

FINAL YEAR PROJECT PROPOSAL

Intranet Communication in Organization
Project Proposal



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Overview of the System:

This system facilitates mailing among users of on a LAN. Today organizations are large and are increasing in size also. Therefore, these organizations are divided into different departments. In the fast growing world the information is needed as fast as possible. This can be accomplished by passing the information quickly. Quick delivery of mails is very difficult in manual system. This is because the information is passed through persons of one department to another department. This leads to the inconsistency, irregularity, vulnerability and delay in delivering information. Therefore, a system is needed, which is both fast as well as accurate. This can be achieved by developing an “Intranet Communication in Organization”.

1. Introduction

Intranet is the generic term for a collection of private computer networks within an organization. An intranet uses network technologies as a tool to facilitate communication between people or work groups to improve the data sharing capability and overall knowledge base of an organization's employees. A network that uses technologies of internet protocol to share any type of information within association or Business Company is called Intranet. This technology is used in the proposed system, the “Intranet Communication in Organization” to make the most out of this technology. This will somehow automate the information passing system.

1.1 Purpose

The purpose of this document is to define the high-level requirements of the “Intranet Communication in Organization” software in terms of the needs of the end users.

1.2 Existing System

Present System is manually providing services to employees of departments of an Organization. Employees have to go departments to attain some particular information. Sometimes information is passed manually between departments like letter, mail etc. This manual system takes time to pass the information and sometimes it causes loss of information too. There by causing loss of employee time also. Thus, the present system stated is time taking, insecure and costly.

1.3 Proposed System

As organization grows in size in terms of departments and functionalities, it requires a quick and efficient system to achieve instant communication b/w employees of same department or b/w departments. The proposed system “Intranet Communication in Organization” serves organization’s needs in a consistent and transparent manner. It should cater the needs of information sharing. It allows the users to exchange their views through mails and send electronic files through attachments. It should have all traditional things such as

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sent items, inbox, drafts etc. The users are allowed to send mails to multiple users using to, cc (carbon copy) and bcc (blind carbon copy) too. Thus, the system caters spontaneous needs of the organization.

2. Project Scope

The proposed system scope is limited to Intranet only. It can be enhanced to be a global communication medium for multinational companies. We can also implement internationalization to support user interface in various/local languages.

3. Feasibility Study

3.1 Technical Feasibility

- Does the necessary technology exist to do what is been suggested?
- Does the proposed equipment have the technical capacity for using the new system?
- Are there technical guarantees of accuracy, reliability and data security?
- The project will be developed on Hewlett Packard's Core i3 PC with 6 GB RAM.
- The environment required in the development of system is any platform.
- These languages will be used in the development is JAVA, JSP, Servlets, Tomcat Server version 6.0 and database SQLite.

3.2 Operational Feasibility

- Will the system be used if it developed and implemented?
- If there was sufficient support for the project from the management and from the users.
- Have the users been involved in planning and development of the Project?
- Will the system produce poorer result in any respect or area?
- This system can be implemented in the organization because there is adequate support from management and users. Being developed in Java so that the necessary operations are carried out automatically.

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4. Implementation

In this section, the implementation details of our Intranet Communication in Organization are presented. We have chosen Java as the main programming language of our system modules. Java, which is developed by Sun Microsystems and is a simple, object-oriented, interpreted, robust, secure, architecture neutral, portable, multithreaded, and dynamic programming language. The language originally designed for controlling consumer electronics is now widely used in developing Web-based applications. SNMP-based communication can be implemented easily by using Java. Java provides TCP/IP socket interfaces for such kinds of communication applications. However, there are much more efficient techniques of developing SNMP-based management system in Java. Java class package dedicated to SNMP communication is freely available from many organizations. AdventNet is one of such companies that provides SNMPv2c package written in Java. It helps the developers of network management applications by simplifying SNMP interfaces. The library takes care of all the SNMP details underneath, so that programmers can concentrate on the implementation logic of management applications. Manager and agent modules for Intranet Communication in Organization are Web-based.

5. Design Architecture

The design architecture of our Intranet Communication in Organization is illustrated in **Figure 1**. MTAP is assigned to keep checking management information defined in RFC 2249 MTA MIB module. MTAM process manage MTAPs to exchange SNMP message for every agent process. These kind of distributed applications should have to be programmed using Java Technologies to make them run on any browser like Chrome, Edge, Mozilla, Safari as Java Applets. Most of the servers are using shared applet program, which is stored in the Applet Memory, to Explorers. Although **Figure 1** shows Web server and MTA manager running in one system, the physical locations of Web server and MTA manager do not matter. Management operations from human users are transferred to MTA manager which interacts with MTA agents using SNMP messages. We will use 3-Tier approach and will make it responsive to monitor services.

