• MINOR-1 PROJECT

SYNOPSIS REPORT

For

- Café keeper: Digital address book for the cafes near you.

- Submitted By

• Specialization	○ SAP ID	• Name
• CCVT	• 500094103	• Anishka Sinha
• CCVT	• 500094135	• Vishakha Joshi
• CCVT	• 500094065	• Vivaswan Shukla
• CCVT	• 500094125	• Priyvrat Upadhyay

○ Department of

Systemics School Of

Computer Science

• UNIVERSITY OF PETROLEUM & ENERGY STUDIES,

▪ DEHRADUN- 248007. Uttarakhand

- Ms. Shahina Anwarul
- **Project Guide**

Dr. Hitesh Kumar Sharma

Cluster Head

School of Computer Science

University of Petroleum & Energy Studies,
Dehradun

Synopsis Report

- **Project Title:**
- Café keeper: digital address book for the cafes near you.

- **Introduction:**
- In today's bustling urban landscapes, the overwhelming array of dining and socializing options often leaves people struggling to choose where to enjoy a meal or a cup of coffee. The absence of a dependable and thoughtfully curated cafe rating system exacerbates this challenge. While platforms like Yelp, TripAdvisor, and Zomato provide valuable insights into local eateries, they often fall short in ensuring accurate and up-to-date ratings, leaving users uncertain about theirchoices.
- Enter Cafe Keeper, a visionary project on a mission to transform cafe discovery and evaluation. Using C++ programming, advanced data structures, and algorithms, Cafe Keeper aims to redefine the cafe experience. It offers users a sophisticated platform with comprehensive information about nearby cafes and their menus. What sets Cafe Keeper apart is its cutting- edge algorithm, which diligently monitors cafe ratings and automatically removes poorly performing establishments, ensuring a high-quality database.
- Cafe Keeper has ambitious goals: efficient data management, user-friendly interfaces, community engagement, and quality assurance. It seeks to simplify cafe exploration, encourage users to share their experiences, and ultimately reshape the cafe experience. Cafe Keeper is not just for cafe enthusiasts but for anyone who appreciates a great cup of coffee and a memorable cafe visit in today's dynamic dining landscape.

- **Literature Review:**
- The domain of cafe and restaurant discovery and rating systems has witnessed substantial growth in recent years. Several platforms, including Yelp, TripAdvisor, and Zomato, have emerged as popular choices for users seeking information about local eateries. These platforms provide valuable insights into cafe locations, menus, and user-generated reviews.

- While these platforms have successfully addressed the need for cafe information, they face challenges when it comes to the reliability of ratings and the maintenance of an up-to-date database. Users often encounter outdated or biased reviews that may not accurately represent a cafe's current quality. This is where Cafe Keeper aims to make a significant contribution.
- Café keeper constantly analysis and filter out cafes with low ratings, Cafe Keeper ensures that users can trust the platform to guide them to reputable establishments, thus alleviating the uncertainty associated with traditional review-based systems.
- In summary, Cafe Keeper builds upon the strengths of existing platforms while addressing their limitations by providing an innovative solution that combines user engagement, efficient data management, and dynamic quality control, making it a valuable resource for cafe enthusiasts and casual diners alike.

Problem Statement:

- With the abundance of cafes available in the age of bustling urban life, it sometimes gets stiff for the customers to choose the best one that suits their preferences. It assists users in discovering nearby cafes with ease while offering detailed menu information. The real innovation lies in its dynamic rating system, which not only empowers users to share their experiences but also employs an algorithmic approach to continuously maintain the database's quality.

Motivation:

- Key features of the project are:
- Café Sorting: Finding Highly-rated cafes based on the user preferences, ensuring better experience by saving customer time.
- User participation: Activate engagement between the user and the platform by submitting reviews, rating and café information, contributing for system growth.
- Efficient Exploration: User will get to explore new cafes in their vicinity, leading to more diverse experiences.
- User profile: Allow user to create account, and rating the cafes based on their experiences.
- Filtering option: Search functionality by location, name and cuisine type.

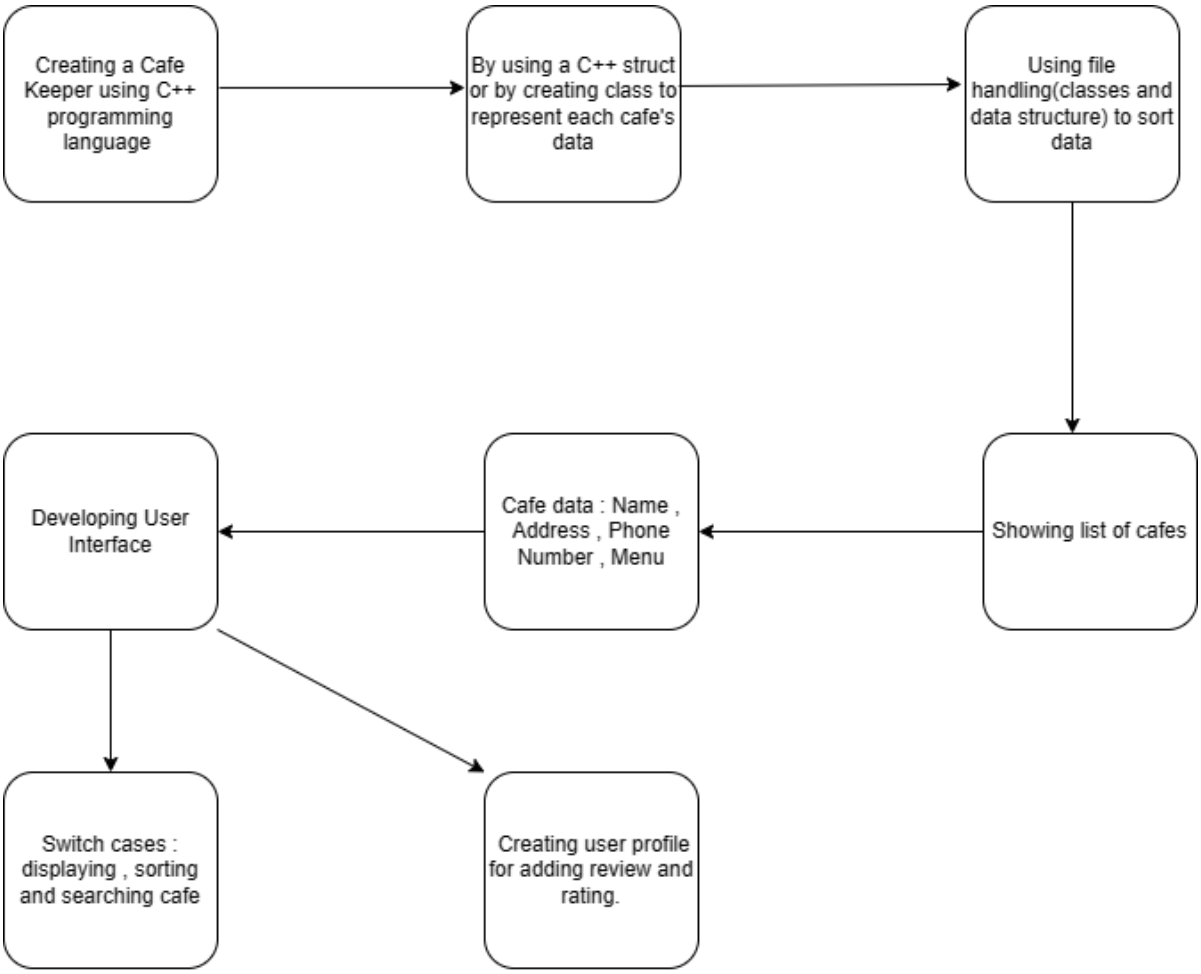
Objective:

- The primary objective of the Cafe Keeper project is to develop a sophisticated and versatile system utilizing C++ programming along with advanced data structures and algorithms. The

