

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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OF COMPUTER APPLICATIONS 20MCA245 – MINI PROJECT

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 - 2026 (S3 MCA)
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1. Title of the Project : Sanchaya  
\_\_\_\_\_
2. Name of the Guide : C M Sulaikha  
\_\_\_\_\_
3. Register Number of the Students : MES24MCA-2054  
\_\_\_\_\_
4. Date of Submission : 21-07-2025  
\_\_\_\_\_
5. Student Details (in BLOCK LETTERS)

Name	Roll Number	Signature
SNEHA K P	54	_____

For Office Use Only

Approval Status : Approved/Not Approved

Comments/Suggestions :  _____
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Signature of Committee o Members:

First Review Comments/Suggestions :

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Second Review Comments/Suggestions :

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Final Review Comments/Suggestions :

\_\_\_\_\_

Dated Signature of Committee Member

Dated Signature of HOD

### Abstract

In Kerala’s urban and semi-urban areas, a significant amount of edible food is wasted daily at social functions, restaurants, and banquet halls, while many people face hunger or malnutrition. This stark contrast between food wastage and hunger highlights the urgent need for a system that connects surplus food sources with individuals in need. The mobile application *Sanchaya* was conceptualized to address this issue by creating a real-time digital platform for food donation and redistribution.

*Sanchaya* is a Flutter-based mobile application that enables real-time reporting, tracking, and collection of surplus food to reduce waste and help underprivileged populations. The platform allows food donors—including restaurants, event organizers, and households—to report available food, which can then be claimed by registered volunteers or NGOs. These users coordinate the timely collection and safe delivery of food to orphanages, shelters, or families facing food insecurity. The application incorporates time-sensitive alerts and expiry countdowns to ensure food safety and minimize spoilage. Enhancing existing food donation models, *Sanchaya* includes features such as geolocation tagging, photo uploads, and food quality tagging for greater transparency and traceability.

Key functionalities of the application include OTP-based secure login for donors and volunteers, real-time posting and claiming of food, mapping of donation points via Google Maps, and an admin panel to monitor deliveries and verify users. The platform supports both Malayalam and English, ensuring wider accessibility among local users in Kerala.

The system is developed using Flutter (Dart) for cross-platform mobile development, Firebase services (including Authentication, Firestore/Realtime Database, and Cloud Messaging) for backend operations, and Google Maps API for location services. Notifications are handled through push alerts within the app interface.

*Sanchaya* presents an innovative, scalable solution to Kerala’s ongoing challenges of food wastage and hunger. By digitally connecting donors with volunteers and integrating real-time features such as location tracking and expiry monitoring, the platform fosters a culture of sustainable food sharing. It also supports local governance and disaster-relief operations by providing a structured and accessible food redistribution network at the grassroots level.