

**Department of Computer Engineering**

**Academic Term: First Term 2023-24**

**Class: T.E /Computer Sem – V / Software Engineering**

<b>Practical No:</b>	<b>1</b>
<b>Title:</b>	Software Requirement Specification
<b>Date of Performance:</b>	<b>1/08/2023</b>
<b>Roll No:</b>	<b>9645</b>
<b>Team Members:</b>	

**Rubrics for Evaluation:**

<b>Sr. No</b>	<b>Performance Indicator</b>	<b>Excellent</b>	<b>Good</b>	<b>Below Average</b>	<b>Total Score</b>
1	On time Completion & Submission (01)	01 (On Time )	NA	00 (Not on Time)	
2	Theory Understanding(02)	02(Correct )	NA	01 (Tried)	
3	Content Quality (03)	03(All used)	02 (Partial)	01 (rarely followed)	
4	Post Lab Questions (04)	04(done well)	3 (Partially Correct)	2(submitted)	

**Signature of the Teacher:**

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## Requirements Specification(News Portal)

### 1 Abstract

The advent of the Information and Communication Technology (ICT) has revolutionized the life of humans. The implications of this revolution are enormous and are manifest in almost all spheres of the life. Particularly the Internet has changed the ways people seek information to satisfy their information needs. To remain abreast with the latest happenings around the globe, newspapers are proven to be an effective source. With the emergence of new technologies newspaper publishers are fast moving onto the online platform to effectively reach the remote users and people are also quickly following the trend. In this scenario, the present study made an endeavour to investigate the use of internet and subsequently online newspapers among the PG students of University of Kashmir. The study underlines the growing importance of internet and the use of electronic medium among the people and also confirms the potential use of online newspapers mostly for educational and other information purposes

### 2 Introduction

#### 2.1 Purpose

The purpose of this document is to describe the external requirements for a news portal which provides news related to different things . It also describes the interfaces for the system.

#### 2.2 Scope

This document is the only one that describes the requirements of the system. It is meant for use by the developers and will be the basis for validating the final delivered system. Any changes made to the requirements in the future will have to go through a formal change approval process. The developer is responsible for asking for clarifications, where necessary, and will not make any alterations without the permission of the client.

#### 2.3 Definitions, Acronyms, Abbreviations

Not applicable.

#### 2.4 References

D. C. De Reis, P. B. Golgher, A. S. Da Silva, and A. H. F. Laender, "Automatic web news extraction using tree edit distance," 2004, pp. 502-511

## 2.5 Developer's Responsibilities

The developer is responsible for (a) developing the system, (b) installing the software on the client's hardware, (c) conducting any user training that might be needed for using the system, and (d) maintaining the system for a period of one year after installation.

## 3 General Description

### 3.1 Product Functions Overview

A news portal typically serves as an online platform that aggregates and delivers news content from various sources to its audience. This website is used to enhance the quality of news to users and produce Good quality of images and videos uploaded. It also provides a User friendly interface without any hidden details. A High quality Search Engine Optimization(SEO) is also provided for easy browsing and news related to different categories like technology, sports, entertainment, health, business is available on the website.

### 3.2 User Characteristic

The main users of this website will be the people who are usually traveling or can't carry newspapers everywhere and having deep interest in news will visit this website.

### 3.3 General Constraints

The system should run on Sun 3/50 workstations running UNIX 4.2 BSD.

### 3.4 General Assumptions and Dependencies

Not applicable.

## 4 Specific Requirements

### 4.1 Inputs and Outputs

The website has one input file and produces one type of output.

Input file 1: It contains navigation bar which contains different news categories. Each new categories contains various news items. The format of file is:

Navigation bar				
Categorie1	Categorie2	Categorie3	Categorie4	Categorie5
NEWS	NEWS	NEWS	NEWS	NEWS
ITEMS	ITEMS	ITEMS	ITEMS	ITEMS

## **4.2 Functional Requirements**

1. Category and Tagging: Organize news articles into categories and apply relevant tags for easy navigation.
2. Multimedia Support: Support images, videos, and other media formats to enhance news articles.
3. Mobile Responsiveness: Ensure the portal is accessible and user-friendly on various devices, including smartphones and tablets.
4. Search Functionality: Provide users with a search feature to find specific news articles or topics.
5. Social Media Integration: Enable sharing news articles and interacting with the portal through social media channels.
6. Related Articles: Display related articles or suggested content to keep users engaged.

## **4.3 External Interface Requirements**

User Interface: Only one user command is required. The file names can be specified in the command line itself or the system should prompt for the input file names.

## **4.4 Performance Constraints**

The website will work faster and faster will be the news fetching for all categories mentioned above with access to net/Wi-Fi.

## **4.5 Design Constraints**

### **Software Constraints**

The website needs HTML , CSS , Java Script , React JS for designing and running.

### **Hardware Constraints**

Not applicable.

### **Acceptance Criteria**

Before accepting the website, the developer must demonstrate that the website works. The developer will have to show through all news categories.

## POSTLAB:

**Q1. Ans:** A well-defined Software Requirement Specification (SRS) is of paramount importance in the software development lifecycle. It serves as the foundation for the entire project and has a significant impact on project success. The following are some key points:

- ❑ Clarity and Understanding: An SRS clearly outlines the scope, objectives, and functionalities of the software.
- ❑ Scope Management: With a detailed SRS, project scope is well-defined and documented.
- ❑ Requirement Validation: The SRS acts as a basis for validating requirements with the client and other stakeholders.
- ❑ Design and Development Guide: A comprehensive SRS provides a roadmap for the design and development teams.
- ❑ Risk Mitigation: By identifying and addressing potential challenges in the early stages, the SRS helps in mitigating risks.
- ❑ Communication and Collaboration: The SRS serves as a communication bridge between the development team and the client.
- ❑ Cost and Time Estimation: With a well-defined SRS, accurate cost and time estimates can be made, ensuring effective project planning and resource allocation.

**Q2. Ans:** Comparison

Technique	Description	Advantages	Challenges	Effectiveness In Gathering User needs
Interviews	One-on-one/group interactions	In-depth exploration, detailed information, rapport-building	Time-consuming, resource-intensive	Highly effective for complex and nuanced needs
Surveys	Structured questionnaires	Reaching a large user base, cost-effective, anonymity	Lacks depth, inconsistent responses, low response rates	Effective for gathering broad perspectives
Use Case Modeling	Defining user-system interactions	Clear understanding, visualizing system behavior	May not capture non-functional requirements	Effective for defining system functionality