

Annapurna Mess Management System

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A Software Development Project by IIIT Guwahati

1 Introduction

1.1 Vision

The aim of “Annapurna” is to automate the various management processes of the mess functioning in IIIT Guwahati. The current mess of IIIT Guwahati caters the needs of around 400 customers. It operates manually having functionalities limited to billing, feedback, and complaint system. The drawbacks of this system include incorrect billing, inability to skip sessions, and many more. It also lacks necessary functionalities like incorporation of guests, menu add-on, and parcel services. “Annapurna” offers a software solution to these problems.

This report explains the existing system, its drawbacks and what “Annapurna” has to offer to deal with the existing issues.

2 Existing Mess Management System

Current mess has the following members in the administrative body.

1. Mess Manager
2. Faculty In-charge
3. Student Body

The Mess Manager supervises the day-to-day working of the mess. The Faculty in charge is responsible to deal with the complaints and forward the mess bills to the student community. The student body decides the menu served in the mess. The feedback and complaint system is manual. This gives rise to issues like irregular feedback input and unattended complaints. Even though a faculty member supervises the bills, there have been cases of inaccurate bills being enforced on the students. Currently, guests can be accommodated but there is no official record kept about it. Also, there is no full-proof system to handle it. As mentioned before, parcel facility and provision of Add-on items is not present. Also, there is a need to mess notification system to enable communication between these different services (explained later). To remove this inefficiency, a timely software solution is a must!

3 Annapurna

“Annapurna” offers an extensive as well as exhaustive solution to the existing problems. Following are the components of “Annapurna”.

1. Sign-In system
2. Instruction Page
3. Calender Interface
4. Billing System
5. Mess Feedback System
6. Complaint System
7. Authentication System
8. Guest Service
9. Credit System
10. Menu Voting
11. Parcel System (charged)
12. Add-on System
13. Mail System

A new user can avail this service by completing the registration in the institute. The list of registered members should then be forwarded to the Mess In-charge who is entitled to add new users in the system. An account is then provided to the user. The user can sign-in to the system by entering username and password. An instruction page is provided which describes how one should operate the system.

The most important feature of this system is the calender interface. It contains ticked entries for breakfast, lunch, snacks, and dinner. The user may un-tick these options as per it’s plans only before a certain time span (say 48 hours). Only the ticked services are used to calculate the bill. Also, the calender interface shows the date-wise menu for the coming week so that the user can decide whether or not to avail mess service for a particular time slot. In this way, there can not be any incorrect bills and the user is ensured that it gets bills only for what it avails.

The mess feedback interface takes input the item-wise feedback to generate overall quality analysis of the mess service. The complaint system provides both message service to the mess in-charge as well as public post. This will ensure timely addressing of the complaints and actions based on obtained feedback.

Authentication system ensures that only those who have ticked for a service avail the same. It uses QR code for authentication. The guest system provides the mess facilities for guests of this institute. It only requires filling a form to maintain record. The credit system goes in hand with the billing system. If a user is not able to pay the bill in time then additional credit may be transferred to it’s account by the mess in-charge. Menu voting system incorporates every user’s vote to decide monthly menu. By this way, transparency can be achieved. Parcel facility can also be availed by paying a charge. This can help those who are unable to go to the mess due to extremely busy schedule or illness. Add-on system is also present for users who wish to have additional items against a

charge. To govern all these systems, a mailing system or a notification system is also provided.