlife.
- Registration - Secure registration and profile management facilities for registered members, government and NGOs.
- Statistical Analysis - To monitor statistics related to endangered species, habitats, ecosystem, and climate.
- Social (Forum) - To facilitate members to form group for meetings, wildlife camps, periodicals and forums.
- Newsletter - A regular newsletter should be sent to registered user to spread awareness.
- Employment Opportunities - To provide various career opportunities in field of wildlife along with list of universities offering degree, fellowships and certification.
- News Updates - It will provide recent wildlife stories (success) with an opportunity for user to participate in wildlife blogs, forum, internships, conference and other awareness programs.
- Member Management - Basic facilities like add and update members, backup/recovery of data, generating reports etc.
- Feedback - To setup reviewers' panel to have tab on data being posted for website, panel will be responsible for various queries of users.

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Non-Functional Requirements

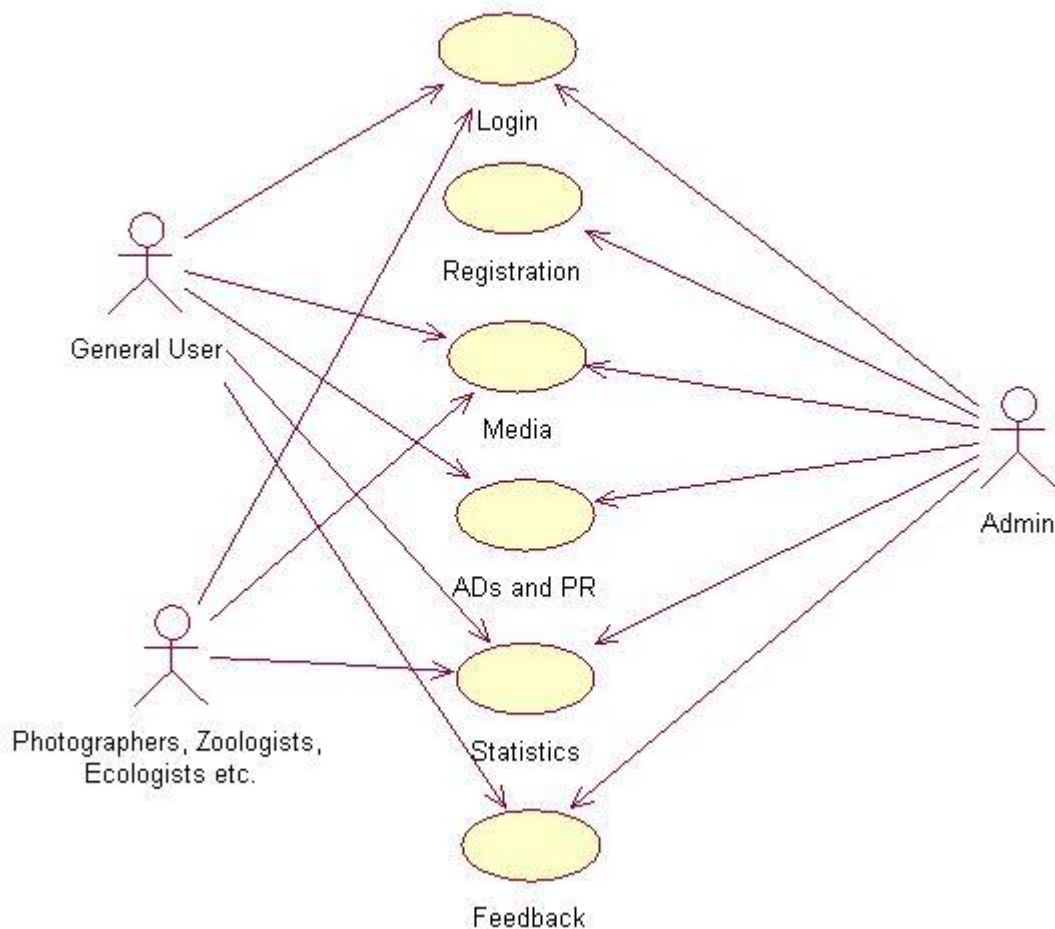
- Usability - The system shall allow the users to access the system from the internet using HTML/XML/CSS. The system uses web browsers as an interface. Online help will also be available and keyboard shortcuts will be made available.
- Security - After registration, the user can login to the system. Passwords must at least 8 characters and shouldn't be only alphabetic. System will have automatic logout after 5 minutes of inactivity.
- Performance - Response time will be less than seconds for 96% of the requests made to the system.
- Hdd - 500 GB
- Transactions logs - 50 GB
- Availability - It will be available 24x7 on all the days of the year.
- Portability - It can be accessed on any version of operating system like windows, linux, mac etc.
- Privacy - User will login using his unique email id and password which is hidden. Similarly, NGO public details will be shown but private details will be hidden.

