Use Case Specification

DMT/RM01/TMP

|  |  |
| --- | --- |
| Project Code | PRJ\_TransferFundsSystem\_001 |
| Project Name | Transfer Funds System |

|  |  |  |
| --- | --- | --- |
| Prepared/Modified by | Role | Date of Preparation |
| Chaitrali Wadnere | Software Associate | 22nd December, 2017 |
| Reviewed by | Role | Date of Review |
| Neha Gudisagar | Software Associate |  |
| Approved by | Role | Date of Approval |
| Dayanand Patil | Consultant |  |
| Circulation List |  | Version Number of the template:1.1 |
| Version Number | 1.1 |  |

<<Customer>> REVIEW HISTORY

<<Customer comments on the Use case along with the signed off is tracked here>>

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Version | <<Version number>> |  |  |  |  |  |
| Date | <<Date of Review>> |  |  |  |  |  |
| Reviewed by | << Reviewer Name>> |  |  |  |  |  |
| Reviewed UI Specification doc | << Whether UI Specification doc is reviewed >> |  |  |  |  |  |
| All Open Queries/issues closed | << Whether all the open queries and issues resolved>> |  |  |  |  |  |
| Agreement on Assumptions | <<Whether all the assumptions have been agreed upon by the customer>> |  |  |  |  |  |
| Sign Off | <<Signature>> |  |  |  |  |  |

Disclaimer:

The scope of the project ‘Trabnsfer Funds System’ is restricted to the contents of this signed off use case.

TABLE OF CONTENTS

[1. Use Case Name: Applying for Leave 5](#_Toc504932813)

[2. Actor(s): 5](#_Toc504932814)

[3. Preconditions 5](#_Toc504932815)

[4. Flow of Events 5](#_Toc504932816)

[4.1 Basic Flow 5](#_Toc504932817)

[4.2 Alternative Flows 6](#_Toc504932818)

[4.2.1 Alternate Flow 1 7](#_Toc504932819)

[4.2.2 Alternate Flow 2 7](#_Toc504932820)

[4.2.3 Alternate Flow 3 7](#_Toc504932821)

[Exception Flow 1: Login Failure Due to Invalid Credentials Exceeded Login Attempts 7](#_Toc504932822)

[Exception Flow 2: Exceeded Login Attempts 7](#_Toc504932823)

[Exception Flow 3: Web Server Down 8](#_Toc504932824)

[Exception Flow 4: Database Connectivity Error 8](#_Toc504932825)

[Exception Flow 4: Insufficient Balance Error 8](#_Toc504932826)

[Exception Flow 5: Network Connectivity Error 8](#_Toc504932827)

[5. Post Conditions 9](#_Toc504932828)

[6. Special Requirements 9](#_Toc504932829)

[Performance 10](#_Toc504932830)

[Availability 10](#_Toc504932831)

[User Interface 10](#_Toc504932832)

[Security 10](#_Toc504932833)

[7. Extension Points 10](#_Toc504932834)

[Extension in Alternate Flow 1: 11](#_Toc504932835)

[Extension in Alternate Flow x: 11](#_Toc504932836)

[8. Business Rules 11](#_Toc504932837)

[9. Diagrams 12](#_Toc504932838)

[Use Case Diagram for User 12](#_Toc504932839)

[Activity Diagram<<Not Applicable>> 13](#_Toc504932840)

[10. Scenarios 13](#_Toc504932841)

[Success Scenarios 13](#_Toc504932842)

[Failure Scenarios 13](#_Toc504932843)

[11. Issues 13](#_Toc504932844)

[12. UI Specifications 14](#_Toc504932845)

[13. Inter System Dependencies 14](#_Toc504932846)

[14. Integration with an already existing System of the <<Customer>><<Not Applicable>> 14](#_Toc504932847)

[15. Assumptions 14](#_Toc504932848)

1. Use Case Name: Applying for Leave

Use Case ID: UAS.EMPLOYEE.LEAVE\_001

Brief Description:

This Use Case describes the process by which employee is able to apply for leave online. For applying employee must be already registered on the System and must have a valid user ID and password.

1. Actor(s):
2. Employee (user)

1. Preconditions
2. User has already registered on the system
3. User has entered the valid URL for login page and is directed to the login page
4. User has valid user id and the password
5. User has successfully logged in and the homepage is displayed
6. User has clicked on the “Leave Request” link and is directed to “Apply for Leave” form
7. Flow of Events

4.1 Basic Flow

<< Basic Flow is the main flow or heart of the Use case. Use case starts when the actor does some action i.e. an actor always initiate a use Case. The use case should describe what the actor does and what the system does in response. It should be phrased in the form of a dialog between the actor and the system.

