**File Viewing Application System**

 Submitted by: **Centre for Development of Advanced Computing(C-DAC),**

**Software Requirements Specifications**

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Software Requirement Specifications

**For**

**File Viewing System**

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**Document Control**

Document Change Control

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**Table of Contents**

Document Change Control 3

Change Summary 3

Table of Content 3

1 Introduction 4

1.1 Purpose 4

1.2 Scope 4

2 Overall Description 4

2.1 System Perspective 5

2.1.1 User Interfaces 5

2.1.2 Hardware Interfaces 5

2.1.3 Workflow Diagram 7

Introduction

Purpose

This document specifies the requirements for the WRF-Chem module of NUCI project. The document provides an overview of the system and also states the functionality of the system under consideration and scope of the system. This SRS describes the interaction of the system with other external hardware and software entities in terms of its interfaces. Constraints, assumptions and dependencies are also stated in this SRS. This document acts as a source of definitions for all terms, acronyms and abbreviations to be used throughout the system development life cycle. Explanations of these terms are also provided as and when required. It provides a list of references and their sources. The document briefly highlights the characteristics of the end users of the product and the access mechanism

Scope

The File Viewer Web Application is designed to be a file management platform that supports viewing of multiple file types. The core features include:

* + - Categorization of files into structured folders.
    - Viewing of various file types (.txt, .jpeg, .pdf, .docx, .png) in a new browser window upon user request.
    - Metadata management for each file (filename, format, upload date, etc.).

The application aims to offer a seamless experience for users who need to manage and access files in different formats through a centralized web-based platform.

The scope does not include uploading, editing or real-time collaborative features for the uploaded files. The application focuses solely on viewing files of different formats.

This SRS defines the product features, user interface, hardware/software interfaces, and constraints necessary to guide the system’s design, development, and validation.

1. Overall Description

2.1. SYSTEM PERSPECTIVE

The system shall comprise of:

1. Client System

The client-side application is developed using Angular and provides interactive user interfaces that allow users to view files stored in the system. Each file is presented within categorized folders and can be opened via a "View File" action that renders the file in a new browser window.

1. File Management and Viewer Module

This intermediate layer handles file processing, including format- specific viewing logic (.txt, .jpeg, .pdf, .doc, .png). It also manages the secure retrieval of files from the VM file server, converting binary data for rendering within the UI.

1. Server System

The backend is developed using Java Spring Boot. The server performs all business logic, file format handling, and manages communication with the VM file server where the files are physically stored on the system.

**USER INTERFACES**

* + - 1. The Angular-based UI is fully responsive and designed for clarity and usability.
      2. Users interact with elements via mouse and keyboard (tab navigation supported).
      3. Best viewed on screen resolutions of 1024x768 and higher.

Hardware Interfaces

**Minimum System Requirements of computer to host Maps**

|  |  |
| --- | --- |
| **Item** | **Description** |
| Processor | Intel Core i3 dual core 2GHz 64-bit (x64) architecture |
| Memory | 4 GB |
| HDD | 500 GB (50GB free space) |
| Display | Color Display supporting at least 1024\*768 |
| Keyboard | Standard 101 Keys |
| Mouse | 3 button wheel |
| Operating System | Boss Linux 5 / Microsoft Windows 8.1 |
| Graphics Card | **Not specifically required for core functions** |

* + 1. Workflow Diagram

A diagram of a software flowchart

AI-generated content may be incorrect.

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