Fusion ERP

Software Requirements Specification

for

GAD-1-HR Module

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Introduction

In this section, we present a comprehensive overview of the contents of this Software Requirements Specification (SRS) document. It encompasses the scope, providing a detailed description of what is covered, and an overview that outlines the key elements included. The purpose of this document is outlined, emphasizing its role in specifying the requirements for the software under consideration.

Additionally, we furnish a list of abbreviations and definitions to ensure clarity and understanding throughout the document. This section serves as a guide for readers, offering a roadmap to navigate the subsequent details and specifications outlined in the SRS document.

Purpose

This document serves to provide a detailed description of the requirements for the "HR-1" module within the "Fusion" software. Its main purpose is to outline the system's objectives, constraints, and specifications, serving as a proposal for customer approval and a reference guide for the development team as they embark on creating the initial version of the system. By offering clear insights, it aims to establish a shared understanding among stakeholders regarding the envisioned functionalities of the "HR-1" module in the broader context of the "Fusion" software.

Product Scope

The HR-1 module consists of many activities. This software product will have a limited scope as some of the activities are taken care of by other software. This software will take care of the following activities:

- CPDA (Cumulative Professional Development Allowance)
- LTC (Leave Travel Concession)
- Appraisal

Definitions, Acronyms, and Abbreviations

Table 1 - Definitions

Term	Definition

User	Someone who interacts with the application.
LTC	Leave Travel Concession
CPDA	Cumulative Professional Development Allowance
Appraisal	A formal assessment of the performance of an employee over a particular period.
Faculty	The teaching or research staff of university departments
Staff	All the people employed by a particular organization.
Director	A person who is in charge of an organization.
Dealing Asstt.	Deals with the receipts.
HOD	Head of Department
AR	Assistant Registrar
DR	Deputy Registrar
Stakeholder	Any person who has interaction with the system who is not a developer.
Registrar	An official is responsible for keeping a register or official records.
SRS	Software Requirements Specification
Admin	Assigns reviewers to applications.

References and Acknowledgments

[1] IEEE Software Engineering Standards Committee, "IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications", October 20, 1998.

[2] "Fusion" - Open Source Software, https://github.com/FusionIIIT/Fusion

User/Actor Description

Three types of users interact with the system: Users of the module, Approval Authorities, and Administrators. Each of these three types of users has a different use of the system so each of them has its own requirements.

Faculty/Staff :

Faculty/Staff members interact with the system to initiate various requests such as Appraisal, CPDA (Continuing Professional Development Activity), and LTC (Leave Travel Concession).

Role: They are applicants in different submission processes, seeking Appraisal assessment, professional development activities, or leave travel concessions.

General Functionalities:

- Faculty/Staff must log in to access respective functionalities.
- Click on the relevant option (Appraisal,CPDA,or LTC) to access the request form.
- Fill in details on the request form and submit the form.
- Redirected to the requests page with a pending status for the respective request.

HR Admin :

The HR Admin is a system user with elevated privileges responsible for assigning applications to reviewers.

Role: The Admin manages the application review process, assigning reviewers to assess applications.

General Functionalities:

- Log in to access administrative functions.
- Assign reviewers to applications by filling out a form.
- Open and manage a list of application requests.
- Faculty/Staff can view submission status and remarks on their profiles.
- Manages and updates Employee records.

Director/Registrar :

The Director/Registrar is a pivotal role in the system responsible for approving or rejecting LTC (Leave Travel Concession) and CPDA (Continuing Professional Development Activity) requests.

Role: They hold the authority to review and make decisions on LTC and CPDA requests, ensuring compliance and appropriateness.

General Functionalities:

- The Director/Registrar must log in to access their respective functionalities.
- Click on the relevant option (LTC or CPDA) to view the list of requests.
- Open a specific request and click on the APPROVE or REJECT button accordingly.
- Faculty/Staff can see the approved status on their profile after approval or the not approved status with remarks if rejected.