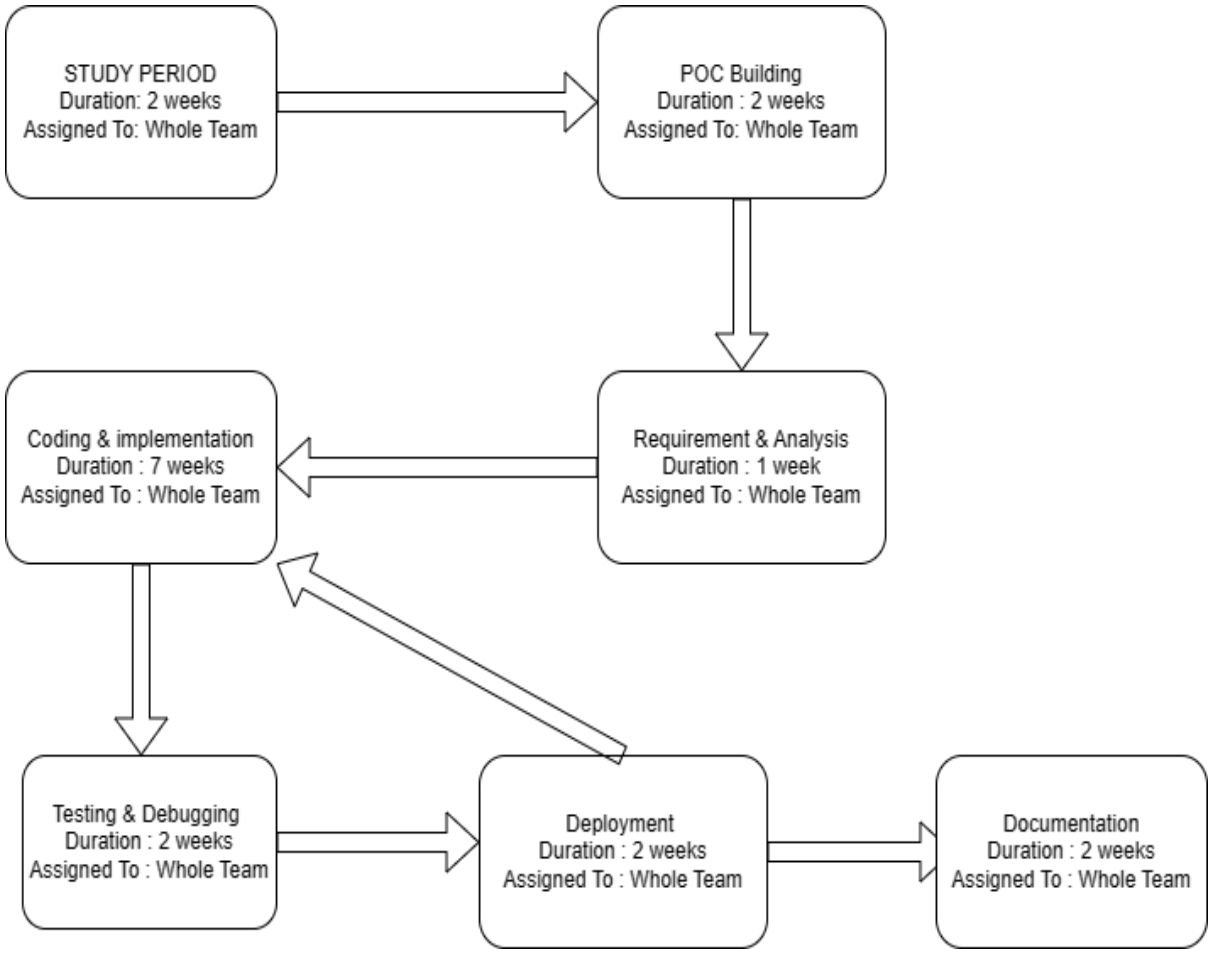
- core focus of the project is to provide users with a comprehensive and user-friendly platform to access vital information about nearby cafes, including their menus. Additionally, it facilitates customer engagement by enabling them to rate their experiences at these cafes.

• Methodology:

- This project focuses on building a digital command-line based café address book system using the Agile Methodology using C++ programming.
- The café address book system gives users access to café data and tools for locating and maintaining café listings, sorting, searching and file input/output using classes and functions.
- Using C++ classes to represent café's data including café name, address, phone number and other information and storing information about café using data structure.
- Creating functions to add new cafes to the address book and to display the list of cafes.
- Implementing sorting algorithm (quicksort for sorting the cafes and binary search for searching algorithm).
- Using switch cases, user can interact with digital café address book to display, sort and search for specific cafes by name.
- Incorporating error handling to manage potential issues when reading/writing files or executing operations.
- Documentation of code with the comments for clarity.



- **FIGURE 1: FLOWCHART**



- **FIGURE 2: PERT CHART**

- **References:**

- https://www.yelp.com/
- https://tripadvisor.com/TransparencyReport2023
- https://www.statista.com/statistics/1310549/zomato-revenue/