



INDIAN INSTITUTE OF INFORMATION
TECHNOLOGY
GUWAHATI

Hostel Mess Management System

Project Proposal

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Introduction

A hostel mess is a vital part of an institute's infrastructure. It provides the people living far from their homes with the basic necessity of life. With such parts of a system, which are vital and essential for daily working, comes the responsibility of making it work as smoothly as possible.

There are quite a few problems in a mess that could be solved or made simpler using a specialised management software. The software could deal with multiple modes of operation such as Food Coupons as well as pay-per-month services to students. Different charges and bills can be issued to different people in such a software using required authentication features which would generally create a problem in implementing without a software on a short-staffed or busy day.

Lodging complaints, daily and anytime accessible bills as well as keeping track of past payments and dues could be simplified significantly using such a software minimising large and repetitive paperwork. Furthermore, the data generated daily could be analysed and inferred to get a prediction of food needed, minimising wastage. This would be helpful to the caterer as well as to our society in general which faces with wastage along with scarcity of food.

Planned Features

- Option for residents to opt for coupon based or pay-per-month service.
- Interface for buying food coupons and paying bills for pay-per-month service.
- A complaints and suggestions portal allowing to submit photographic evidence along with complaints of uncleanness or bad quality of food.
- An interface for applying for leave in pay-per-month service if leaving hostel for more than 3 days.
- Centralised dashboard containing data metrics on the caterer side.
- Providing some users with a tag(mess-committee member) allowing special privileges like complaint disposal and suggestions processing.

Tech Stack

These are the languages and libraries we plan to use:

- **Frontend:** React, Bootstrap
- **Backend:** Flask or Django
- **Database:** PostgreSQL