Implementation of an Intranet System

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Abstract

An intranet system is an internal corporate network that is defined as a network of interconnected computers that only a limited number of people in an organization have access to. It is a "private version of the internet" or an internal Internet confined to an organization.

Intranets are used to convey information among employees of a company. They can be used as references for internal procedures and regulations, and they can be applied as collaboration tools.

Intranets have transformed from being tools through which key personnel and management post information to becoming tools through which all employees generate content to obtain an updated and expanding intranet. Technically, an intranet system is defined as follows:

A network on TCP/IP protocols (an Internet) belonging to an organization, usually a corporation, accessible only by the organization's members, employees, or others with authorization. An Intranet's Web sites look and act just like any other web sites, but the firewall surrounding an intranet fends off unauthorized access. (Wikipedia 2007, cited in [14]).

Introduction

In today's rapidly evolving digital landscape, effective communication, seamless collaboration, and efficient information sharing are essential for the growth and success of any organization. Recognizing this imperative, Nairobi City Council (NCC) is embarking on a transformative journey towards the implementation of a comprehensive intranet system.

The NCC, as a dynamic and diverse municipal entity serving the vibrant community of Nairobi, understands the paramount importance of robust internal communication and streamlined operations. An intranet system represents the key to achieving these goals. This initiative aims to create a secure and user-friendly digital workspace that will empower our dedicated employees, enhance productivity, and enable us to better serve the residents of Nairobi.

As we navigate this journey, the NCC intranet project will not merely be a software deployment. It represents a cultural shift towards a more connected and collaborative workforce, where information flows seamlessly, decision-making is informed, and innovation thrives. It embodies our commitment to progress, transparency, and efficiency.

Literature Review

Software Requirements Specification

The purpose of this Software Requirements Specification (SRS) document is to outline the requirements and expectations for the development of an intranet system for Nairobi City County.

This project aims to create a comprehensive intranet platform that enables efficient communication, collaboration, and information sharing among Nairobi City County employees.

The SRS document provides detailed information about the functional and non-functional requirements of the NCC intranet project.

General Description

Product Perspective

The intranet will serve as an internal communication and collaboration platform for NCC. It will integrate with existing systems, including HR and document management systems.

Product Functions

The intranet will provide the following key functions:

- User authentication and authorization
- News and announcements
- Document management
- Employee directory
- Calendar and events
- Task management
- Collaboration tools
- Integration with existing systems

User Classes and Characteristics

The intranet will cater to various user classes, including employees from different departments, management, and administrators. Users may have varied technical proficiency.

Operating Environment

The intranet will be accessible via web browsers and mobile devices. It will be hosted on secure servers within NCC premises.

Design and Implementation Constraints

The intranet should be designed to meet security and compliance standards.

It should integrate with existing NCC systems.

Assumptions and Dependencies

The project assumes that necessary hardware and software infrastructure will be available.

Dependencies may include third-party software and API integrations.

Specific Requirements

Functional Requirements

User Authentication and Authorization
Users must authenticate to access the intranet.

Role-based access control should be implemented to restrict access to specific features.

News and Announcements
Administrators can post news and announcements.

Users can view and comment on news articles.

Document Management
Users can upload, organize, and search for documents.

Version control for documents should be available.

Employee Directory
A searchable employee directory with profiles should be provided.

Calendar and Events
Users can view and RSVP to events.

Event organizers can create and manage events.

Task Management

Users can create and assign tasks.

Task progress tracking and notifications should be available.

Collaboration Tools

Tools for real-time collaboration, such as chat and video conferencing, should be integrated.

Integration with Existing Systems

Integration with HR and document management systems for data exchange.

Non-Functional Requirements

Security and Access Control

Data encryption in transit and at rest.

Access control based on user roles.

Regular security audits and vulnerability assessments.

Performance

Fast response times even under heavy load.

Scalable architecture to handle growing user base.

Scalability

The system should be able to scale horizontally and vertically.

Usability

User-friendly and intuitive interface.

Accessibility compliance.

Compliance

Compliance with relevant data privacy and security regulations.

Disaster Recovery and Backup

Regular data backups and a disaster recovery plan.

User Interface Requirements

Design and Layout
A clean and visually appealing design.

Consistent navigation and layout.

Responsiveness
Support for various screen sizes and devices.

Documentation Requirements

Comprehensive user guides and documentation for administrators.

Training and Support Requirements

- o Training sessions for employees on how to use the intranet.
- o Ongoing technical support and helpdesk.

System Models