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System Diagram

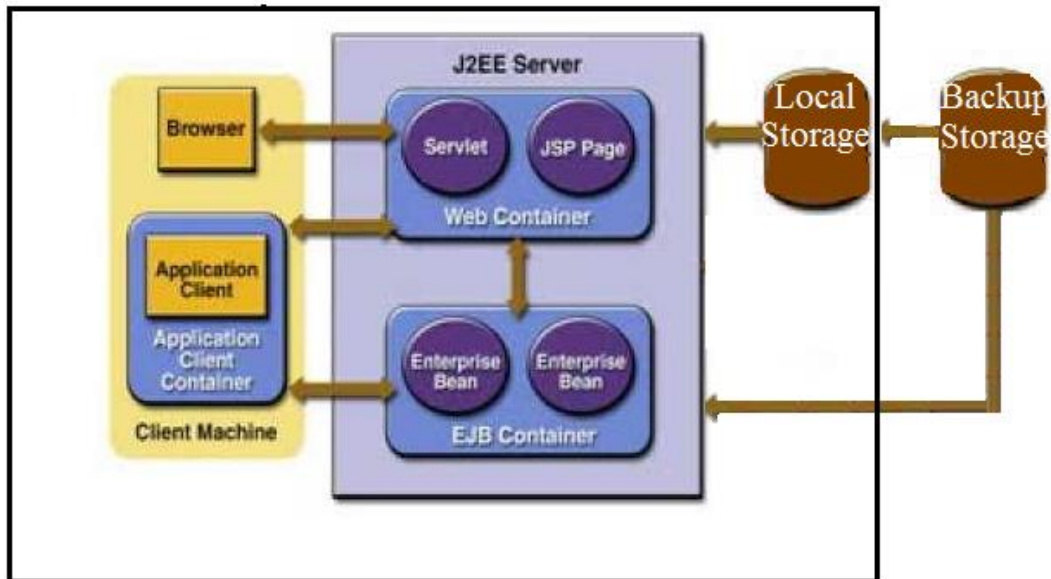


Figure 1: Application Architecture of Proposed Intranet Communication in Organization

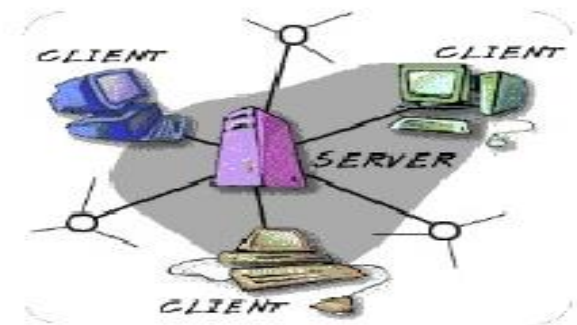


Figure 2 :Client server Architecture for the system

6. Tools/Technology

Web Presentation: HTML, CSS

Programming Language: **Java**

Web based Technologies: **Servlets, JSP**

Java 8 EE Web/Application Server: **Tomcat Server 8.0**

IDEs: **Eclipse/Netbeans**

Database: **MySql/ Sqlite/Casendra**

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7. Features of the System

- System will allow mailing without internet through a Network
- System will allow file sharing
- System will allow to save and delete contacts
- System will keep log of incoming mails
- System will keep log of sent mails
- System will allow all the above features through Internet also

8. Modules of the System

The system “Intranet Communication in Organization” consists of the following modules.

1. **User Profile Management**
2. **Messaging**
3. **Contacts**
4. **Attachments**
5. **Database**
6. **Backup Storage**

8.1 Modules Details

8.1.1 User Profile Management

This module facilitates new user registration, sign in of existing user, password recovery and user profile management.

8.1.2 Messaging

This module facilitates conventional message options like Inbox, Compose, Sent Messages, and Draft etc. **Compose** option allows us to compose new mails that can be sent to one or more users of the organization. **Inbox** option shows all messages received. This option allows viewing and deleting such messages. **Sent Messages** option allows us to view and delete messages that have been sent. The **Draft** option allows us to view messages saved incompletely. These messages can be completed and sent at a later stage.

8.1.3 Contacts

This module contains the vitals of user's contacts. It will allow the user to add and delete contacts.

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8.1.4 Attachments

It is an important feature of this system. With this feature, this system not only allows sending and receiving messages. It facilitates us to attach files along with mail messages. Thus, people of various departments of an organization can share/exchange files effectively.

8.1.5 Database

This is the database where messages, user profile information, user credentials, contacts, reports and files will be stored and retrieved.

8.1.6 Backup Storage

It is very important for any kind of application which has database module to have backup when database crashes or data is lost. So, this application will have a module for auto-backup to avoid from any adverse situation.

9. Definition, Acronyms , and Abbreviations

The following is a list of terms, acronyms and abbreviations used by the “Office Collaboration and Communication System” software package and related documentation.

- CC: Carbon Copy (recipients are visible to all other recipients)
- BCC: Blind Carbon Copy (recipients are not visible to anyone)
- RAM: Random access memory
- JSP: Java Server Page
- SNMP: Simple Network Management Protocol
- SNMPv2c: Sub-version of Simple Network Management Protocol
- TCP/IP: Transmission Control Protocol/Internet Protocol
- MTA: Message Transfer Agent
- MiB: Management Information Base
- HTML: Hypertext Markup language
- CSS: Cascading Style Sheet
- LAN: Local Area Network
- MTAP: Message Transfer Agent Process
- MTAM: Message Transfer Agent Manager

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