

MES COLLEGE OF ENGINEERING - KUTTIPPURAM DEPARTMENT
OF COMPUTER APPLICATIONS 20MCA245 – MINI PROJECT

Mini Project Proposal Submission - Guidelines

Approval of the mini project proposal is mandatory to continue and submit the project work.

The mini project proposal should clearly state the project objectives and the environment of the proposed project to be undertaken.

The following documents are to be submitted for approval

1. Proforma for approval of the Mini Project
2. Synopsis/Abstract with following contents
 - (a) Title of the Mini Project
 - (b) Introduction/Overview of the Project
 - (c) Motivations of the Project
 - (d) Problem Definition and Objectives of the Project
 - (e) Basic functionalities of the Project
 - (f) Project Developing Environment

Note:

1. An editable PDF is given in the 2nd page for filling the Proforma. Fill all the appropriate entries.
2. Template format for preparing the Mini Project Synopsis/Abstract is given in the 4th page of this document.

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PROFORMA FOR THE APPROVAL OF THE FIFTH SEMESTER MINI PROJECT

(Note: All entries of the proforma for approval should be filled up with appropriate and complete information. Incomplete proforma of approval in any respect will be rejected.)

Mini Project Proposal No : _____ (Filled by the Department)	Batch: 2024-2025 S3 MCA
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- 1. Title of the Project : RationMate
- 2. Name of the Guide : Reshmi k
- 3. Register Number of the Students :MES24MCA-2052
- 4. Date of Submission : 21-07-2025
- 5. Student Details (in BLOCK LETTERS)

Name	Roll Number	Signature
SHIFANA NASRIN	52	

For Office Use Only Approval Status :

Approved/Not Approved

Comments/Suggestions : _____

Signature of Committee o Members:

<p>First Review Comments/Suggestions:</p> <hr/>	
<p>Second Review Comments/Suggestions :</p> <hr/>	
<p>Final Review Comments/Suggestions:</p> <hr/>	

Dated Signature of Committee Member

Dated Signature of HOD

RationMate – Ration Card Tracker & Festival Benefit Alerts for Kerala

Introduction

"RationMate is a mobile application designed for ration card holders in Kerala. It helps users track their monthly ration entitlements, receive alerts for special schemes like Onam kits, and check if their assigned ration shop is open or closed on a particular day (e.g., due to holidays, Sundays, or strikes). The app works in both Malayalam and English and is built with offline capabilities to make it accessible even in low-connectivity rural areas.

Motivations

In Kerala, many citizens rely on public distribution systems, but often face challenges such as lack of information on their monthly ration quota, missing out on festival kits, or visiting the ration shop only to find it closed. This project aims to eliminate these problems by creating a simple, easy-to-use app that empowers users with accurate, timely, and localized information directly on their phones.

Problem Definition and Objectives of the Project

Ration card users often lack up-to-date information on their entitlements, distribution dates, and shop availability. There is also limited awareness of seasonal or festival-related distributions.

Objectives:

- To develop a mobile app that displays the user's monthly ration items and quantities.
- To notify users about special government schemes such as Onam kits.
- To inform whether the ration shop is open or closed on the current day.
- To support Malayalam and English for better usability.
- To work offline using local data storage.

Basic Functionalities of the Project

1. User Module:

- Login with mobile number or ration card number
- View card type and member details
- Monthly ration item list (eligible and collected)
- Special scheme notifications (Onam kits, flood relief, etc.)
- Ration shop status (open/closed today with reason)
- Complaint submission option

2. Admin Module

- Post special distribution alerts
- Manage holidays and shop data
- Review complaints

Project Developing Environments

- Frontend: Android SDK (Kotlin/Java + XML)
- Backend Logic: Kotlin
- Database: SQLite (for offline mode)
- Language Support: English (optional Malayalam)
- IDE: Android Studio

Conclusion

"RationMate is a user-friendly and practical mobile application built to improve the efficiency and transparency of ration distribution in Kerala. By offering offline access to ration entitlements, shop status, and alerts about special kits, it helps users stay informed and avoid unnecessary travel. The app empowers citizens by bringing essential public distribution system details right to their fingertips.

