

PROJECT ABSTRACT

Hostel Mess Menu Android App

A hostel mess menu Android app with live serving status, weekly menus, per-dish ratings and a committee feedback channel. Delivered built-to-order with full Kotlin source, menu schema, report, PPT and viva kit.

01. Title

Hostel Mess Menu Android App — answer 'what's for dinner?' with today's menu, live serving status, the week's plan ahead, dish ratings and structured feedback to the mess committee.

02. Introduction / Background

In every college hostel, the mess menu is the most-asked-about and worst-distributed information on campus — a crumpled printout on a notice board, or buried in a WhatsApp group. Students walk to the mess not knowing what is served; coupon-based specials have opaque deadlines; the committee hears feedback only as corridor complaints. A dedicated app fixes all three with live menus, weekly planning and a structured feedback channel.

03. Problem Statement

Menu distribution is unreliable and feedback is unstructured. This project builds a native Android app with an offline-cached weekly menu, meal windows with live 'serving now' status and countdowns, per-dish ratings aggregated into quality signals, veg/non-veg indicators, special-meal booking-deadline notices, and a feedback pipeline compiled into a weekly committee digest.

04. Objectives

- Model the weekly menu (days × meals × dishes with timings, flags and specials) in a Room cache.
- Show today's menu with live serving status and countdowns; show the full week ahead.
- Collect per-dish ratings (one per user per dish per day) and aggregate averages.
- Route structured feedback to a weekly mess-committee digest.
- Work fully offline with background refresh when connectivity returns.

05. Proposed Methodology

The menu dataset is bundled and cached in Room on first launch. The home screen resolves the device clock against meal windows to highlight the active meal and compute countdowns. Ratings write per-user-per-dish rows; aggregation queries produce dish averages and the weekly mess score. Feedback submissions queue locally for the committee's weekly review. A WorkManager job refreshes the menu cache when online.

06. System Architecture / Working

Menu dataset → Room cache → repository → ViewModels (today, week, feedback) → Material 3 UI. Ratings and feedback write locally; background sync refreshes menus. Committee digest is a designed weekly compilation.

07. Hardware / Software Requirements

- Android Studio with an Android 8.0+ device or emulator.
- Kotlin, Android Jetpack (MVVM, Room, WorkManager), Notifications API, Material 3.
- No server required for the core build; sync endpoint stubbed.

08. Expected Outcomes

A working mess app with live menus, ratings and feedback — plus the menu schema and sample data, committee workflow doc, a project report, PPT and viva Q&A.

09. Applications

- College hostels digitizing menu communication.
- Mess committees getting actionable weekly quality signals.
- A template for canteen and cafeteria menu apps.

10. Future Scope

- Committee-side menu editor app.
- Coupon booking integration for specials.
- Nutrition estimates per meal.