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2.4 Constraints of the Project

- GUI is only in English.
- Login and password is used for the identification of users.
- Only zoologists and wildlife experts will be able to fully utilize our online platform.
- Limited to HTTP/HTTPS.
- This system is working for single server.

2.5 Use Case Diagram



Use Case Diagram Figure 1

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Description

A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. It is simplest is a representation of a user's interaction with the system and depicting the specifications of a use case. A use case diagram also portray the different types of users of a system .It contains actors, use cases and the relationships between the use cases.

Actors

1. General User
2. Admin
3. Photographers, Zoologists and Ecologists

Use Cases

1. Login
2. Registration
3. Media
4. Advertisements and PR
5. Statistics
6. Feedback and Forum

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2.6.1.1 Scheduling diagrams

Gantt Chart

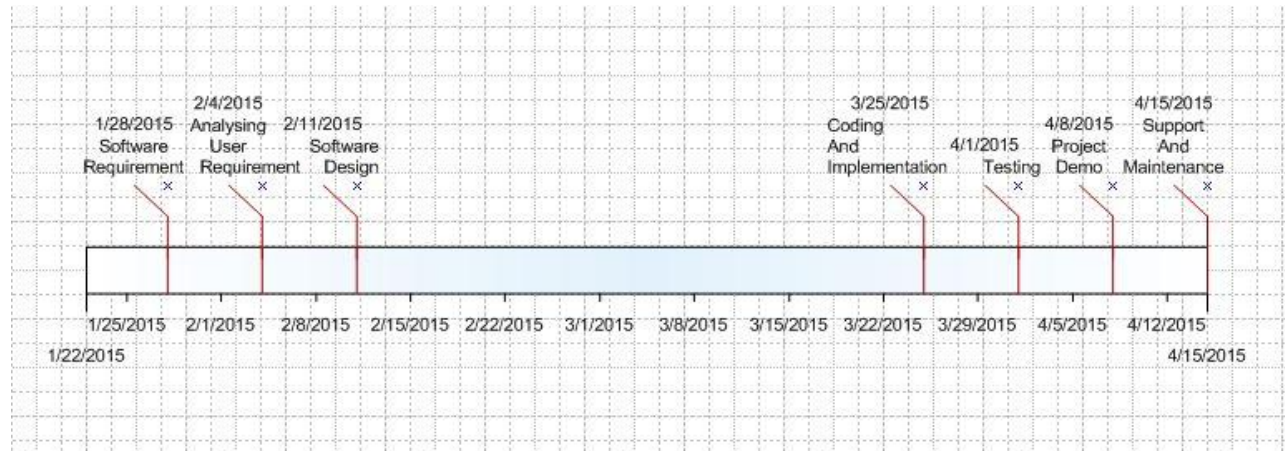


Gantt chart Figure 2

It allows the project team, as well as the stakeholders, to visualize the schedule and to determine the completion date. During the project, the project manager can determine whether the project is on schedule at any point during the execution. If changes occur, the project team can utilize the Gantt chart to determine how the changes will affect the completion date.