Note : Director manages requests from faculty and Registrar manages requests from Staff.
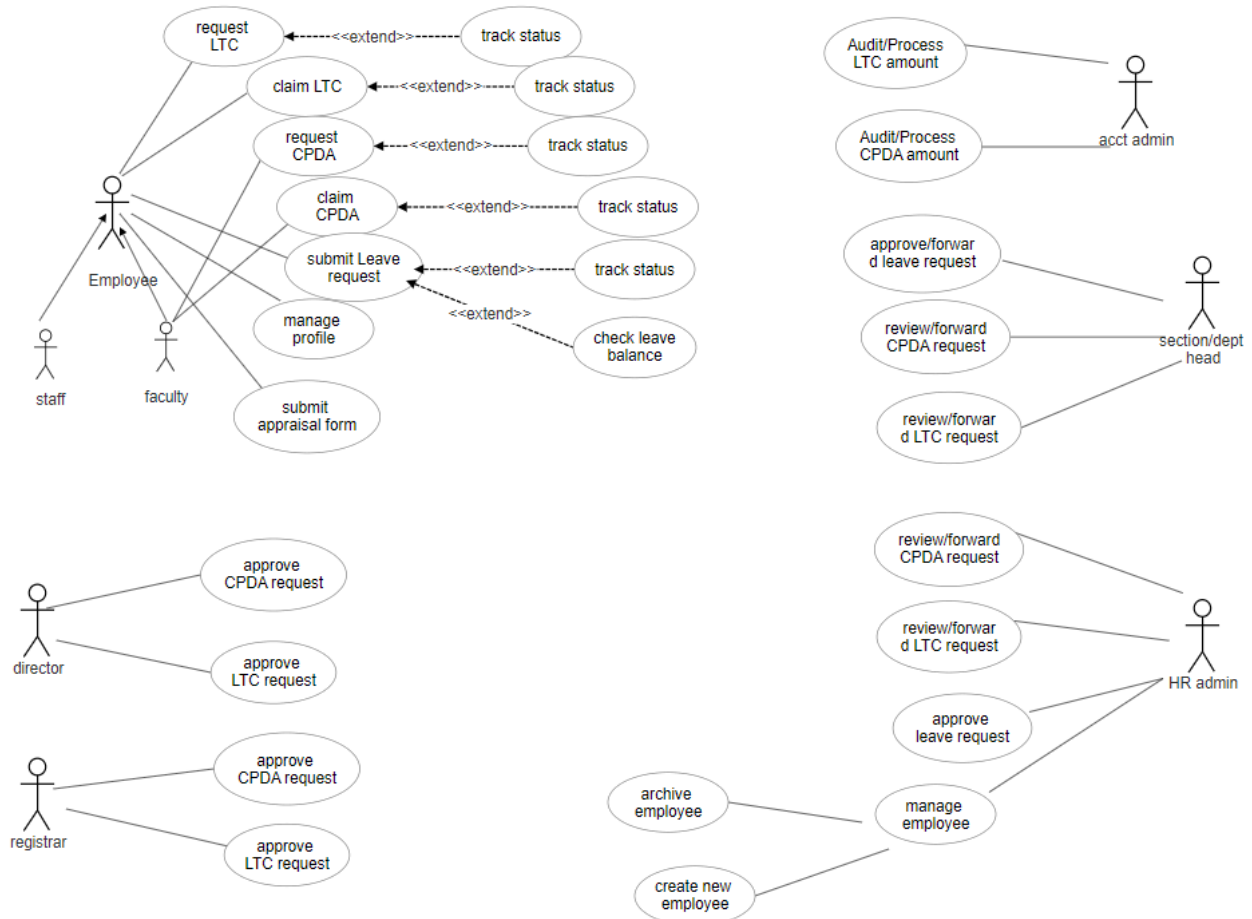
HOD :

- View the list of CPDA, LTC or Appraisal requests.
- Approves(forwards) or rejects the requests.
- Be redirected to the relevant request page.
- Faculty/Staff can see the submitted status and remarks on their profile after appraisal approval.
- For CPDA requests, forward the approved application to the Estt. Section.

