

COMP433 - SOFTWARE ENGINEERING

Phase 2: Requirements Engineering- Elicitation & Discovery





Team members:

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Introduction:

As developers, we met with our clients and determined that the best way to create a system would be to create a user-friendly website where customers could browse the selection of meats, ranging from prime cut to specialty meats, and place orders by simply entering their name, location, contact information, etc., without having to create an account. Additionally, To help our salesman handle customer orders in the shop more easily and smoothly, we will also develop a financial system for the shop. While also having expert consultants to help customers throughout their overall shopping experience.

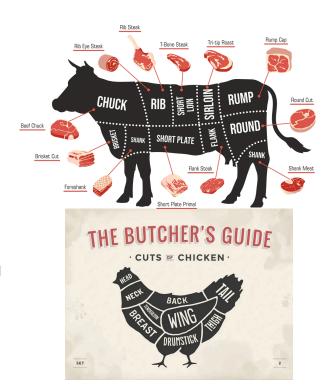
User requirement:

- 1. Customers expect a diverse range of high-quality meats, including meats such as sheep, lamb, beef, veal, and chicken.
- 2. The meat shop shall offer a variety of marinated chicken and other meats ready for purchase.
- 3. Customers should have the option to make special requests for custom cuts or custom preparation of the meat product.
- 4. Customers shall be able to get expert consultation that will help them answer their questions and give them advice for selecting a "meat" product.
- 5. Customers should be able to browse the available meat products online(shopping cart), make orders via phone call, or place in-store orders.
- 6. The shop provides On-Demand Cooking and BBQ Service for customers who prefer. ready-to-eat meals or freshly grilled BBQ.
- 7. The shop shall support both cash and card payments.
- 8. The shop provides professional 24-hour customer services by answering questions, and inquiries, and simply taking the order to pickup or delivery.
- 9. The meat shop has a schedule for which the employee's turn is to collect the scraps of meat that could be used as animal food (cats and dogs).

System requirements:

- **1.** Customers expect a diverse range of high-quality meats, including meats such as sheep, lamb, beef, veal, and chicken.
 - 1.1 . Develop a Database system to store information about various types of meat including sheep, lamb, beef, veal, and chicken.
 - 1.2. The ability to categorize products by meat type, price, quantity, frozen or fresh, imported or local, and meat origin(source)

- **2.** The meat shop shall offer a variety of marinated chicken and other meats ready for purchase.
 - 2.1. Develop an Inventory system that tracks both raw fresh meats or the ready to go marinated products.
 - 2.2 The store shall be able to get special custom requests for recipes for different types of marinades and spices that allow the customer to pick based on their preferences.
 - 2.3 The system shall have proper labeling, and tracking of marination times and quantity.



- **3.** Customers should have the option to make special requests for custom cuts or custom preparation of the meat product.
 - 3.1. Develop a customer order system that allows the customer to make special requests including specific cuts(from specific parts), portion size, boneless, no fat, and type of preparation method (ground meat, kofta ...etc).
 - 3.2. This system should integrate with inventory management to ensure the availability of requested items.
 - 3.3 The system shall have proper labeling to specify which part of meat this is and what type of animal
 - 3.4 If the order was ordered from the website the client will be notified whenever their request is ready.

- **4.** Customers shall be able to get expert consultation that will help them answer their questions and give them advice for selecting "meats" products.
 - 4.1. Provide a platform for customers to access expert advice either through in-store consultations or online chat services.
 - 4.2. This system should have information about cooking techniques, and dietary considerations (keto, sugar-free, fat-free etc).
 - 4.3. The ability to Suggest recipes depending on the type of meat customers buy, and advise on the best method of cooking to get the best results
 - 4.4 the ability to suggest the correct or best option of meat cuts depending on the customer's dish
- **5.** Customers should be able to browse the available meat products online(shopping cart), make orders via phone call, or place in-store orders.
 - 5.1. Develop a website where customers can browse the available meat products, and view prices and descriptions.
 - 5.2 the ability to accept online orders from the website, give discounts to regular customers, and suggest products depending on previous purchases.
 - 5.3. The ability to send daily recommendations, weekly and current sales offers by customers' email and SMS message
 - 5.4 . create a system that gives points to regular customers every time they make a purchase(the more products you buy the more points you get), which eventually leads the shop to give them discounts or rewards.
 - 5.5. The store shall have clear pricing, labels, and in-store help from the salesman.
 - 5.6 The customer shall make a request or inquiry about the available options by phone and then place an order if needed.
 - 5.7 Ensure the integration of inventory and order management systems.
 - 5.8 The customer shall be able to add products to cart and view cart contacts.

- **6.** The shop provides On-Demand Cooking and BBQ Service for customers that prefer ready-to-eat meals or freshly grilled BBQ
 - 6.1. Implement a kitchen management system capable of fulfilling on-demand cooking and BBQ services.
 - 6.2 . This system should schedule cooking times, track orders, and ensure timely delivery or pickup depending on the agreed time.
 - 6.3. The shop has special deals and packages that include a specific amount of grilled meats and complementary sides (grilled vegetables, salads, drinks ... etc.) that they can select from.
 - 6.4. The ability to take special preparation requests, and give the complementary side like(grilled vegetables, salads, drinksetc).
- 7. The shop shall support both cash and card payment
 - 7.1 The user shall be able to pay by Visa or e-wallets (Reflect ..etc)
 - 7.2 The user shall be able to pay by PayPal.
 - 7.3 The user shall be able to pay by Cash after delivering the order.
 - 7.4 The system should accept cancellation of an order within 2 hours before the agreed time.
- **8.** The shop provides professional 24-hour customer services by answering questions, and inquiries, and simply taking the order to pickup or delivery.
 - 8.1 Develop a customer orders management system to handle the orders and schedule time for the delivery or pickup.
 - 8.2 The system shall be able to allow the customer to position their current location and make it easier to deliver to the exact location.
 - 8.3 Set up hotline/live chat to answer customer questions, and inquiries, receive feedback or objections

- **9.** The meat shop has a schedule for which the employee's turn is to collect the scraps of meat that could be used as animal food (cats and dogs).
 - 9.1 Develop a system to manage the scraps and useless meat to store them until the end of the day to give them to the animals.
 - 9.2 make a schedule system with working employees of the day, and whose turn it is to feed the animals.

Cost estimation:

Feature/User Req.	Function point	Total Function Points (*20) HOURS	# of Days
UR1	5	100	13
UR2	2	40	5
UR3	3	60	8
UR4	3	60	8
UR5	4	80	10
UR6	3	60	8
UR7	4	80	10
UR8	4	80	10
UR9	1	20	3
TOTAL	29	580	75

- ❖ Total function points : 5+2+3+4+4+4+1 = 29 function points
- ♦ Total hours : 20*29 =580 hours

- ❖ Total months needed for work : 75 /22 = 3 months and 6 days === 4 months
- ❖ We have 3 developers which means one month and a half worth of work
- ♦ Each developer's salary is \$1600+\$1800+\$2000= \$5,400 per month[1] salaries for developer in Palestine

For 1 month and a half = \$8,100

- **❖** For min 30% = \$ 10,530
- ♦ For max 50 % = \$ 12,150

References:

[1] ("A person working as a Developer and Programmers in Palestine typically earns around 1,650 USD. Salaries range from 1,220 USD (lowest average) to 2,160 USD (highest average, actual maximum salary is higher).")..according to the website Palestine developer's and programmers salary