

# A Linux Based Content Management System

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**Abstract-** A Content Management System (CMS) is computer program or a system administrator tool that allows publishing, editing and modifying content as well as maintenance from a central interface. Such systems of content management provide procedures to manage work flow in a collaborative environment. The core function and use of content management systems is to store and organize files, and provide control to access their data.

The content management system (CMS) has two elements:

- Content management application (CMA) is the front-end user interface that allows a user to add, modify and remove content from a system.
- Content delivery application (CDA) compiles that information and updates the system.

Unix/Linux is less popular as compare with other OS like windows, mac and so on. It is always difficult to remember all commands for non-technical users to manage the contents. So, this application is enable to access the content without accepting any commands from user.

**Index Terms-** Content Management System, File handling in Linux, Linux, and Shell Programming

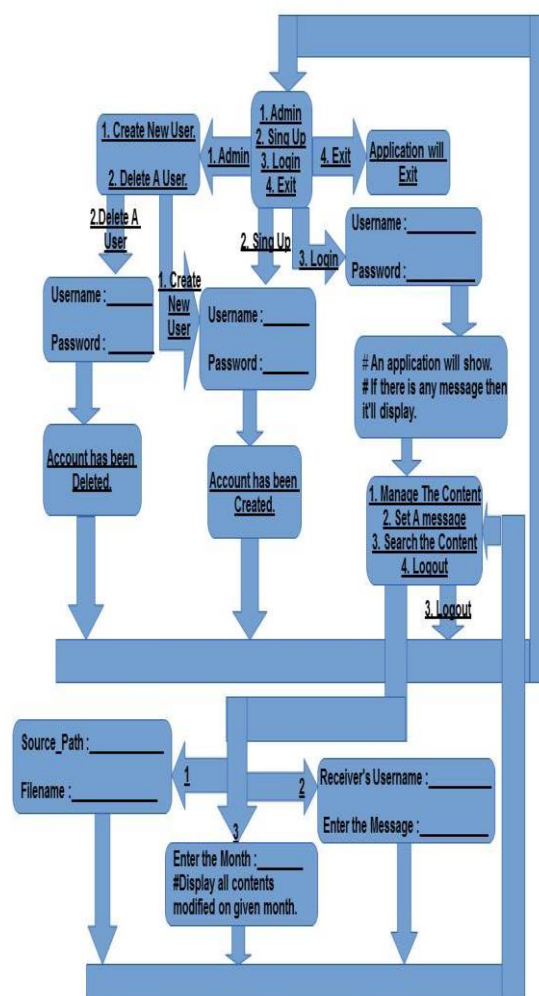
## INTRODUCTION

It is always difficult to manage the contents in collaborative environment for individual needs. But this application serves individual details for each user to avoid collision of data. It contains individual directories for each user as well as individual directories for each type of files in each user's directory. Some time it arises a problem, while working with a file and the file will be crushed. To overcome this problem, CMS provide a feature by creating backup and user can work with backup file without interrupting the original file. On the other hand, it also enables messaging; one user can send a message to another user as well as user can create a note for him. User can also search his contents by month. Application will search content present in current user's directory and show the possible results which are modified on given month and present in user's directory.

A CMS serves as a central interface containing documents, movies, pictures, phone numbers, and scientific data. CMS can be used for storing, controlling, modifying and publishing documentation. This content management application is simple to use and understandable to your individual needs. No programming knowledge is required to manage and control your content. With the ability to define multiple users and roles, you can control the privileges assigned to your users, allowing complete control to their individual contents. It provides full management of your

comprehensive document, image and media libraries including messages and organize, store and display all of your contents with ease.

## METHODOLOGY



### Step Algorithm-

**Step 1:** Create a "CMS" directory -

- It contains all the information regarding to CMS application.
- It contains the all user's data and details.

**Step 2:** Create a text file with name "login.txt" -

- It contains all user's names and respective passwords.

**Step 3:** Ask user to choose an option from following -

- 1. Admin.
- 2. Sing up.

- 3. Login.

**Step 4:** In Admin mode -

- Admin can delete any exist user.
- Admin can create a new user.

**Step 5:** In Sing up mode -

- User can create user.
- As user will create an account, the details regarding with the user will update in “CMS” directory followed by user name.

**Step 6:** In Login mode -

- User can login into the user's own account
- User can operate the following operation -
  - 1. Content Management.
  - 2. Messaging.
  - 3. Logout.

**Step 7:** As user login into the system, an application will open automatically and this application was mostly used by current login user.