Accountant :

- The Accountant manages audits, updates and reconciles financial transactions, ensuring accuracy and compliance.
- Conduct financial audits and implement corrective actions.
- Record, reconcile, and update financial transactions related to LTC and CPDA.

Functional Requirements

Use Case Diagram :

Use Case Description :

Use Case #1

Use Case ID	UC#1
Use Case Name	LTC form submission
Description	This use case describes the interaction between Faculty/Staff with the system to apply for LTC.
Actor	Faculty/Staff
Precondition	The Faculty/Staff must be logged in to the system.
Main Flow	1. Faculty/Staff clicks on the LTC option on the panel on the right side. 2. LTC request form opens where Faculty/Staff fills the details. 3. Faculty/Staff clicks on the submit button.
Postcondition	Faculty/Staff is redirected to the requests page having pending status on LTC request.
Alternate Flow	
Postcondition	
Sub Flow	
Postcondition	

Use Case #2

Use Case ID	UC#2
Use Case Name	LTC approval
Description	This use case describes the interaction between the Registrar/Director with the system to approve or reject an LTC request.
Actor	Registrar/Director
Precondition	The Registrar/Director must be logged in the system.
Main Flow	1. The Registrar/Director clicks on the LTC option on the panel on the right side. 2. The Registrar/Director clicks on the LTC requests tab on the left side panel. 3. A list of requests opens up and the registrar/director opens a request. 4. The Registrar/Director clicks on the APPROVE button.
Postcondition	The Registrar/Director is redirected to the LTC request page. Faculty/Staff can see the approved status on his profile.
Alternate Flow	The Registrar/Director clicks on the REJECT button.
Postcondition	The Registrar/Director is redirected to the LTC request page. Faculty/Staff can see not approved status with remarks on his profile.
Sub Flow	
Postcondition	

Use Case #3

Use Case ID	UC#3
Use Case Name	CPDA form submission
Description	This use case describes the interaction between Faculty/Staff with the system to apply for CPDA.
Actor	Faculty/Staff
Precondition	The Faculty/Staff must be logged in to the system.
Main Flow	1. Faculty/Staff clicks on the CPDA option on the panel on the right side. 2. CPDA request form opens where Faculty/Staff fills the details. 3. Faculty/Staff clicks on the submit button.
Postcondition	Faculty/Staff is redirected to the requests page having pending status on CPDA request.
Alternate Flow	
Postcondition	
Sub Flow	
Postcondition	

Use Case #4

Use Case ID	UC#4
Use Case Name	HOD_Recommendation
Description	This use case describes the interaction between the HOD with the system to forward a CPDA request,
Actor	HOD
Precondition	The HOD must be logged in the system.
Main Flow	1. The HOD clicks on the CPDA option on the panel on the right side. 2. The HOD clicks on the CPDA requests tab on the left side panel. 3. A list of requests opens up and HOD opens a request. 4. The HOD clicks on the APPROVE button.
Postcondition	The HOD is redirected to the CPDA request page. The application is forwarded to Estt. Section.
Alternate Flow	The HOD clicks on the REJECT button.
Postcondition	The HOD is redirected to the CPDA request page. Faculty/Staff can see not approved status with remarks on their profile.
Sub Flow	
Postcondition	

Use Case #5

Use Case ID	UC#5
Use Case Name	Estt. Section
Description	This use case describes the interaction between the AR/DR and Dealing Asstt. with the system to forward a CPDA request,
Actor	AR/DR, Dealing Asstt.
Precondition	The AR/DR, Dealing Asstt. must be logged in the system.
Main Flow	1. The AR/DR, Dealing Asstt. clicks on the CPDA option on the panel on the right side. 2. The AR/DR, Dealing Asstt. clicks on the CPDA requests tab on the left side panel. 3. A list of requests open up and AR/DR, Dealing Asstt. opens a request. 4. The AR/DR, Dealing Asstt. clicks on the APPROVE button.
Postcondition	The AR/DR, Dealing Asstt. is redirected to the CPDA request page. The application is forwarded to Internal Audit.
Alternate Flow	The AR/DR, Dealing Asstt. clicks on the REJECT button.
Postcondition	The AR/DR, Dealing Asstt. is redirected to the CPDA request page. Faculty/Staff can see not approved status with remarks on their profile.
Sub Flow	
Postcondition	

Use Case #6

Use Case ID	UC#6
Use Case Name	Internal Audit
Description	This use case describes the interaction between the AR/DR and Dealing Asstt. with the system to forward a CPDA request
Actor	AR/DR, Dealing Asstt.
Precondition	The AR/DR, Dealing Asstt. must be logged in the system.
Main Flow	1. The AR/DR, Dealing Asstt. clicks on the CPDA option on the panel on the right side. 2. The AR/DR, Dealing Asstt. clicks on the CPDA requests tab on the left side panel. 3. A list of requests opens up and AR/DR, Dealing Asstt. opens a request. 4. The AR/DR, Dealing Asstt. clicks on the APPROVE button.
Postcondition	The AR/DR, Dealing Asstt. is redirected to the CPDA request page. The application is forwarded to the Director.
Alternate Flow	The AR/DR, Dealing Asstt. clicks on the REJECT button.
Postcondition	The AR/DR, Dealing Asstt. is redirected to the CPDA request page. Faculty/Staff can see not approved status with remarks on their profile.
Sub Flow	
Postcondition	

Use Case #7

Use Case ID	UC#7
Use Case Name	CPDA form approval
Description	This use case describes the interaction between the Director with the system to approve a CPDA request
Actor	Director
Precondition	The Director must be logged in to the system.
Main Flow	1. The Director clicks on the CPDA option on the panel on the right side. 2. The Director clicks on the CPDA requests tab on the left side panel. 3. A list of requests opens up and the Director opens a request. 4. The Director clicks on the APPROVE button.
Postcondition	The Director is redirected to the CPDA request page. Faculty/Staff can see the approved status on their profile.
Alternate Flow	5. The AR/DR clicks on the REJECT button.
Postcondition	The AR/DR is redirected to the CPDA request page. Faculty/Staff can see not approved status with remarks on their profile.
Sub Flow	
Postcondition	

Use Case #8

Use Case ID	UC#8
Use Case Name	Appraisal
Description	This use case describes the interaction between Faculty/Staff with the system to apply for Appraisal.
Actor	Faculty/Staff
Precondition	The faculty/staff must be logged in to the system.
Main Flow	1. Faculty/Staff clicks on the Appraisal option on the panel on the right side. 2. The appraisal request form opens where Faculty/Staff fills in the details. 3. Faculty/Staff clicks on the submit button.
Postcondition	Faculty/Staff is redirected to the requests page having pending status on Appraisal request.
Alternate Flow	
Postcondition	
Sub Flow	
Postcondition	

Use Case #9

Use Case ID	UC#9
Use Case Name	Review and Remarks
Description	This use case describes the interaction between the Director, HOD with the system to review and give remarks on an appraisal request
Actor	Director, HOD
Precondition	The Director, HOD must be logged in the system.
Main Flow	1. The HOD, Director clicks on the Appraisal option on the panel on the right side. 2. The HOD, Director clicks on the Appraisal requests tab on the left side panel. 3. A list of requests opens up and the HOD, Director opens a request. 4. The HOD, Director clicks on the APPROVE button.
Postcondition	The Director, HOD is redirected to the Appraisal request page. Faculty/Staff can see the submitted status on their profile along with the remarks provided.
Alternate Flow	
Postcondition	
Sub Flow	
Postcondition	

Use Case #10

Use Case ID	UC#10
Use Case Name	Assign Reviewer
Description	This use case describes the interaction of the Admin with the system to assign applications to authorities to review and give remarks on an application.
Actor	Admin
Precondition	The Admin must be logged in the system.
Main Flow	1. The Admin clicks on the CPDA/LTC/Appraisal option on the panel on the right side. 2. A list of requests opens up and the admin opens a request. 3. The Admin can assign the role of reviewing the application to other users by filling up a form. 4. The Admin clicks on the ASSIGN button.
Postcondition	The Admin is redirected to the requests page. Faculty/Staff can see the submitted status on their profile along with the remarks provided.
Alternate Flow	
Postcondition	
Sub Flow	
Postcondition	

Other Functional Requirements:

1. Notification:

Automate HR event alerts for employees, enhancing communication and engagement.