The use case should describe what happens inside the system, but not how or why. If information is exchanged, be specific about what is passed back and forth. For example, it is not very illuminating to say that the Actor enters customer information; it is better to say the Actor enters the customer’s name and address. A Glossary of Terms is often useful to keep the complexity of the use case manageable; it defines things like customer information there, to keep the use case from drowning in details. >>

Name: Successful attempt to apply for leave

1. User clicks on the Leave Request on the Leave Management System home page.
2. The system displays Apply for Leave form
3. User enters Start Date
4. User enters End Date
5. User selects a value from Filter by Type dropbox
6. User selects same value as selected in Filter by Type dropbox in Absence Name dropbox
7. User selects a value from Reason dropbox
8. User enters a valid ten digit phone number
9. User enters requestor comments
10. User clicks on submit button
11. System validates all the details entered by user
12. System generates the message “Your request got submitted successfully”
    1. Alternative Flows

<<More complex alternatives should be described in a separate section, which is referred to in the basic flow of events section. Think of the alternative flow sections like alternative behaviour – each alternative flow represents alternative behaviour (many times, because of exceptions that occur in the main flow). They may be as long as necessary to describe the events associated with the alternative behaviour. When an alternative flow ends, the events of the main flow of events are resumed unless otherwise stated.

Note: Alternate flow should resume back to Basic Flow or Use case Ends. Always define the return or exit step>>

* + 1. Alternate Flow 1

1. User clicks on the Leave Request on the Leave Management System home page.
2. The system displays Apply for Leave form
3. User enters Start Date
4. User enters End Date
5. User selects a value from Filter by Type dropbox
6. User selects same value as selected in Filter by Type dropbox in Absence Name dropbox
7. User selects a value from Reason dropbox
8. User enters ten digit phone number
9. User enters requestor comments
10. User clicks on submit button
11. The system validation fails due to some invalid form details
12. System generates some valid error message according to the invalid field

Exception Flow 1: Login Failure Due to Invalid Credentials Exceeded Login Attempts

1. User clicks on the URL of login page
2. The system displays Login page
3. User enters Username
4. User enters Password
5. User clicks on the Login button
6. The system validates Username & Password
7. The system validation fails due to invalid user credentials and no more login attempts remaining
8. The system suspends the user account
9. The system informs the user that his/her account has been suspended

Exception Flow 2: Web Server Down

1. User clicks on the URL of login page
2. The system displays an error message regarding web server unavailability problem

Exception Flow 3: Database Connectivity Error

1. User clicks on the URL of login page.
2. The system displays Login page.
3. User enters Username
4. User enters Password
5. User clicks on the Login button
6. The system validates Username & Password
7. The system displays an error message regarding database connectivity problem.

Exception Flow 4: Save for later option out of scope

* 1. Successful Login into the System
  2. User clicks on the Leave Request on the Leave Management System home page.
  3. The system displays Apply for Leave form
  4. User enters Start Date
  5. User enters End Date
  6. User selects a value from Filter by Type dropbox
  7. User selects same value as selected in Filter by Type dropbox in Absence Name dropbox
  8. User selects a value from Reason dropbox
  9. User enters a valid ten digit phone number
  10. User enters requestor comments
  11. User clicks on Save for Later button
  12. System generates the message “Save for Later option is out of scope for user”

Exception Flow 5: Network Connectivity Error

1. User clicks on the URL of login page.
2. The system displays Login page.
3. User enters Username
4. User enters Password
5. User clicks on the Login button
6. The system validates Username & Password
7. The system displays an error message regarding network connectivity problem.
8. Post Conditions

<< Post conditions are the STATE where the system, sub-system and /or entities will be after Basic and /or Sub flow and/or Alternate flows are executed.

State the Post conditions for Basic flow + each and every Sub flow and Alternate flow.>>

| Flow Name | Post Condition |
| --- | --- |
| Successful user login to the leave management webpage | User will be logged in to the leave management webpage successfully and system should navigate user to the home page |
| Login to the leave management webpage with reattempt | User will be logged in to the leave management webpage successfully and system should navigate user to the Home Page |
| Invalid Form Details Error | *The system should display an error message to the user regarding the network connectivity problem* |
| Exceeded Login Attempts | The system should suspend the user account and should inform the user that his/her account has been suspended |
| Web Server Down | The system should display an error message to the user regarding web server unavailability problem |
| Database Connectivity Error | The system should display an error message to the user regarding the database connectivity problem |
| Save for Later Option Out of Scope Error | The system should display error message to the user regarding out of scope condition of save for later button |
| Network Connectivity Error | The system should display an error message to the user regarding the network connectivity problem |

1. Special Requirements

<<A Special Requirement is typically a non-functional requirement that is specific to a use case but is not easily or naturally specified in the text of the use case’s event flow.