**Step 8:** After that a message will show to user if any user sent to current user.

**Step 9:** In Content Management mode, user can edit any file.

- A duplicate copy of original file will be created in user's directory.
- User can edit and save the duplicate file.
- After edit the file, if user wants, user can replace the original file with duplicate file.

**Step 10:** In Messaging mode -

- User can send a message to any user followed by receiver's username and message.

**Step 11:** In Searching mode -

- User can search the contents by month.
- All the contents modified on the given month will show to user.

**Step 12:** Finally, if user want, user can logout from the application.

### Explanation of Messaging-

The main feature of messaging is to send a message to any existing user in the application. It can also use as notes by any user for himself/herself. Suppose there are two users like user1 & user2. When user1 logged into the application and user1 wants to send a message to user2, user1 should mention receiver's user name say “user2”. The application will check the existence for user2. If user2 exists then the application will allow user1 to create message and send to user2 otherwise application will show an alert message. When user2 will login into the application then the message will appear automatically for once only.

### Explanation of Content Management-

The main feature of content management is to store and organize files, and provide control to access their data. User can access any file from the system and can modify it without updating the original file. When user chooses to manage the content, application will ask user to give a source path of the file and application will check the existence of the path. If the path will exist the application will ask for filename and again application will check the existence of the file. If file will exist in the given source path then the application will make a duplicate file of original and the duplicate file will open in edit mode. If user wants, can modify the file and save it. As user will save the file application will save the duplicate file without modifying the original file. After that application will ask to user to whether the user wants to replace the original file with the duplicate file. If user wants, he can replace the original file.

### Explanation of Searching-

The main feature of searching is to find the content on the given parameter. User can search his contents on the basic of month. Application will ask user to enter the name of month and application will search the all the contents present in user's directory and application will show all the contents, modified on given month.

### RESULT

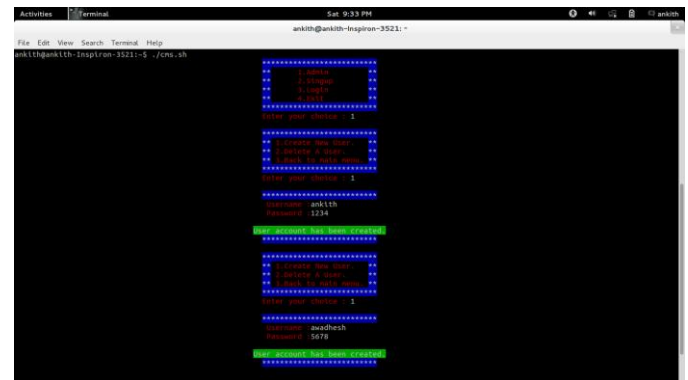


Figure-1

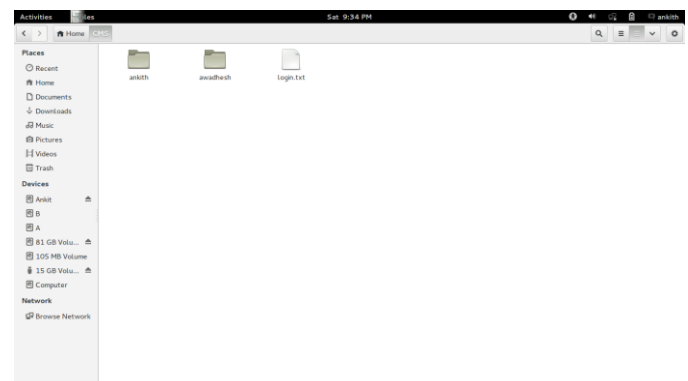


Figure-2

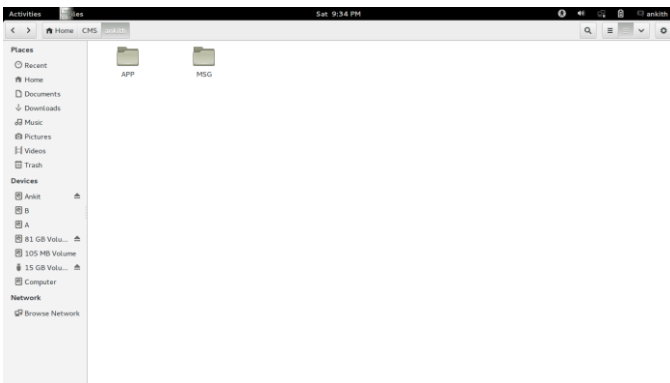


Figure-3



Figure-7



Figure-4



Figure-8

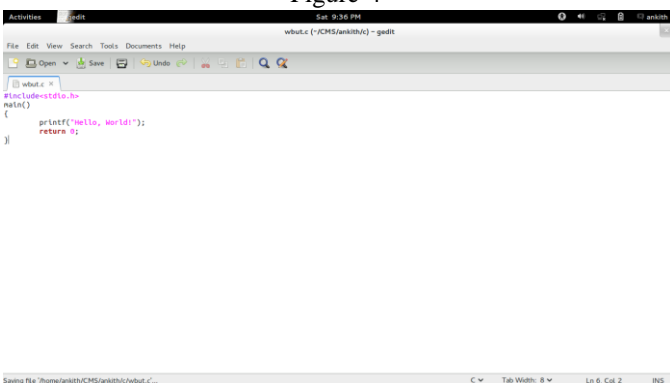


Figure-5

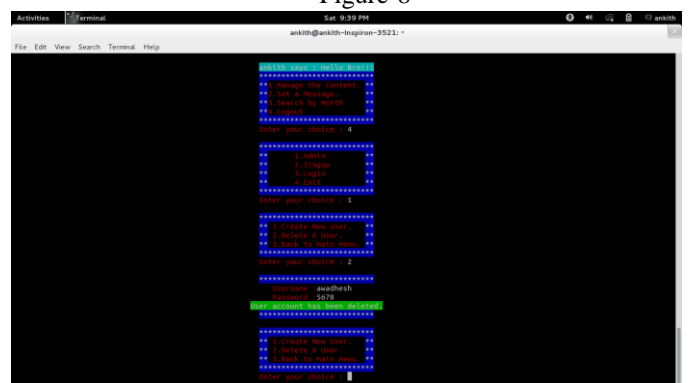


Figure-9

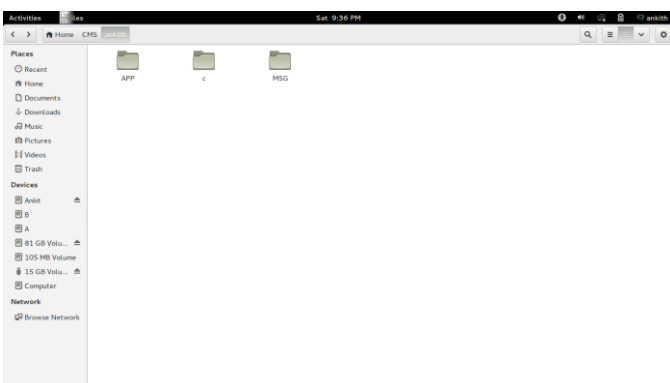


Figure-6

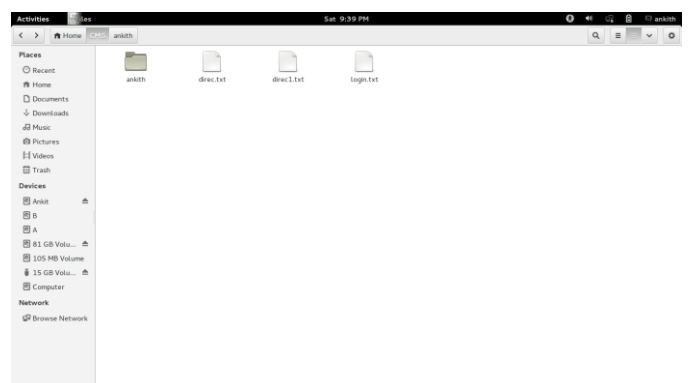


Figure-10

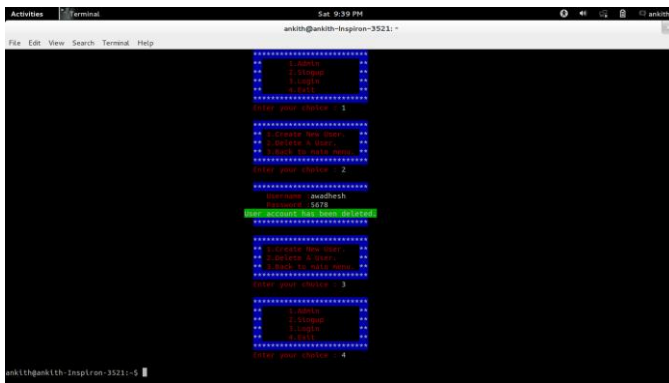


Figure-11

## FUTURE WORK & CONCLUSION

The security features need to be imported in this system in order to prevent outside attacks. Encryption and decryption techniques can be used to store the file secretly and securely.

The Methodology section of this report describes the implementation concept in detail and result section shows that the system works as per our expectation. We hope that the concept described in this report will aid the developers' community in near future.