2. Superuser/Admin Access:

Grant elevated access to HR personnel for efficient system management.

3. Form Editing:

Enable employees to digitally edit HR forms, streamlining updates for data accuracy.

4. Form Downloading:

Enable employees to download the forms approved by the competent authority.

Other Constraints:

User Interfaces:

The user interface should comply with the color scheming and dashboard design of the FUSIONIIT. Users should be able to navigate from one functionality to another. Inter module navigation should be smooth. All the functionalities should be easy to use and no specific training should be required for the usage of the module.

Software (Tech) Stack Used:

Frontend:

HTML: The application's user interface is developed using HTML for structuring Web content

CSS: Styling in our application

Backend:

Django: Python web framework employed for building the application's back-end logic, facilitating efficient development and integration.

Database:

PostgreSQL: The relational database management system (RDBMS) used for storing and managing application data with a focus on scalability and performance.

Version Control: Git

Deployment: Docker

Business rules:

 1. Users must authenticate using a valid username and password to access the system.

 2. Different user roles (e.g., admin, faculty, student) have distinct access permissions, and access is restricted based on these roles.

3. The system must comply with data privacy regulations, ensuring that sensitive user information is securely stored and accessed only by authorized personnel.

 4. Uploaded files must follow a specific naming convention for consistency and easier management.

Non-Functional Requirements :

Performance: The system should be scalable for concurrent users and for huge data volumes of different actors.

Reliability: The system should have availability and Fault-tolerant error handling.

Security: Data encryption for sensitive information and role-based access control should be there in the product to ensure security.

Usability: The product will have a consistent and intuitive user interface.

Scalability: Database scalability for courses and users.

Maintainability: Modular architecture for easy updates.

Module dependencies with other fusion modules :

UI Level:

The HR module can be accessed from the dashboard (the very first page after login) by the faculty, staff, and competent authorities or from the sidebar.

DB Level Dependencies:

Module Level Dependencies:

GAD4, OS3 and GAD5 modules are having interactions with our module. Especially on GAD4 (File tracking module) for forwarding the requests.

PDPM
Indian Institute of Information Technology, Design & Manufacturing Jabalpur
(An Institute Established by MHRD, Govt. of India)
Dumna Airport Road, PO: Khamaria, Jabalpur 482 005
India

APPLICATION FOR GRANT OF L.T.C
(TO BE SUBMITTED IN DUPLICATE)

Block year: P.F. No………………………… Basic Pay

Rs………

…………

…

1. Name_____

2. Designation_____

3. Department/Section_____

4. (a) Whether leave is required for availing L.T.C.? Yes_____

No:_____ (b) (i) If so, duration of leave applied for

From_____ To:_____ (ii) Date of departure of family, if

not availing himself _____ (c) Nature of

leave_____

(d) Purpose_____

5. Whether L.T.C. is desired for going to home town or elsewhere? Home

Town/Elsewhere (The place of the visit be also mentioned) Place

6.   Address   during
leave_____
___

_____

_____
7.   Mode: Rail/Road

_____

8.
 (i) Details of family members for whom L.T.C. for this block has
        already been availed: a.

        _____
        b. _____
        c. _____
(ii) Details of family members who will avail L.T.C.
 (a) Self
 (b) Wife
 (c) Children

S. No.	Full Name	Age

(d) Dependent parents, minor brothers, and sisters residing with the applicant:

S. No.	Full Name	Age	Why fully dependent?

9 Amount of advance required, if any:

(i) Certified that family members for whom the L.T.C. is claimed are residing with me and are wholly dependent upon me.

_____
_____ (ii) Certified that the previous L.T.C. advance drawn by me on
……………………….. has been adjusted in the month of
………………………...

