

# IT314 Software Engineering



**Lab-2 Report**  
**Course Project Kick-Off**  
**Central Mess Management Software**  
**Group: G32**

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## Needs:

The needs for a central mess software will depend on the specific requirements and goals of the system, as well as the context in which it will be used. Some common needs for a central mess system include:

**Improved efficiency:** By automating many tasks, central mess software can help to increase the overall efficiency of a mess operation, freeing up time for kitchen staff to focus on other tasks.

**Better inventory management:** The software can help to track the amount of ingredients used, ensuring that the mess never runs out of supplies and reducing food waste.

**Increased accuracy:** With central mess software, there is less chance of human error when it comes to tasks like menu planning and billing.

**Better customer experience:** Central mess software can be used to provide customers with the menu.

**Better data tracking:** Central mess software can collect data on sales, and more, providing valuable insights that can be used to make informed business decisions.

**Feedback:** Customers can review the overall experience.

**Employee Management:** The ability to manage and track employee information, including options for scheduling, training, and performance tracking.

Overall, the use of central mess software can help to streamline operations, increase efficiency, and improve the overall customer experience.

## Functional requirements:

**User Management:** The software should allow the administrators to manage users, create new user accounts, update existing user accounts, and delete user accounts.

**Mess Management:** The software should make it possible for the administrators to manage the mess facilities, including creating menus, monitoring food inventory, and controlling food availability.

**Billing and Payment:** Users should be able to check the status of their billing in the software.

**User feedback:** Users should be able to feedback on the food, services, and facilities using the software.

**User-Friendly Interface:** The software should have an intuitive and user-friendly interface that is easy to navigate and use.

**Data Security:** To protect the safety and confidentiality of user data, the programme should have strong security measures in place.

**Employee Management:** The ability to control and monitor employee data, including alternatives for planning, developing, and monitoring performance.

**Inventory Management:** The software assists administrators in monitoring the stock levels of ingredients and food.

## **Non-Functional Requirements:**

**Usability:** The software should have an intuitive user interface and be simple for people to use and comprehend.

**Performance:** The software needs to be able to manage many users at once with quick response times.

**Scalability:** The software should be able to grow in capacity over time to handle an increase in the number of users and transactions.

**Reliability:** The software must be dependable and deliver correct results on a consistent basis with little downtime.

**Security:** The software must guard against unauthorized access to sensitive data, including user and payment information.

**Maintainability:** With clear documentation and a modular architecture, the software should be simple to maintain and update.

**Compatibility:** The software should be compatible with various platforms and should be able to integrate with other systems if necessary.

**Availability:** The software should be accessible around-the-clock, with the necessary safeguards in place to guarantee high availability.

**Compliance:** The software should adhere to all applicable rules and laws, including those governing data privacy.

## **Features:**

**Menu Management:** Administrators may build, manage, and update menus using the software.

**Inventory management:** The software helps administrators in monitoring the stock levels of ingredients and food.

**Customer management:** The software keeps a list of clients in a database.

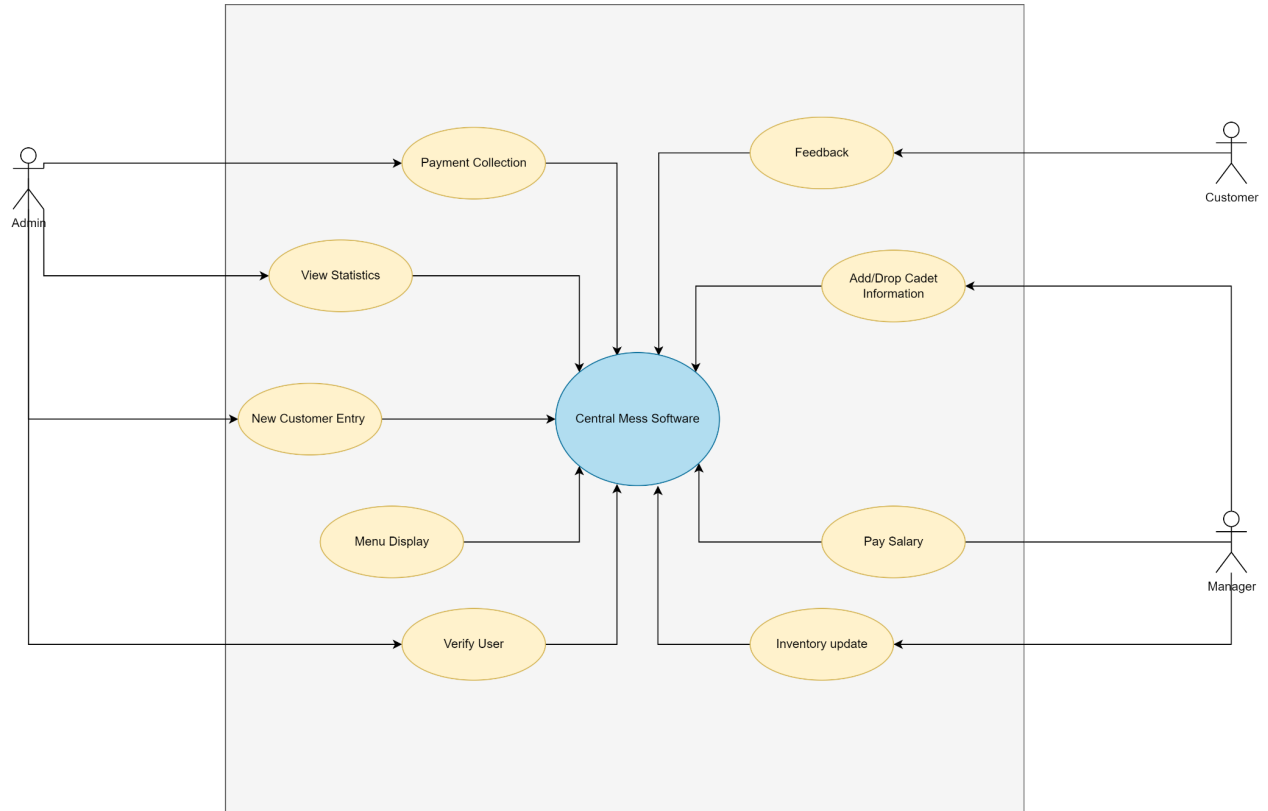
**Employee management** includes the ability to monitor an employee's schedule, their training, and their performance.

**Feedback** options will be made available to customers.

**User Management:** The capacity to regulate each user's access and permissions, including the ability to give them roles and limit the activities they may do within the software.

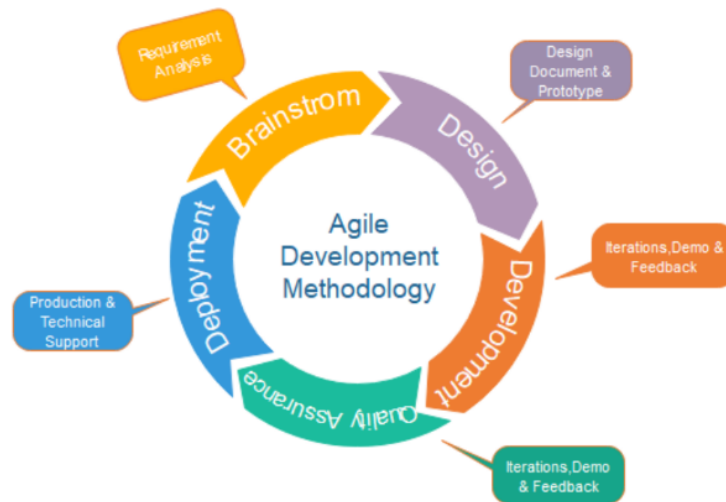
**Analytics and Reporting:** Capability to provide reports on a range of business operations-related topics, including as sales, stock levels, and member information.

## Use Case Diagram:



## Process Model: Agile Model

The agile model is an iterative and adaptive development model that emphasizes flexible and collaborative approaches to software development, with regular feedback and adjustments based on changing requirements and priorities.



**Fig. Agile Model**

In general, the Agile software development model is often preferred for the development of complex and dynamic systems, such as a central mess system, as it allows for frequent iterations, collaboration and feedback, and adaptability to changing requirements.