

FUSION ERP

Software Requirements Specification

for

GAD-3-COMPLAINT MANAGEMENT(APP)

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1. Introduction

1.1 Introduction about the Fusion – A brief Description:

FusionIIIT at PDPM Indian Institute of Information Technology, Design, and Manufacturing, Jabalpur, exemplifies the seamless integration and automation of diverse functions. Developed by students using Python 3.8 and powered by the Django Web framework, this initiative is a testament to the institute's commitment to improving operational efficiency and enriching campus life. In the administrative domain, FusionIIIT manages intricate paperwork and processes, simplifying administrative tasks for a more streamlined approach. On the academic side,

It introduces a digital facet to learning and course management, enhancing the educational experience. However, its impact extends beyond the conventional, reaching various departments and sections to ensure the smooth operation of every aspect of campus life.

Visualize FusionIIIT as a digital wizard that not only organizes administrative processes and elevates academic experiences but also lends support to miscellaneous departmental tasks. It acts as a supportive companion, overseeing the seamless functioning of every facet of campus life.

Beyond being a mere tool, FusionIIIT emerges as a reliable friend dedicated to enhancing organization and enjoyment in the lives of everyone at PDPM IIITDM Jabalpur.

1.2 Purpose of the module:

The central complaint system is designed to efficiently manage and resolve issues pertaining to electricity, hostels, and cleanliness in each campus building. The primary goal of this software is to provide a swift and effective mechanism for addressing concerns raised by individuals within the campus community, ensuring a seamless resolution process. Additionally, it serves as a communication platform, facilitating a direct connection between users and the relevant Caretaker/Supervisor for each department.

1.3 Scope of the module :

The complaint management system by offering a comprehensive and efficient platform for students to register their concerns. Beyond simple registration, the system facilitates real-time tracking and visibility of complaints for respective authorities.

2. User/Actor Characteristics

2.1 Student / Faculty / Staff

Individuals who would lodge the complaints.

Role: Creation of complaint

Specific Functionalities:

- Lodge complaint through the Fusion portal
- Specify details of the complaint
- Choose the complaint category
- Track Complaint status
- Provide Feedback

2.2 Admin / Section In-Charge

Admin or Section In-Charge of the service.

Role: Oversee the complaints, able to respond and change the status of complaints

Specific Functionalities:

- View Complaints
- Respond to complaints
- Change the status of complaints
- Manage worker/caretaker

2.3 Caretaker

Caretaker of the particular service like internet, electricity.

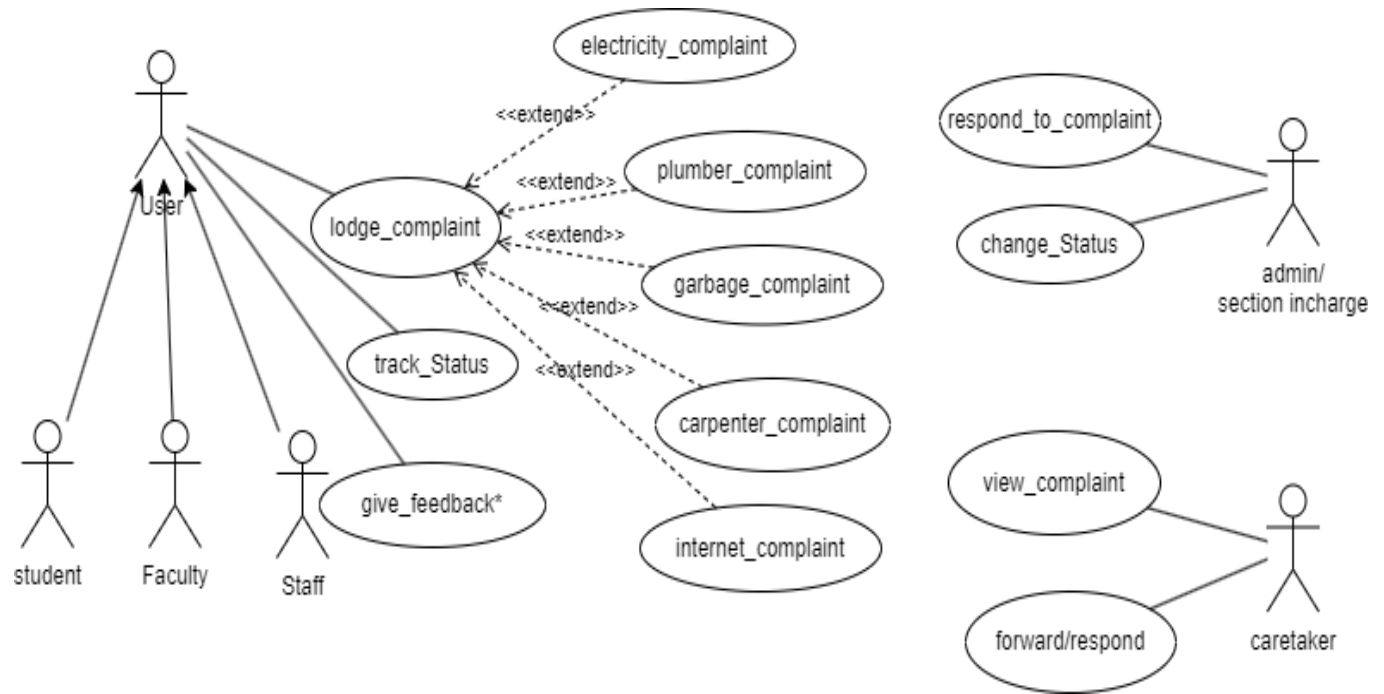
Role: View and resolve complaints, manage worker

