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| Requirement Specification Document for Checklist Manager |
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# Purpose

This document describes the Functional and Requirement specification of the Checklist Manager. All the enhancement information and requirements documented herein are collected and compiled by NTT India Digital business solution project team from NTTCOM system division.

This document will be used as the blueprint by us for the Designing, Building, Testing and Deployment of the Checklist Manager project.

# Scope

The main objectives of this project are as stated below,

* Authentication Management Function
* User Management
* Checklist Creation
* Checklist Assignment
* Checklist Execution
* Checklist Approval

# Abbreviations / Acronyms / Glossary

Table-3.1

| Acronym | Explanation |
| --- | --- |
|  |  |

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# Application changes functional requirement

## Authentication Management Function

Purpose:

This functionality will display the login screen, incorporates authentication functionality on the login page.

Field Level Specifications:

Table–4.1-1

| **No.** | **Field Name** | **Control Type** |  | **Edit Type** | **Size** | **Remarks** |
| --- | --- | --- | --- | --- | --- | --- |
|  | Employee ID | Text Box |  | Editable | 8 | Employee ID length should be 8. |
|  | Password | Text Box |  | Editable |  | The Password will be encrypted into SHA Format for higher security. |

Data Element:

Table–4.1-2

| No. | Data Name | Description | Value | Remarks |
| --- | --- | --- | --- | --- |
| 1 | employee\_id | Unique Employee ID of the User. | Employee ID | Employee ID length should be 8. |
| 2 | password |  | SHA Format | The password will be encrypted by Salting and Hashing and then stored. |

Business Rules:

#### Form load,

1. Display the Login screen.
2. Set the Title in the screen header.
3. The Login screen should hold the below mentioned fields,
4. Employee ID\*
5. Password\*

#### While clicking Login, (Login Authentication process)

1. Value Check of Employee ID and Password
2. The fields Employee ID and Password should be made mandatory. The focused field should be highlighted.
3. If Employee ID is not entered or the value of the Employee ID textbox is empty, the warning message (WAR\_001) should be displayed.
4. If Password is not entered or the value of the Password text box is empty, the warning message (WAR\_001) should be displayed.
5. Login Authentication Execution
6. Entered Employee ID and Password should be checked against the Employee ID and encrypted Password registered in the database. If the entered credentials are valid the User should be authorised access and redirected to the Dashboard.
7. If the input Employee ID is not registered in the database, the warning message (WAR\_002) should be displayed.
8. If the input Password is not registered in the database, the warning message (WAR\_003) should be displayed.
9. If the Employee ID and the Password entered is valid, but the Delete Flag for the entry in the database is 1, the warning message (WAR\_004) should be displayed.
10. If database connection failure occurs during Authentication, the error message (ERR\_001) should be displayed.

#### While clicking Change Password, (After Logging in)

1. The Password entered in the New Password Text box will be checked with the Password entered in the Re-enter New Password Text box
2. The fields New Password and Re-enter New Password should be made mandatory. The focused field should be highlighted.
3. If the New Password is not entered or the value of the New Password textbox is empty, the warning message (WAR\_001) should be displayed.
4. If the Re-enter New Password is not entered or the value of the Re-enter New Password textbox is empty, the warning message (WAR\_001) should be displayed.
5. If the value of the New Password and the Re-enter New Password do not match, the warning message (WAR\_005) should be displayed.

Table–4.1-3

| **No.** | **Error code** | **Type** | **Message** | **Remarks** |
| --- | --- | --- | --- | --- |
|  | ERR\_001 | Error | Server Connection Error. Please Try Again! | When database connection error occurs. |
|  | WAR\_001 | Warning | Please fill out this field. | When a specific field is not entered. |
|  | WAR\_002 | Warning | The Employee ID you entered is incorrect. | When the Employee ID entered is incorrect. |
|  | WAR\_003 | Warning | The Password you entered is incorrect. | When the Password entered is incorrect. |
|  | WAR\_004 | Warning | The User no longer exists. | When the User has been soft deleted. |
|  | WAR\_005 | Warning | Password did not match. | When the New Password and Re-enter New Password entered do not match. |

## User Management

Purpose:

This functionality allows the admin to manage already existing users to edit Username, change Role and even delete a specific user or create a new user.

Field Level Specifications:

Table–4.2-1

| **No.** | **Field Name** | **Control Type** | **Edit Type** | **Size** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1. | Employee ID | Text Box | Editable | 8 | Employee ID length should be 8. |
| 2. | Username | Text Box | Editable |  |  |
| 3. | Password | Text Box | Editable |  | Entered Password will be SHA Encrypted. |
| 4. | Role | Dropdown Menu | Editable |  | Options will have 4 roles. |

Business Rules:

#### Form load,

1. Display the Create User screen.

Set the Title in the screen header.

The Create User screen should hold the below mentioned fields,

1. Employee ID\*
2. Username\*
3. Password\*
4. Role\*

#### While clicking Login, (Login Authentication process)

1. Value Check of Fields
2. The fields should be made mandatory. The focused field should be highlighted.
3. If any field is not entered or the value of any field is empty, the warning message (WAR\_001) should be displayed.

## Checklist Creation

Purpose:

This functionality allows the admin to create a Checklist and add it to a list of existing Checklists, which can be later assigned to users.

Field Level Specifications:

Table–4.3-1

| **No.** | **Field Name** | **Control Type** | **Edit Type** | **Size** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1. | Checklist ID | Label | Not Editable |  | Checklist ID is autogenerated. |
| 2. | Checklist Name | Text Box | Editable |  | Name should be unique and readable. |
| 3. | Purpose | Text Area | Editable |  | Short information about the Checklist. |
| 4. | Checkitem | Dropdown Menu | Editable |  | Name of the Checkitem. |
| 5. | Add Item | Button | Not Editable |  | Used to add Checkitems one by one. |

Data Element:

| No. | Data Name | Description | Value | Remarks |
| --- | --- | --- | --- | --- |
| 1. | checklist\_id | Checklist ID is autogenerated. | ID |  |
| 2. | checklist\_name | Name should be unique and readable. | Checklist |  |
| 3. | purpose | Short information about the Checklist. |  |  |
| 4. | checkitem\_id | Checkitem ID is autogenerated. | ID |  |
| 5. | checkitem\_name | Name should be unique and readable. | Checkitem |  |

Table–4.3-2

Business Rules:

1. The ID of the Checklist and Checkitem must be unique, should not be 0 and is automatically generated.
2. The Name of the Checklist must be readable, relevant to the corresponding Project and same applies to the Checkitems under it.
3. The Checklists created can be edited or deleted anytime from the list of Checklists by the admin.

## Checklist Assignment

Purpose:

This functionality will allow the admin to assign the checklists which are already created,

to the user.

Field Level Specifications:

Table–4.4-1

| **No.** | **Field Name** | **Control Type** | **Edit Type** | **Size** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1. | Assignment ID | Label | Not Editable |  | Assignment ID is autogenerated. |
| 2. | Checklist Name | Dropdown Menu | Editable |  | List of all already created Checklists. |
| 3. | Assigned To | Dropdown Menu | Editable |  | List of all Users. |
| 4. | Approver | Dropdown Menu | Editable |  | List of all Approvers. |

Data Element:

Table–4.4-2

| No. | Data Name | Description | Value | Remarks |
| --- | --- | --- | --- | --- |
| 1. | assignment\_id | Assignment ID is autogenerated. | ID |  |
| 2. | assigned\_to | List of all Users. | User |  |
| 3. | approver | List of all Approvers. | Approver |  |
| 4. | task\_id | Task ID is autogenerated. | ID |  |
| 5. | assigned\_on | Time of Checklist Assignment. | Time Stamp |  |
| 6. | status\_id | Status ID for Four Values. | ID | Values are Incomplete, Submitted, Completed and Rejected. |

Business Rules:

1. The ID of the Assignment and Task must be unique, should not be 0 and is automatically generated.
2. The Checklist Name dropdown must display all Checklists, which are already created.
3. The Assigned to dropdown must display all users, who are meant to execute Checklists.
4. The Approver dropdown must display all approvers, who are meant to approve executed Checklists.
5. The Status ID should by default be Incomplete, which upon Execution will change to Submitted, and then upon Approval will change to Completed or Rejected.

## Checklist Execution

Purpose:

This functionality will allow the user to submit the Checklist status, which he has been assigned to and will request for approval upon submission, to the approver.

Field Level Specifications:

Table–4.5-1

| **No.** | **Field Name** | **Control Type** | **Edit Type** | **Size** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1. | Checkitem ID | Label | Not Editable |  | Checkitem ID is autogenerated. |
| 2. | CheckItem | Label | Not Editable |  | Checkitems created under the Checklist will be displayed. |
| 3. | Status | Label | Editable |  | Displays the status Incomplete (Default)/ Completed/ Excluded, which can be changed using the Action buttons. |
| 4. | Remarks | Text Box | Editable |  | Optional Remarks for each Checkitem. |

Data Element:

Table–4.5-2

| No. | Data Name | Description | Value | Remarks |
| --- | --- | --- | --- | --- |
| 1. | value\_id | Value ID for Three Values. | ID | Values are Incomplete, Completed and Excluded. |
| 2. | remarks | Optional Remarks for each Checkitem. |  |  |

Business Rules:

1. The User must be displayed all the Checklists that has been assigned to him, which upon clicking should open the Checklist Execution Page.
2. The Value ID must be initially at Incomplete, which upon Execution changes to Completed or Excluded.
3. The User can be able to submit the Checklist Execution only once, which gets sent to Approver to get approved.
4. Upon Rejection by the Approver, the User will be again asked to submit the Checklist Execution for the particular Checklist.
5. The Remarks for each item is optional, which can be used to inform the Approver the reason why a particular Checkitem is excluded.

## Checklist Approval

Purpose:

This functionality will allow the approver to review and approve or reject the Checklist, for which he has been assigned as an approver.

Field Level Specifications:

Table–4.6-1

| **No.** | **Field Name** | **Control Type** | **Edit Type** | **Size** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| 1. | Task ID | Label | Not Editable |  | Task ID is autogenerated. |
| 2. | Assigned On | Label | Not Editable |  | Time of Assignment. |
| 3. | Checkitem ID | Label | Not Editable |  | Checkitem ID is autogenerated. |
| 4. | Checkitem | Label | Not Editable |  | Name of the Checkitem. |
| 5. | Status | Label | Not Editable |  | Status set by User after Execution. |
| 6. | Remarks | Label | Not Editable |  | Optional Remarks for each Checkitem. |
| 7. | Comment | Text Area | Editable |  | Approver’s Comment for his action. |

Data Element:

Table–4.6-2

| No. | Data Name | Description | Value | Remarks |
| --- | --- | --- | --- | --- |
| 1. | comment | Comment is optional, explains Approver’s action of Approving or Rejecting to the User. |  |  |

Business Rules:

1. The Approver can be able to Approve/ Reject the Checklist, he has been assigned to, based on User’s Execution.
2. The Approver can also be able to comment on User’s action and also to explain the User, the reason for his approval or rejection.
3. When the Approver approves, the Status ID of the Checklist will change to Completed, whereas when denied, changes to Rejected.