Overview of the module:-

The Hostel Management module is an integral part of our project, catering to students, caretakers, and wardens. For **students**, it offers streamlined functionalities like requesting guest rooms, managing allotted rooms, registering complaints, and accessing notices. **Caretakers** can efficiently handle tasks such as approving leave, managing inventory, and overseeing student-related information. **Wardens** have central oversight, managing guard shifts, notice boards, room assignments, and generating relevant reports. The module aims to enhance hostel administration by providing role-specific features, fostering efficient communication, and simplifying various management tasks. The implementation includes secure API endpoints to ensure a user-friendly and organized hostel management system.

Main Actors : Student, Warden, Caretaker, Super Admin.

ALL API's & Their Status :

1) [/view_allotted_room/]: (Partially Implemented)
Check Allotted Room

2) [/view_notice_board/]: (Yet to be Implemented)
Check Notice Board

3) [/view_attendance/]: (Yet to be Implemented)
Check Attendance

4) [/request_guest_room/]:(Yet to be Implemented)
Request For Guest Room

5) [/view_fines/]: (Yet to be Implemented)

View Fines

6) [/register_complaint/]: (Yet to be Implemented)

Register Complaint

7) [/apply_for_leave/]: (Yet to be Implemented)

Apply for leave

8) [/pay_fine/] : (Yet to be implemented)

To pay due fines

10) [/notice_form/] : (Implemented)

Creates Notice

11) [/delete_notice/] : (Implemented)

Deletes notice

12) [/edit_schedule/] : (Partially Implemented)

Edit staff schedule

13) [/delete_schedule/] : (Implemented)

Delete staff schedule

14) [/edit_student_room/] - (Partially Implemented)

Edits student's room info

15) [/edit_student_attendance/] - (Partially Implemented)

Edits students attendance

16) [/generate_report/] – (Partially Implemented)

generates PDF reports for worker

17) [/approve_leave] - (Yet to be implemented)

18) [/manage_inventory/] - (Yet to be implemented)

19) [/view_staff_info/] -(Yet to be Implemented)

20) [/manage_guest_room] - (Yet to be Implemented)

21) [/view_guard_info/] -(Yet to be Implemented)

22) [/view_student_info/] -(Not implemented)

23) [/view_guest_room/] - (Yet to be Implemented)

24) [/view_guest_room_request_status/] - (Yet to be implemented)

25) [/manage_caretaker/] -(Yet to be implemented)

26) [/manage_warden/] -(Yet to be Implemented)

27) [/manage_hoste/]- (Yet to be Implemented)

28) [/close_complaint/] - (Yet to be Implemented)

29) [/view_notices/] - (Yet to be implemented)

30) [/view_rooms/] - (Yet to be Implemented)

31) [/apply_leave/] - (Yet to be implemented)

32) [/manage_leaveForms/] - (Yet to be implemented)

33) [/add_notice/] - (Yet to be implemented)

34) [/edit_notice/] - (Yet to be implemented)

35) [/update_fine_status/] -(Yet to be implemented)

36) [/add_fines/] - (Yet to be implemented)

37) [/manage_guest_room_request/] - (Yet to be implemented)

APIs:-

Yet to be implemented or Partially Working

- *[request_guest_room] :-* [/view_guest_room/, /request_guest_room/, /view_guest_room_request_status/]
    - [The entire use case needs to be implemented. All the APIs under it need to be written.]
    - Database - [GuestRoomBooking].

- *[view_allotted_room]:-* [/view_allotted_room/]
    - [The entire use case needs to be implemented by which Student can view his/her allotted room]
    - Database - [In the table "HallRoom" a new column for roll number and name needs to be added.]

- *[register_complaint]:-* [/register_complaint/, /close_complaint/]
    - [Entire use cases need to be implemented]
    - Database - [A new table "RegisterComplint" required to store complaints of students.]

- *[view_notice_board]:-* [/view_notices/]
    - [The entire use case needs to be implemented]
    - Database - [HostelNoticeBoard]

- *[view_fines]:-* [/view_fines/ , /pay_fines/]
    - [Entire use case needs to be implemented].
    - Database - [A new table "HostelFines" is required to store fine-related data]

- *[apply_for_leave]:-* [/apply_leave/]
    - [Entire use case needs to be implemented].
    - Database - [A new table "HostelLeave" is required to store leave-related data]

- *[approve_leave]:-* [/manage_leaveForms/]
    - [Entire use case needs to be implemented].
    - Database - [A new table "HostelLeave" is required to store approved leave-related data]

- *[manage_inventory]:-* [/manage_inventory/]
    - [Entire use case needs to be implemented].
    - Database - [A new table "HostelInventory" is required to store approved leave-related data]

- *[manage_notice_board]:-* [/add_notice/, /edit_notice/, /delete_notice/]
    - [Notice can be created, and deleted. The edit functionality needs to be implemented].
    - Database - [HostelNoticeBoard]

- *[manage_student]:-* [/view_student_info/, /update_student_info/, /update_student_attendance/]
    - [student attendance is getting updated but view student info needs to be implemented]
    - Database - [A new table "StudentInfo" is required to store data of students to manage.]

- *[manage_guest_room]:-* [/view_guest_room/, /view_guest_room_request/ , /manage_guest_room_request/]
    - [Entire use case needs to be implemented].
    - Database - [GuestRoomBooking]

- *[manage_rooms]:-* [/edit_student_room/]
    - [HallRoom table gets updated but StudentInfo table is not connected and not getting updated].
    - Database - [Data will come from the "HallRoom" table. And changes in the "StudentInfo" table will happen.]

- *[search/generate_report]:- [/*generate_report*/]*
    - [Fetches the data from the database but fails to convert it to file format].
    - Database - [WorkerReport]

- *[manage_fines]:-* [/add_fines/, /update_fine_status/]
    - [Entire use case needs to be implemented].
    - Database - [A new table "HostelFines" is required to store data on hostel fines.]

- *[view_staff_info]:-* [/view_staff_info/, /edit_schedule/, /delete_schedule/]
    - [Edit and delete functionality is working. View info needs to be worked on].
    - Database - [WorkerReport, StaffSchedule]

- *[view_guard_shift]:- [/view_guard_info/]*
    - [Entire use case needs to be implemented].
    - Database - [A new table "GuardShift" is required to store data on guard.]

- *[*view_rooms*]:- [/*view_allotted_room/*]*
    - [Entire use case needs to be implemented]

- ■ Database - [In the table "HallRoom" a new column for roll number and name needs to be added]

- ● *[view_student]:-* [/view_student_info/]
  - ■ [[Entire use case needs to be implemented]].
  - ■ Database - ["StudentInfo" table needs to be added]

- ● *[manage_hostel]:-* [/manage_hostel_allottment/]
  - ■ [Entire use case needs to be implemented]
  - ■ Database - [HostelAllottment]

- ● *[manage_warden]:-* [/manage_warden/]
  - ■ [Entire use case needs to be implemented].
  - ■ Database - [HostelAllottment table needs a column of assigned warden to be added]

- ● *[manage_caretaker]:- [/manage_caretaker/]*
  - ■ [Entire use case needs to be implemented].
  - ■ Database - [HostelAllottment table needs a column of assigned caretaker to be added]

Google Doc Link :
[https://docs.google.com/document/d/1GE7WM8ZVVJ8IZM--QddDd8d5S2tMrF6eFk8LLq7Huho/edit]

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