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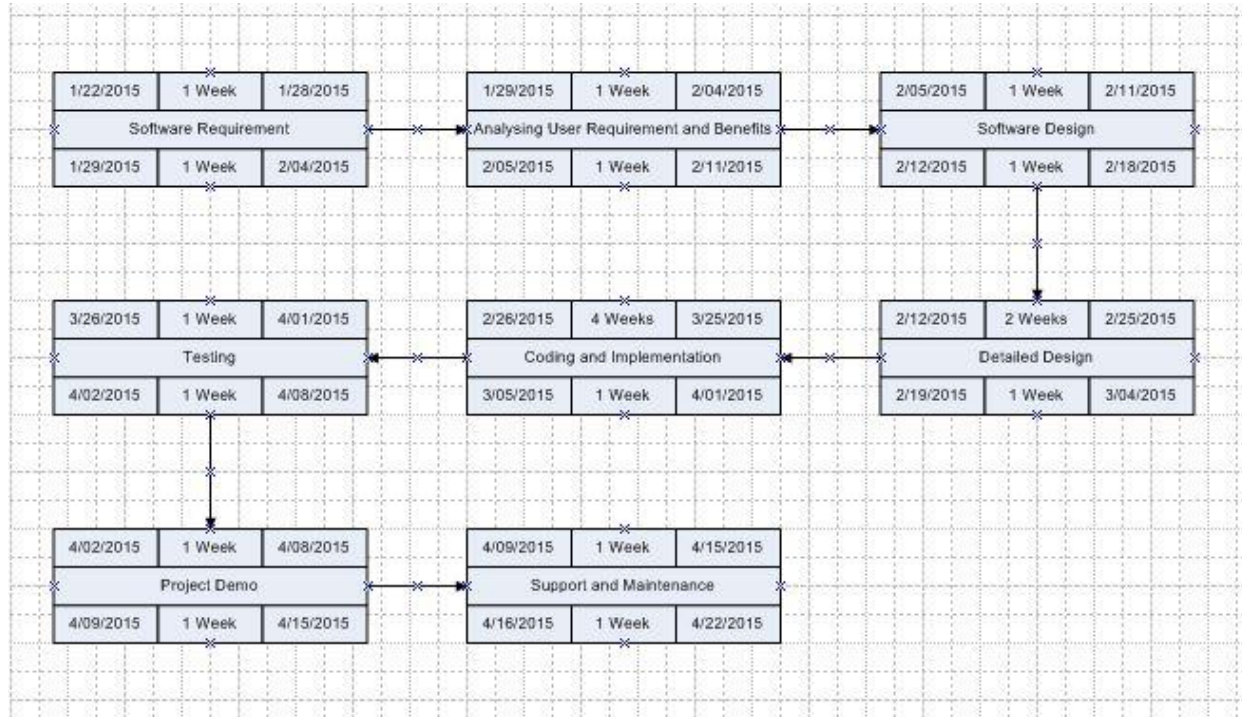
Timeline Chart



Timeline chart Figure 3

A timeline is a chart that depicts how a set of resources are used over time. If you're managing a software project and want to illustrate who is doing what and when, or if you're organizing a conference and need to schedule meeting rooms, a timeline is often a reasonable visualization choice.

