# Section 1: Project Overview

ALIF Document Workflow System software sets the standard for document workflow solutions. Users access and interact with the application by logging into the software. Every operation occurs within this browser-based interface, from document attaching, indexing, and retrieving documents to approving and emailing/distributing them.

In ALIF Document Workflow System, you can attach documents of any file format i.e. Excel File XLS, PDF documents, Image Formats. Documents and other files can be attached using upload/document attaching features to network folders, e-mail accounts or catalog browser. All documents can be retrieved using document properties that are defined and associated with document. Integrated e-mail facility allows you and your team to distribute documents for approval workflow without requiring external software. A powerful document workflow & approval engine can manage your information & documents behind the scenes based on system events or schedules defined by users.

## 1.1 Project Goals and Objectives

The main goal and objective ALIF Document Workflow System is to automate the manual document approval system and to promote the paper less environment in organization. Also it makes the document approval process quick & secure by implementing the renowned security standards. The system helps the user in document management and maintaining versions/revisions of each document.

## 1.2 Project Scope

The ALIF Document workflow system is secured with login and is divided into two main sections:

Admin Section: This section is used by administrator of system to configure global settings, users & permissions and will help in managing the activities. It is also used to define lists, document properties, email templates and workflows.

User Section: The section is used by the system user to attach or upload its document in a particular catalog with document type. It is also used by authorities to approve/reject document, sending documents to other members and data entry of document properties attached with different office documents.

## 1.3 Operating Environment

## 1.4 Design & Implementation Constraints

The proposed system must be designed and developed using the following tools and technologies:

* **Operating System:** Windows/Linux Operating System.
* **Web Server:** Apache Server
* **Scripting Language:** PHP 5.3
* **Database:** My SQL
* **CSS Framework:** Twitter Bootstrap
* **Development IDE:** Net Beans IDE v7.2, Dreamweaver MX
* **Source Sharing:** Bit Bucket (GitBash)
* **Graphics Designing:** Adobe Photoshop

# Section 2: Customer Requirements

The requirements that are identified in requirement gathering phase for ALIF Document Workflow System are:

|  |  |  |
| --- | --- | --- |
| Customer Requirements | | |
| ID | Requirement | Description |
| **CR-2.1** | User Authentication & Authorization | User authentication should be done automatically when accessing the system. Every user must sign in to the system and should not be prompted to reenter any credentials. The administrator of the system should have control to user access. The system should provide a facility:   * To create user accounts. * To activate or deactivate accounts. * To attribute roles and permissions.   The system should allow users to play multiple roles. A person could act as an author of document, an entry person and a part of workflow process |
| **CR-2.2** | Document Versioning | Document version control provides check in / checkout ability preventing documents from being overwritten or deleted, as documents are updated by more than one member. All versions of a document are maintained by the system. |
| **CR-2.3** | Application Distribution Licensing | In order to avoid illegal installation and distribution of application, the application distribution license should be implemented. The licensing could be of two types:   * Individual License * Group License |
| **CR-2.4** | Feature Based User Help | For each activity in application, a feature based user help is required, which guides the user to accomplish the desired task. |
| **CR-2.5** | Organization Hierarchy | The system should provide a feature to configure client’s organization profile which will be used later in different system reports and tagging documents. The system needs to provide organizational hierarchy in two steps:   * The user should be able to define its company profile, and should be able to upload its company logo. * The user should be able to define its company’s branches (or projects). |
| **CR-2.6** | Server Configuration & Settings | The system should facilitate client to configure following server settings:   * Email Server * File Server * Database Server |
| **CR-2.7** | Document Management | Document management feature is required. Using this feature, the user can:   * Define document category. * Define document type. * Upload document. * Enter information of document to make it searchable. * Search document. * Email document. * Download document. * Delete document. * View document history. |
| **CR-2.8** | Workflow Process | A document workflow process is required in application. By using it, the user should be able to define a workflow for any document .T he can add members of workflow process in sequential order. The user can define retention policy for each member. User should be able to approve and reject document. |
| **CR-2.9** | User Collaboration & Email Notifications | Members involved in some tasks should be able to exchange comments, ideas, suggestions or any remarks at each point of the process. |
| **CR-2.10** | Email Notification (Workflow) | The system should be able to track activities for each user and inform them by email that a new pending task has arrived. Or email reminders on some pending activities if they have exceeded a time limit. |
| **CR-2.11** | Logging & Reporting | The application should track and record every user activity to ensure a complete audit trail of document activity.  This document auditing capability ensures compliance and protects intellectual property.  The application is required to give built in reports to administrator about the usage of documents and users. And also the log reports that can be generated and printed:   * Report that tracks relevant information of the requests i.e. initial document and its request for changes. * Report that tracks late/delayed tasks based on their deadlines. * Reports that tracks activities per person or unit, number of tasks handled by the person.   An on screen event viewer or audit trail feature can be helpful for system administrator to monitor document and user activities effectively. |

# Section 3: Functional Requirements

Functional requirement are divided into two main sections:

## 3.1 Admin Section

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Functional Requirements | | | | |
| ID | Functional Requirement | Customer Req. ID | Criticality | Status |
| **FR-A** | **Sign In** | CR-2.1 | High |  |
| **FR-A.1** | Admin sign in first before they are allowed for any administrative tasks. |  |  |  |
| **FR-A.2** | Admin enters their username and password. |  |  |  |
| **FR-A.3** | The sign in page must use the password field to keep the password from being viewable. |  |  |  |
| **FR-A.3** | Admin can:   * Manage Users & Permission * Manage Company & Project * Manage Document Category & Type * Manage Workflow * Monitors Activity |  |  |  |
| **FR-B** | **Company Profile** | CR-2.5 | High |  |
| **FR-B.1** | The application limits admin to define only one company. |  |  |  |
| **FR-B.2** |  |  |  |  |

# Section 3: System Features

The features that we have identified for ALIF Document Workflow System are listed below:

## 3.1 Admin Section

The administrator logs into the system to access following features:

### 3.1.1 System Settings:

It is used to configure global settings such as company profile, email server, database settings & configuration.

#### 3.1.1.1 Company/Client Profile:

This feature helps administrator to define its company profile in detail. The admin can also attach its company logo in profile.

Actions: Add/Update  
Feature Dependency: Nil  
Frequency: Once  
Inputs: Data field(s) to define company profile.  
Outputs: Company profile is saved or updated.  
Exceptions: The mandatory field(s) is not provided or an error has occurred while saving.

#### 3.1.1.2 Project/Branches/Sites Detail:

This feature helps administrator to define its company profile in detail. The admin can also attach its company logo in profile. The admin can add or update company profile.

Actions:   
Inputs:   
Outputs:   
Exceptions:

#### 3.1.1.3 Email Server Settings:

It is used to configure email server settings. The administrator also provides server authentication settings. The email server could be either hosted on web or hosted locally.

#### 3.1.1.4 File Server Settings:

This feature facilitates admin to configure its file server used to stores documents used in uploaded by user in workflow process. The file server could be either hosted file server on web or hosted locally.

#### 3.1.1.5 Database Server Settings:

It is used to configure database connection settings for your application. The database server could be either hosted on web or hosted locally.

### 3.1.2 Catalog:

This feature allows user to define one or more catalogs. For Example, Accounts, HR, Purchase etc.

### 3.1.3 Document Types:

This feature allows user to define one or more document types against a particular catalog. For Example, **Catalog:** Accounts->**Document Types:** Journal Voucher, Cheque etc.

### 3.1.4 Document Properties:

It is used to configure fields that can be shared among several document types across multiple catalogs. It allows admin to add/modify document identifiers & configure settings such as Name, Type etc.

### 3.1.5 Workflow Process:

This feature allows administrator to define workflow process for any document type by selecting a catalog.

### 3.1.6 Workflow Process Members:

Once the administrator has completed the workflow process definition, he can now add approval member in sequential order for document authentication.

### 3.1.7 Document Retention Policy:

In workflows, document retention is part of record management. It represents the period of time a document should be retained. This feature allows administrator to define document retention policy for each member in workflow process in terms of days, weeks, months etc.

### 3.1.8 Workflow Triggers:

This feature manages work flow rules used to automate document management procedures and notifications. It allows admin to create/modify triggers determining how & when workflow begins.

### 3.1.6 Email Templates:

It is used to define email templates require during workflow process against each activity performed on document. Admin can also sub-merge document properties in email template.

### 3.1.7 Activity Monitor/Event Viewer:

Keep track of all major events and actions performed by system users. The event viewer displays full details for Login Attempts, Searches, and Views, E-mailing, Check Ins/Outs, Document Deletions and more. Every event record contains a date and time, username, system name, IP address and actions performed.

### 3.1.9 Users & Permissions:

This feature manages users that have access to documents and actions attached with document workflow. Users within the system can be added, disabled, or deleted from the administration page and the permissions to various activities can be assigned using this feature.

## 3.2 User Section

The user logs into the system to access following features:

### 3.2.1 User Dashboard:

This feature provides user with the Dashboard after logging in to the system. It displays user recently received messages, documents waiting for approval, documents in your work queue, and uploaded documents requiring coding. The Dashboard provides a convenient view of your document-related work and activities.

### 3.2.2 Document Search:

The Search page lets you find documents by entering one or more words of index fields, e.g., Name and Document Number. Once search results have been obtained, users can view the documents and perform actions related to them.

### 3.2.3 Coding Queue:

When documents have been attached or uploaded, the documents will be first routed to the Coding Queue. Then an indexing clerk/data entry performs heads-up coding on these documents, after that document is moved to work queue.

### 3.2.4 Work Queue:

The Work Queue serves as a holding area for documents that require special attention or need tasks performed related to them. It can also serve as a holding area for documents that require collaboration by multiple users in the system.

### 3.2.5 Approval Queue:

The Approval Queue contains documents routed to a user or group of users via one or more approval processes created and managed by user.

### 3.2.6 Document Properties:

Users with field-editing permissions can make changes to document properties by selecting the Edit Properties item from the Modify menu. The Document Properties window also serves as a data-entry tool for documents that have been routed to the Coding Queue for post-uploading coding.

### 3.2.7 Document Emailing:

E-mail one or more documents in the results list to one or more recipients of your choice. Simply provide the e-mail address, subject, and message body. You can send multiple documents as separate attachments or as a single attachment.

### 3.2.8 Document Downloading:

This feature is used by user to download document on file system.

### 3.2.9 Catalog Browser:

This expandable browser tree provides a familiar Explorer-type view of the documents as they exist on the file system. Documents can be displayed and modified through the Catalog Browser the same as if they had been accessed from the search page.

### 3.2.10 Approval Process:

This feature shows deadlines and priorities which help users determine which documents to process first. Automated messages can be sent when new documents arrive or deadlines expire. User starts approval process from the actions menu. Users approve or reject documents in their Approval Queue after appropriate tasks have been completed. Informative notes can be sent along with any approval or rejection.

### 3.2.11 Document Retention:

Administrators first enable an overall retention policy, if desired, for each document type. User can over-ride the retention policy and develop his own custom retention policy. Documents may be retained for a given period of time represented in days, weeks, months, quarters, or years. They can also be retained indefinitely. Document retention policies can be added, modified, or removed at any time by users having the Override Retention Policy permission. When documents expire, it will be automatically removed from the system.

### 3.2.12 Document Versioning:

The software maintains revision history for each document in the system. Any content modifications increment the major version (1.0, 2.0, etc.). Other actions increment the minor version (1.3, 1.4, etc.). The Document Version History window displays these changes. Each major version can be accessed separately.

# Section 5: Use Cases

|  |  |  |
| --- | --- | --- |
| UC-5.1 Save Company Profile | | |
|  | Functional Req. ID | FR-B |
| Overview | This use case begins when the user wants to define company profile. | |
| Frequency of Use | Once | |
| Actors/Roles/Users | Actor Name | |
| Admin | |
| Pre Conditions | No. | Pre Condition |
| 1 | Admin must be signed in before defining company profile. |
| Post Conditions | No | Post Condition |
| 1 | Company profile is saved. |
| 2 | A record saving message is displayed by system. |
| Alternate Exceptions | No. | Exception |
| 1 | Mandatory fields are not entered and system generates validation notification. |
| 2 | The system is unable to save record and generates an error message. |

|  |  |  |
| --- | --- | --- |
| UC-5.2 Update Company Profile | | |
|  | Functional Req. ID |  |
| Overview | This use case begins when the user wants to update already saved company profile. | |
| Frequency of Use | Once | |
| Actors/Roles/Users | Actor Name | |
| Admin | |
| Pre Conditions | No. | Pre Condition |
| 1 | Admin must be signed in before defining company profile. |
| 2 | Saved company profile is already loaded in form fields. |
| Post Conditions | No | Post Condition |
| 1 | Company profile is updated. |
| 2 | Record Update message is displayed by system. |
| Alternate Exceptions | No. | Exception |
|  | 1 | The system is unable to save record and generates an error message. |