

# **RUNNING ROOM MANAGEMENT SYSTEM FOR INDIAN RAILWAYS**

An Industrial Internship Report

*submitted by*

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*in partial fulfilment for the award of the degree of*

**B.TECH**

in

**CSE**



**VIT<sup>®</sup>**  

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**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)

**SCHOOL OF COMPUTER SCIENCE AND ENGINEERING**

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## DAILY REPORT AS UPLOADED ON VTOP

Date	Activity
20-Nov-2023	Introduction to the working environment, meeting the team and understanding about Running Rooms in Indian Railways by the training officer and discussing about the training and project to be carried out.
21-Nov-2023	Discussed the purpose and requirement of web based running room management system and how it will benefit Indian railways for the smooth operation of running rooms for locopilots, assistant locopilots, guards, etc
22-Nov-2023	Went for industrial visit at Tundla, Agra for which the running room management system will be built which comes under North Central Railways, Prayagraj Division
23-Nov-2023	Industrial visit to the running rooms present in Tundla along with the training officer and co-workers. Understood the working pattern present there and what are the software requirements.
24-Nov-2023	Started making flowchart based on the software requirements and daily activities carried out at running rooms in general.
25-Nov-2023	Meeting with higher officials to get the approval for project idea, software requirements, flowchart and its corrections so as to start the coding part of the project.
26-Nov-2023	Went back to Prayagraj. Alongside all this, the training officer guided me with topics like html, css, js. Also I learnt PHP, MySQL and other software tools necessary for the development of the project.
27-Nov-2023	Started making different tables in MySQL as per the flowchart before starting the main coding part.
28-Nov-2023	Purchased RFID (Radio Frequency Identification) cards scanner of 125KHz frequency from local market. This was for the tapping of cards when the crew checks-in and checks-out
29-Nov-2023	Did coding part for lobby where cards to be issued to crew (made main_lobby.php, add_main_lobby.php)
30-Nov-2023	Did coding part for main page of running room where cards to be scanned and get accommodation (rroom_main.php)
01-Dec-2023	Designed running room as web page and linked with main page (display_room.php and occupation.php)
02-Dec-2023	Did the linking of running room and other web pages with the main page (occupation1.php and add_occupation.php)
03-Dec-2023	Holiday (Sunday). Learnt PHP and bootstrap

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04-Dec-2023	Did the designing for food and other activities page (bf_out.php )
05-Dec-2023	Did the designing for page for coupon generation through printer for food (bf_print.php)
06-Dec-2023	Did the designing for page to monitor non presence of crew at running room (non_present.php)
07-Dec-2023	Did the designing for the main page to get data entry for linen (washing.php and add_washing.php)
08-Dec-2023	Did the designing for the page to issue linens to rooms and for washing and receiving after use (issue.php)
09-Dec-2023	Designed and implemented the page for call book generation (call_book.php), for the crew when their call is given. Additionally, incorporated functionality for revert calls with the revert_call.php page, when crew gets a revert call
10-Dec-2023	Engaged in discussions regarding the generation of various reports from the accumulated data and devised strategies for data backup to ensure data integrity and availability in case of emergencies.
11-Dec-2023	Initiated the coding process for pages responsible for generating different types of reports from the collected data. Successfully completed the implementation of the Current Occupancy Report page (current_occp.php), enhancing the ability to monitor current occupancy status effectively.
12-Dec-2023	Progressed with coding efforts by finalizing the functionalities for the Morning Position and Summary Occupancy report pages, enabling comprehensive analysis and reporting of occupancy trends.
13-Dec-2023	Introduced a feedback mechanism named the Gross Happiness Index (GHI) through the ghi.php page. Expanded the reporting capabilities by coding functionalities for generating GHI and mark-wise GHI reports, enhancing insights into user satisfaction.
14-Dec-2023	Implemented PHP code to generate reports based on specific criteria such as date-wise occupancy (date wise occupancy report) and meal consumption ( date-wise meal report) , providing detailed insights into daily operations.
15-Dec-2023	Extended the reporting capabilities by developing functionalities for generating reports on a day-wise HQ-wise occupancy report and summarizing meal consumption based on different shifts(shift wise meal summary report), facilitating in-depth analysis and planning.
16-Dec-2023	Enhanced reporting capabilities further by implementing functionalities for generating reports like future occupancy and vacation (occupation future and vacation future reports)
17-Dec-2023	Observed a holiday break.
18-Dec-2023	Executed the implementation of a backup page, ensuring regular and automated backups of essential data, thereby mitigating the risk of data loss and ensuring data availability for

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	recovery purposes.
19-Dec-2023	Completed coding for the room change functionality (changeroom.php) and room display (display_room.php), enhancing the system's flexibility in managing room assignments and displaying relevant information.
20-Dec-2023	Developed additional pages for maintenance (maintain.php) and vacation management (vacation.php), streamlining administrative tasks and facilitating efficient management of resources.
21-Dec-2023	Collaborated with the training officer for a final review of the implemented functionalities, incorporating feedback and making necessary adjustments and fixes to optimize system performance and usability.
22-Dec-2023	Conducted comprehensive testing and debugging of all implemented functionalities to ensure robustness and reliability. Employed optimization techniques to enhance website performance and responsiveness.
23-Dec-2023	On the final days ,successfully deployed the website and conducted thorough testing across various scenarios to validate functionality and usability, ensuring a seamless user experience. Thanked my team and training officer for this opportunity and learning experience.