Pert Chart

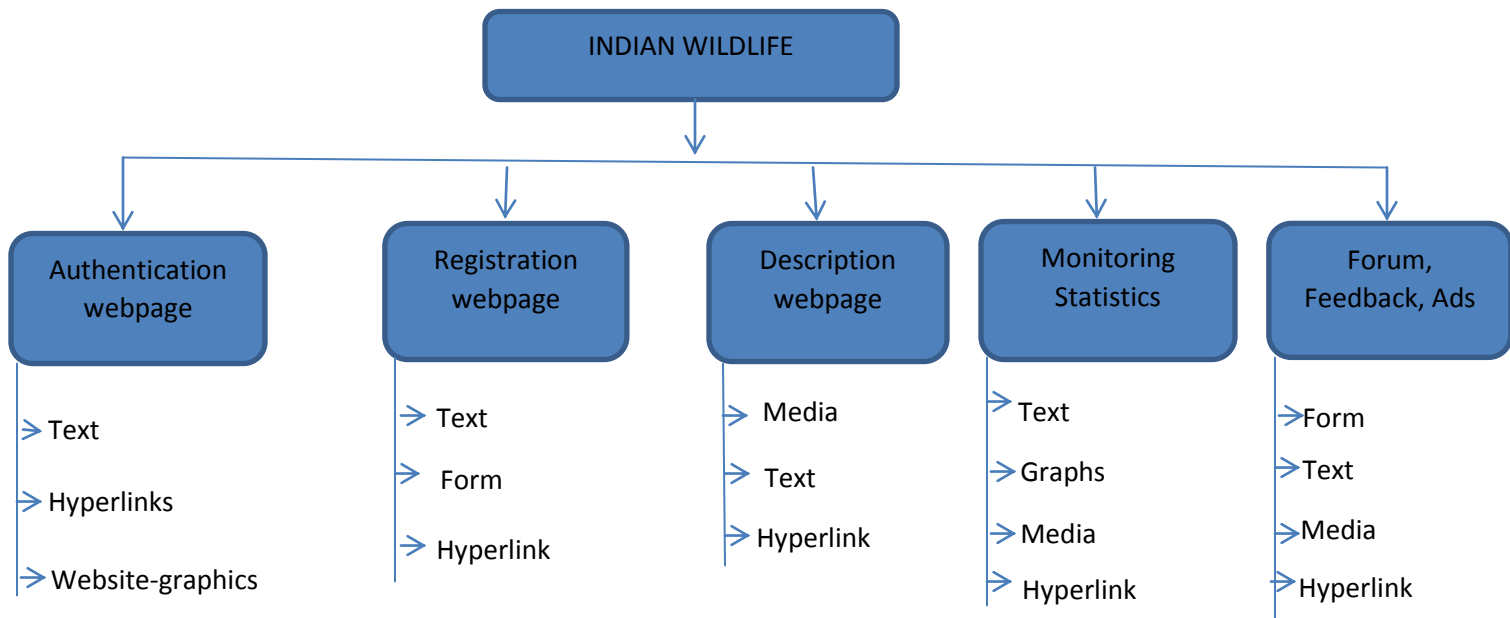


Pert chart Figure 4

Primarily, the PERT chart identifies the critical path for the project. The critical path is the sequence of tasks where there is no slack time. In other words, if any task on the critical path takes longer than expected, the end date of the project will be affected. This only applies if there are tasks that can be completed in parallel.

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Work Breakdown Structure



WBS Figure 5

It is deliverable oriented hierarchical decomposition of the work to be executed by the project team." The work breakdown structure visually defines the scope into manageable chunks that a project team can understand, as each level of the work breakdown structure provides further definition and detail.

2.7 Assumptions and Dependencies:

- There are a large number of people who are willing to participate in wildlife conservation.
- Photographers will provide visual media for free.
- The zoologists and ecologists are active participants in our online platform.
- The wildlife experts freelancing on our web site are qualified professionals of good repute.
- The Admin is honest and trustworthy.

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3. Specific Requirements

3.1 Use Case Reports

Admin Table 1

Use cases	Description
Login	The admin can login through a unique id and password which gives him complete control over all the functionalities of the site.
Registration	Approves and validates all new users of every type.
Media	Manages and monitors all photos and videos uploaded by all users on the site .
Advertisements and PR	Posting advertisements on behalf of users and NGOs for workshops, drives and other awareness programmes.
Statistics	Collecting data from the statisticians and uploading it at the correct locations.
Feedback and Forums	Acts as the forum moderator who ensures healthy discussions.

General Users Table 2

Login	The user can login through a unique id and password which gives him access to all functionalities meant for him.
Registration	Register for an account on the website to start working.
Media	Upload photos and videos.
Advertisements and PR	Request advertisements to be published on the website for workshops, drives and other awareness programmes.
Statistics	Access statistical data of the site for their use.
Feedback and Forums	Register and participate in debates and discussions.

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Photographers, Zoologists and Ecologists Table 3

Login	Login through a unique id and password which gives them access to all functionalities meant for them.
Media	Upload photos and videos.
Statistics	Access statistical data of the site for their use and offer new and updated data as well .
Feedback and Forums	Register and participate in debates and discussions to offer their expert opinion and findings.

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3.2 External interface requirements

- **HR agent**
He is responsible for delivering assistance in the field of employment generation.
- **NGO manager**
He is responsible for handling and coordinating the received data from various NGOs.