Specific Functionalities:

- View Complaints
- Respond to complaints
- Assign worker

3. Functional Requirements

3.1 Use Case Diagram



3.2 Use Case Description

Use Case #1

UC ID	UC #1
Use Case Name	lodge_complaint
Description	Report issues to the concerning administration
Actor(s)	Staff, Student, Faculty
Pre-Condition	User must be logged in
Main Flow	1) The user fills all the necessary columns and clicks on the submit button.
	2) System Displays the message of the complaint being successfully received.
Post-Condition	The complaint is successfully received by the system and stored in the database.
Alternate Flow	If the User is not logged in, the system prompts them to log in
Sub Flow	none
Global Alternate Flow	none

Use Case #2

UC ID	UC #2
Use Case Name	track_status
Description	Check the status of the complaint
Actor(s)	Staff, Student, Faculty
Pre-Condition	The user must have a complaint registered.
Main Flow	1) User checks the complaint history for the status.
	2) User checks his complaint whether it has been overlooked/resolved by the caretaker within a given timestamp or not.
Post-Condition	none
Alternate Flow	none
Sub Flow	none
Global Alternate Flow	none

Use Case #3

UC ID	UC #3
Use Case Name	give_feedback
Description	Rate resolution of the complaint
Actor(s)	Staff, Student, Faculty
Pre-Condition	User must have a complaint lodged
Main Flow	1) The user selects the complaint they want to provide feedback on.
	2) The user enters their feedback.
	3) The system stores the feedback.
Post-Condition	none
Alternate Flow	none
Sub Flow	none
Global Alternate Flow	none

Use Case #4

UC ID	UC #4
Use Case Name	view_complaint
Description	View complaint details
Actor(s)	Caretaker
Pre-Condition	Caretaker must be logged in.
Main Flow	1) Caretaker clicks on view complaints.
	2) New page with all complaints and their complainer appears.
Post-Condition	Caretaker chooses a complaint to assign worker to it.
Alternate Flow	none
Sub Flow	none
Global Alternate Flow	none

Use Case #5

UC ID	UC #5
Use Case Name	forward/respond
Description	Forward the complaint to admin/section in charge.
Actor(s)	caretaker
Pre-Condition	Caretaker cannot handle problem by himself.
Main Flow	1) Caretaker forwards the complaint
Post-Condition	Problem is to be manage by admin/section in charge
Alternate Flow	none
Sub Flow	none
Global Alternate Flow	none

Use Case #6

UC ID	UC #6
Use Case Name	respond_to_complaint
Description	Respond / comment on the complaint by the administration
Actor(s)	Caretaker, admin
Pre-Condition	User is authorized to view the complaint
Main Flow	1) Caretaker views the complaint
	2) Caretaker takes necessary action to resolve the complaint and responds accordingly
Post-Condition	none
Alternate Flow	none
Sub Flow	none
Global Alternate Flow	none

Use Case #7

UC ID	UC #7
Use Case Name	change_status
Description	Update complaint status as needed
Actor(s)	Admin, caretaker
Pre-Condition	User is logged in with role of admin or caretaker
Main Flow	1) Selects a complaint
	2) Selects a new status for the complaint
Post-Condition	System updates the complaint status
Alternate Flow	none
Sub Flow	none
Global Alternate Flow	none

4 NON-FUNCTIONAL REQUIREMENTS

4.1 Performance:

The system should respond to user interactions quickly. Response time for booking actions, inventory updates, and notifications should be less.

4.2 Scalability:

The system should handle a mass of concurrent users. System performance should be evaluated under increasing load conditions.

4.3 Availability:

The system should be available 99.9% of the time.

4.4 Security:

Ensure data confidentiality and integrity. Role-based authorization ensures users can only perform actions relevant to their designated roles.

Module dependencies with other fusion modules

- **Integration at the UI Level:**

Users log into the Fusion application and land on the main dashboard. The user (student, staff, faculty, and other community members of IIITDMJ) can add a complaint by filling in the required input fields. Lodgers can also see the complaint status and history.

Navigation should include direct links or buttons in Fusion's menu, ensuring a clear path for each actor (Student, Staff, Section Incharge) to access their specific functionalities within the Complaint Module.

- **Database Level:**

Data dependencies of the Complaint registration module:

S.no	Table Name	Foreign Key	Referenced Table
1	complaint_system_caretaker	staff_id_id	globals_extrainfo
2	complaint_system_hall	staff_id_id	globals_extrainfo
3	complaint_system_studentcomplaint	complainer_id	globals_extrainfo
4	complaint_system_supervisor	sup_id_id	globals_extrainfo
5	complaint_system_workers	caretaker_id_id	complain_system_caretaker

- **Module Level:**

Complaint registration Module interacts with Notification, Dashboard, and file transferring system.