10. Date: ___/___/_____

11. Phone Number for contact _____ Signature

12. Specific recommendation of the Head of Department/Section

Approved/ Not Approved

Director/ Registrar

Appendix B – CPDA Form

Pandit Dwarka Prasad Mishra
Indian Institute of Information Technology,
Design and Manufacturing Jabalpur
(An Institute of national importance established by an Act of Parliament)

CPDA Advance Form

Name:

Designation:

PF No.:

Purpose:

Amount required:

Advance (PDA) due for adjustment, if any:

I hereby declare that I have uploaded & updated all my achievements (including publications, visits, projects etc.) on **Institute's website and EIS module on** DD/MM/YYYY.

Signature of Applicant
Date:

1. Recommended & Forwarded by HOD:_____

2. Date of entry on EIS Module is verified: (Dean RSPC)_____

Estt. Section

Balance available as on date: ....

Advance amount entered in PDA Register Page no. ....

Dealing Asstt. (Estt.)   AR/DR (Estt.)
Name:...............................   Name:................

Internal Audit

Entry checked in PDA Register for Rs. ....

Dealing Asstt. (IA)   AR/DR (IA)
Name:..................   Name:....................

Sanctioned / Not Sanctioned

Director

AR (F&A) for payment of advance
Copy to:_____for records.

Appendix C – Appraisal Form

PROFORMA FOR FACULTY PERFORMANCE APPRAISAL

Period of appraisal: July 01, 20   to June 30, 20___

Name :

Designation:

Discipline:

Specific Field of Knowledge:

Current Research Interests:

Please give information pertaining to the period of appraisal as per the format given below:

1.   INSTRUCTION ELEMENT

1.1   Teaching
1.1.1   Courses taught at UG/PG Level

Semester	Course Name and Number	Lecture Hrs/wk	Tutorial Hrs/wk	Lab Hrs/wk	Number of registered students	Co-Instructor/ Instructor In charge (if any)

1.1.2   New courses/ laboratory experiments introduced and taught

Course Name and Number	UG/PG	Year and Semester of first offering

1.1.3   New course material developed/Instructional software developed (should be made available on the web/public domain and may be under GIAN/NPTEL/SAWYAM etc.)

Course Name and Number	UG/PG	Type of activity	Web/ Public

1.1.4   Any other instructional tasks

2. RESEARCH ELEMENT

2.1 Thesis/Research Supervision

Name of student (MTech/PhD)	Title of thesis/thesis topic	Year and semester of first registration	Completed/ Submitted/ In progress	Co-supervisors (if any)

2.2 Sponsored Research and Consultancy Projects

Title of Project	Sponsoring Agency/ Organization	Project Funding (Rs.)	Project Duration	Co-investigators (if any)	Status (Submitted/ Ongoing/ Completed)	Remarks

2.3 Other research element (such as Development of Research Facilities, Patent (Applied for/ Granted)/ Transfer of Technology, etc)

2.4 Publication(s) (Journal, Conference, Book, Book Chapter, Technical Report, etc) (Kindly provide the details in the standard format as filled in EIS system)

2.5 Refereed Conference(s)/ Symposia/ Seminars/ Workshop(s)/ Specialists' Meetings Attended etc

2.6 Conference/Workshop/STP etc. organized

2.7 Professional Recognition

2.7.1   Membership of Professional Societies (National/International)
2.7.2   Honours/Prizes/Awards/Fellowship etc.
2.7.3   Editor/ Guest Editor etc. of reputed publications
2.7.4   Expert/Invited Lecture Delivered
2.7.5   Membership of BoS/ BoG/ Senate, etc

2.8 Other Extension Tasks
        (e.g. involvement in industry, government and public community service)

3. ADMINISTRATION ASSIGNMENT
(Please indicate duration of each assignment)

3.1 Administrative Assignments: (please mention institute/discipline level)

3.2 Service to Institute Community (if any): (please mention institute/others)

3.3 Any other contribution

4. SELF-APPRAISAL BY FACULTY

Your comments on your performance so far and this academic year particularly:

_____

Dated   Signature of Faculty

Forwarding by Head of the Discipline with remarks/comments

(Signature of HoD with Date)

Remarks

(Director)