Examples of special requirements include legal and regulatory requirements, application standards, and quality attributes of the system to be built, including usability, reliability, performance or supportability requirements. Additionally, other system common requirements such as operating systems and environments, compatibility requirements, and design constraints should be captured in Supplementary Specification.>>

Performance

1. The click on ‘Leave Request’link shall display the ‘Apply For Leave’ form within 30 seconds of user request

Availability

* 1. The user can apply for leave on working days 24x7 but cannot register on national holidays.
  2. Application is up and running 24\*7

User Interface

* 1. The letters on Menus shall be bold
  2. The active links should be displayed in red color
  3. The visisted links should be displayed in purpule color
  4. The Unvisited links should be displayed in blue
  5. The logout and back button should be available on every page of the application
  6. Look and feel and color of application should be proper.
  7. In case of Field level validation error messages should be displayed in red color.

Security

1. The system shall display the letters of PIN numbers in a masked format when they are entered by the customer.
2. User login should not have admin rights
3. After clicking on back on browser it should takes you back to the previous page in the list
4. After clicking on Forword on browser it should takes you forword to the next page in the list.
5. User Session should get expire if user is inactive for 10 mins.
6. Extension Points

<<Mention the Extension points of the use case.>>

Extension in Alternate Flow 1:

Extension in Alternate Flow x:

1. Business Rules

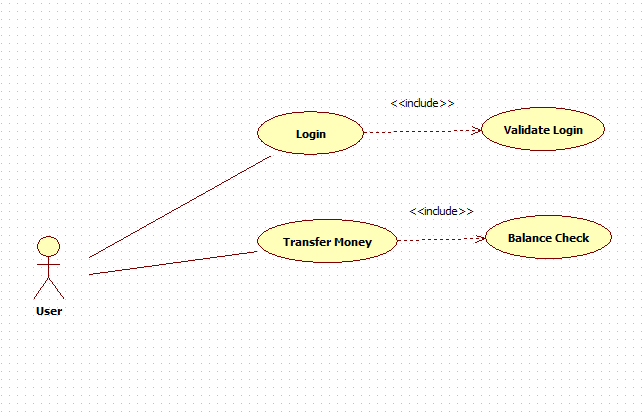
<<Identify any Business Rules applicable to this Use Case. Any generic business rule should be captured in a separate Common Business rules document or in the supplementary specification>>

| Business Rule Name | Business Rule Description | System action (if BR fails) |
| --- | --- | --- |
| BR01 | Start Date, Absence Name, Reason are mandatory | User is prompted to re-enter the credentials |
| BR02 | Start Date should be current date or future date | Displayes error message “Please Select proper Start Date” |
| BR03 | End date should be current date or future date | Displayes error message “Please Select proper End Date” |
| BR04 | Dropbox values selected in Absence Name and Filter by Type should be same | Display error message “Please enter same values in Absence Name and Filter by Type” |
| BR05 | Phone Number Should be of 10 digits | Display error message “Please enter a valid phone number” |
| BR06 | Requestor comments should be alpha numeric and should have maximum 200 character word limit | Display error message “Please enter a vlaid comment having 200 word character limit” |
| BR07 | After clicking on Submit button, it should display a message “Your request got submitted successfully” | System generates some valid error message according to the invalid field |

1. Diagrams

Use Case Diagram for User

<< Gives the relationship between Actors and Use cases [i.e. Main Use case, Include and Extends called by Main use case>>



Activity Diagram<<Not Applicable>>

<< Activity Diagram gives the high level interaction between the user, system and sub systems. Ideally only one activity diagram should be made per use case. >>

1. Scenarios

[Identify the scenarios using Basic Flow, Sub flow and Alternate flows]

Success Scenarios

* Successful user login to the Leave management webpage
* Login to the Leave management webpage with reattempt
* Form gets submitted successfully after clicking on submit button

Failure Scenarios

* Exceeded Login Attempts
* Web Server Down
* Database Connectivity Error
* Insufficient Balance Error
* Network Connectivity Error
* Form does not submitted successfully due to filling invalid form fields

1. Issues
2. What is the maximum size of username and password that a user can have ?
3. What if the user is blocked after invalid login attempts for three times ?
4. UI Specifications

<< Provide a link to the UI specification document of the Use case. Please don’t embed the document here>>

1. Inter System Dependencies

<<Mention the related functionality within the application that is impacted because of this use case. E.g variable or value settings in this use-case which will have a direct impact on the functionality of another use-case. Or vice-versa.>>

Module: ‘Transfer Funds to Other account’ gets impacted due to :

Use case name: Alternate Flow 1

Impact: If the user tries to transfer funds without login, he should be denied so. <<Mention the impact on the above mentioned Use case because of this use case>>

1. Integration with an already existing System of the <<Customer>><<Not Applicable>>

*<< This is especially applicable if the project at hand is an enhancement to an existing system.>>*

1. Assumptions

*<< List down all the assumptions considered by this use case>>*

1. The User should be authenticate.
2. User should know the valid URL of University Admission System.
3. User should have Google chrome browser for best view of site.

REVISION HISTORY OF THE WORK PRODUCT

<to be maintained by projects>

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Date | Version # | Section Changed | Details of changes made | Approved By |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |