

Fundamentals of Software Engineering

Project Title: CuisineCraft ERP

Subtitle: Restaurant Enterprise Resource Planning, Desktop Application

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Deliverable Number: 1

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1. Project Title and Introduction:

The CuisineCraft ERP aims to develop a comprehensive desktop application for managing various aspects of restaurant operations. This system will streamline processes related to customer relationship management (CRM), inventory management, and various other essential functions in a restaurant setting. Deliverable 1 focuses on the initial modules of the application, including Login, Home, CRM, and Inventory.

2. User Stories:

- **Module 1 (Login and Signup):**

- As a user, I want to be able to create an account and log into the application using my credentials.
 - Sub-User Stories:
 - User should be able to select a username and password for his account.
 - User should be able to enter their username and password.
 - System should verify the entered credentials against the database.
 - User should receive appropriate feedback for successful or failed login attempts.
 - And I know I am done when I will be able to login into this application with my unique credentials.

- **Module 2 (Home):**

- As a user, I want to have a central dashboard displaying key information and functionalities.
 - Sub-User Stories:
 - User should be greeted with a welcome message upon successful login.
 - Dashboard should display relevant statistics such as sales figures, orders etc.
 - Navigation options to other modules should be easily accessible.
 - And I know I am done when I can have a bird eye view of my Restaurant.

- **Module 3 (CRM):**

- As a restaurant manager, I want to efficiently manage customer relationships and feedback.
 - Sub-User Stories:
 - Ability to create and view customer profiles with details such as name, contact information, etc.
 - Record customer visits and associated details like date, time, and order.
 - Capture customer feedback and suggestions for improvement.
 - Implement a loyalty program to reward frequent customers.
 - And I know I am done when I can save the information of my customers and I have a data that shows the feedbacks provided by my customers.

- **Module 4 (Inventory):**

- As a restaurant staff member, I want to manage stock items and track inventory levels.
 - Sub-User Stories:
 - Maintain a catalog of stock items with details like name, quantity, and unit price.
 - Record purchases of stock items including supplier information and quantities.
 - Generate alerts for low stock levels to facilitate timely reordering.
 - And I know I am done when I can update my inventory and gets the list of low stock items on a single click.

3. Structured Specifications:

- **Module 1:**

Specification: User Authentication

- Description: The system shall authenticate users based on the provided username and password.
- Acceptance Criteria:
 - Upon successful authentication, the user should be redirected to the home dashboard.
 - Incorrect credentials should prompt appropriate error messages.

Specification: Sign up option

- Description: If the user has not been registered, they can sign up and create an account.

- **Module 2:**

Specification: Total Quantity

- Description: Text view that describes the total quantity of items, total customers and revenue.

Specification: Finance Overview

- Description: A graph that show the trends of restaurants finance.

Specification:

- Description: A graphical representation of number of items in menu per category.

- **Module 3:**

Specification: Record Customer Data

- Description: All the customers' data will be recorded and maintained properly in a database.

Specification: Record Visits Data

- Description: On each customer visit, record the items ordered from the menu and the bill of the customer.

Specification: Record Feedback Data

- Description: Record the feedback of the customers in a database table along with customer details like phone number or email.

Specification: Record Loyalty Data

- Description: Frequent customers are added into the membership/loyalty program. This data is maintained in a separate table in the Customer Database.

● **Module 4:**

Specification: Record Items

- Description: All information related to inventory items will be stored and updated in database. There will be also an option to delete a certain item from inventory.

Specification: Record Suppliers

- Description: Information of Suppliers will be stored in database and easily accessible to owner. There will be option to add, update and delete the information of suppliers.

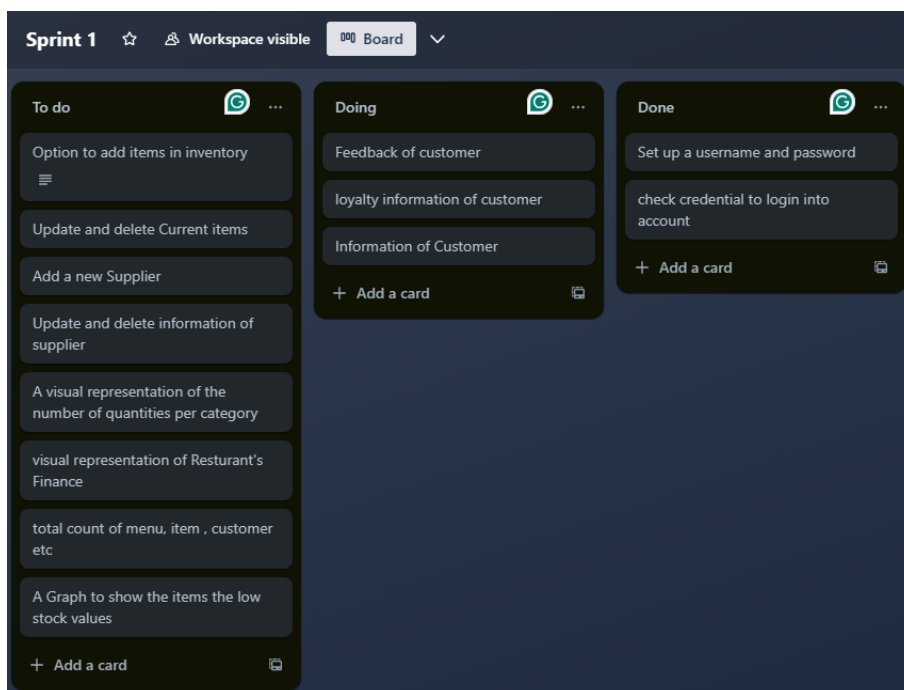
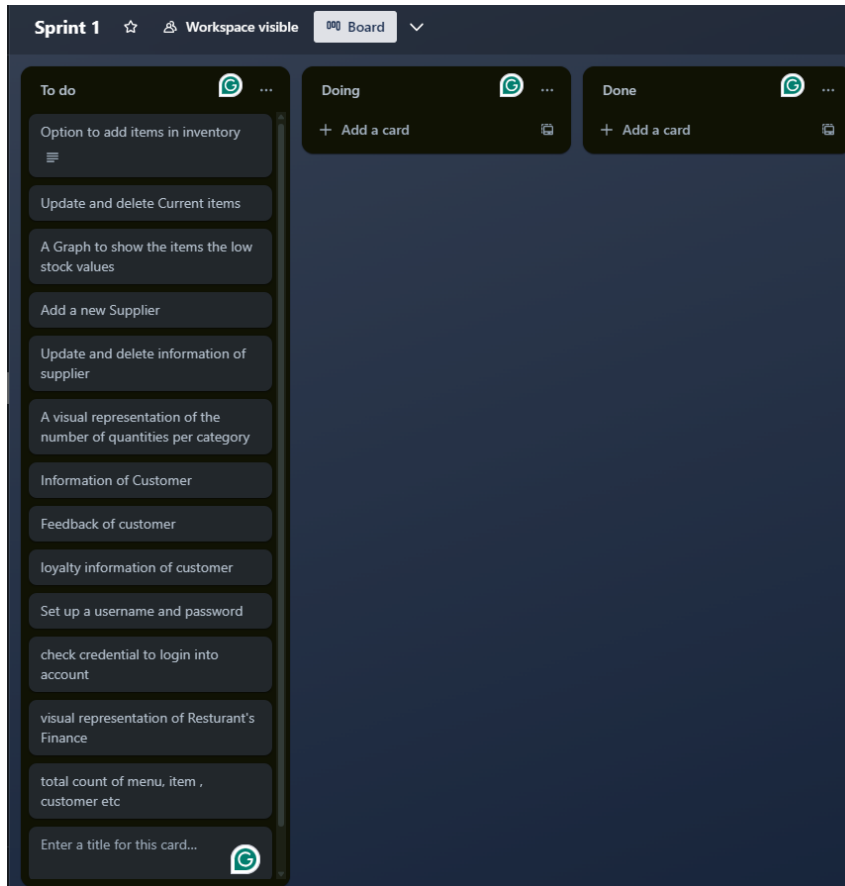
Specification: Low stock Alerts

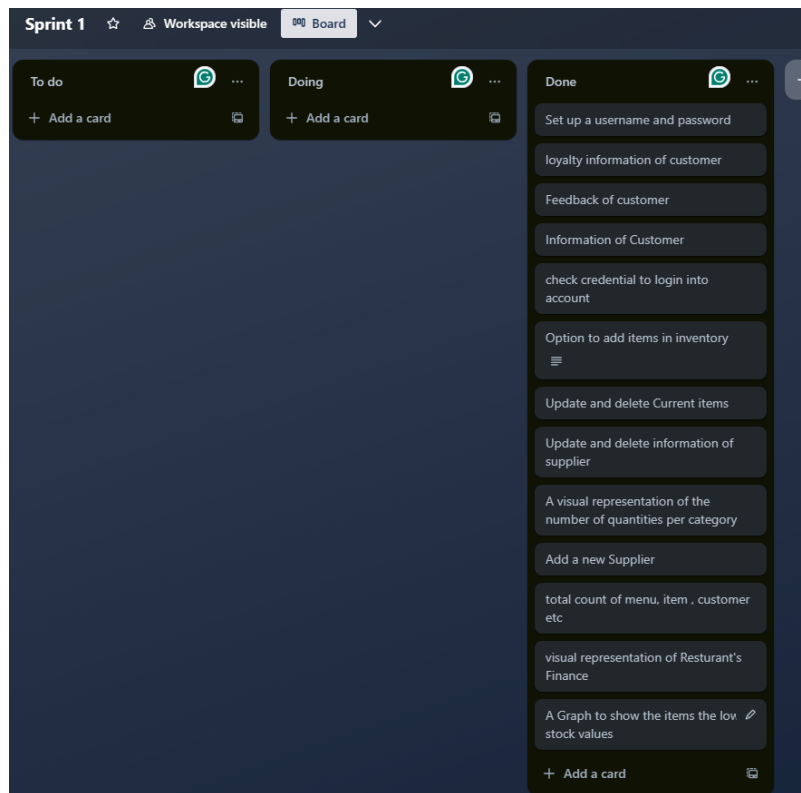
- Description: A graph will show owner the name of items whose stock has decreased from a certain level.

Specification: Analysis

- Description: Graphs will inform the owner of the restaurant about the availability of items with respect to their category.

4. Scrum Board:





5. NFR Specification:

- **Performance:** The system should perform efficiently without delays in displaying data or performing operations.
- **Security:** User authentication and authorization should be implemented using UserName and Password verification.
- **Usability:** The user interface should be intuitive and easy to navigate, requiring minimal training for new users.
- **Reliability:** The system should have a system uptime of at least 99.9% and it should be capable of data recovery from unexpected failures.
- **Maintainability:** The codebase should follow coding standards and best practices to facilitate easy maintenance and future enhancements.

6. Iteration 1 Implementation Screenshots:



Welcome back!

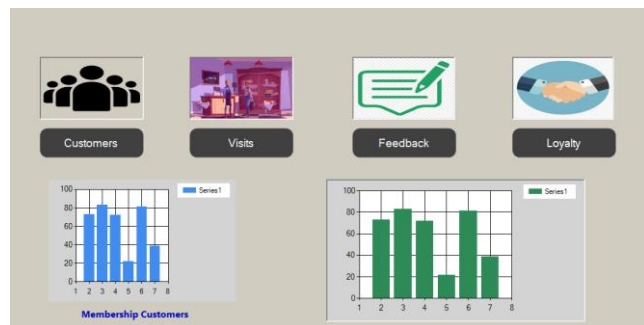
Username:

Password:

☐ Show Password

[LOGIN](#)

[Don't have an account?](#) [Register here](#)



7. Work Division:

Module1: Hafiz Hashir

Module2: Bilal Ahmad

Module3: Abdullah Maqsood

Module4: Shahzad Waris