

THIS FORM IS FOR BOTH THE GENERAL & MEDICAL INFORMATICS PROGRAMMES

SE-I COURSE PROJECT (PHASE 1 COVER SHEET)

Discussions Scheduled for Week 8 (more details will be announced later).

- o Print 1 copy of this cover sheet and attach it to a printed copy of the documentation (SRS, ... etc.). You must also submit softcopies of all your documents (as PDFs); details will be announced later.
- o Please write all your names in **Arabic**.
- Please make sure that your students' IDs are correct.
- o Handwritten Signatures for the attendance of all team members should be filled in <u>before</u> the discussion.
- o Please attend the discussion on time (announced separately), late teams will lose 5 grades.

Project Name: An Application for Online Food & Grocery Delivery Service [Inspired by Talabat]

Team Information (typed not handwritten, except for the attendance signature):

| | ID [Ordered by ID] | Full Name [In Arabic] | Attendance [Handwritten Signature] | Final Grade |
|---|-----------------------|----------------------------------------|---------------------------------------|----------------|
| 1 | 20210188 | اندرو ايمن انسي عبد الملاك | | |
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| 3 | 20210133 | ادم محمد عطيه عبدالغني | | |
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| 6 | 20210153 | اسراء علي سيد محمود | | |
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Grading Criteria:

 $Helwan\ University\ -\ Faculty\ of\ Computers\ \&\ Artificial\ Intelligence-Computer\ Science\ Department\ Module:\ CS251\ Software\ Engineering\ 1-Spring\ "Semester\ 2"\ 2022-2023$



| 10 Items | | Grade | Notes |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---|-------|-------|
| 1. Functional Requirements | 1 | | |
| 2. Non-Functional Requirements | 1 | | |
| 3. Use-Case Diagram(s) including general use-cases for the system, and the detailed use-cases description | 2 | | |
| 4. System Architecture – including applied Architectural Pattern(s) | 1 | | |
| 5. Activity Diagrams | 2 | | |
| 6. Database Specification (ERD, Tables) | 2 | | |
| 7. Class Diagram (<i>Interfaces, Classes, Relations</i>) – An initial version based on the requirements and Use-Case/Activity diagrams. | 2 | | |
| 8. Object Diagrams (Including object diagrams that illustrate the preconditions and the post-conditions of selected functions) | 1 | | |
| 9. Package Diagram(s) | 1 | | |
| 10. Sequence Diagrams including System Sequence Diagrams (SSDs) | 2 | | |
| Teaching-Assistant's Signature: | 5 | | _ |



1.Introduction:

In today's fast-paced world, people are always on the go and have very little time to spare for activities such as grocery shopping and cooking. To address this need, online food and grocery delivery services have become increasingly popular. In this project, we will be presenting an application for an online food and grocery delivery service inspired by Talabat. Our goal is to provide a convenient and seamless experience for customers to order food and groceries from the comfort of their homes.

1.1 System overview

Our online food and grocery delivery service is a web-based system that consists of a customer interface, a vendor interface, and a delivery management system. Customers can order food and groceries through the customer interface, vendors can manage their products and orders through the vendor interface, and the delivery management system handles the delivery process. The system provides a convenient and efficient solution for customers to order and receive food and groceries from the comfort of their homes.



2- Requirements Specification

2.1 Functional Requirements

- 1. The app must allow the admin to manage users and restaurants profiles.
- 2. The app must allow the admin to add restaurant, delete restaurant, update restaurant profile.
- 3. The app must allow the admin to add or edit on the restaurant's menu.
- 4. The app must allow the admin to view customer profile, delete customer profile.
- 5. The app must allow the admin to add w new delivery boy to be assigned by a customer in ordering Process.
- 6. The app must allow the user to sign up if he do not have an account or log in if he has one.
- 7. The app must allow the user to update his profile information.
- 8. The app must allow the customer to add his location.
- 9. The app must allow customers to discover and search for restaurants.
- 10. The app must allow customers to select a restaurant.



- 11. The app must allow customers to view the menu, prices, and images of food items from each restaurant.
- 12. The app must allow customers to place an order.
- 13. The app must allow customers to show the cart and edit or remove from it.
- 14. the app must allow customers to checkout from the cart with a selected payment method (credit, cash)
- 15. The app must allow customers to track the status of their order.
- 16. The app must allow customers to leave feedback.
- 17. The app must allow customers to add restaurant to their favourite list.
- 18. The app must allow customers to access their order history and favourite restaurants.
- 19. The app must provide the No Cutlery feature that lets customers option out of receiving disposable cutlery with their order.
- 20. The app must provide the GEM feature that shows the customers offers and recommendations from restaurants.
- 21. The app must allow the customer to assign the order to the available delivery partners.
- 22. The app must have a FAQ page to help the user.
- 23. The app must have a contact us page to help the user to connect.



2.2 Non-Functional Req:

Performance Requirements

- The website should provide greater performance with no delay. For food, who would be using web app on their desktop or phones, the performance should be good.
- The system must respond to the operation for user (admin) quickly.
- The application shall show success message if the operation was done correctly.
- The system should be compatible with all modern browsers.
- The system should respond to the operation messages to the users quickly.

Safety Requirements

- The system must handle safe login and logout through session.
- The database should be secured from SQL injection to prevent leak or loss of information.

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Reliability

• The website should be reliable and provide catching of exceptions so that unintended results do not occur such as system crashes, or data validation failures.

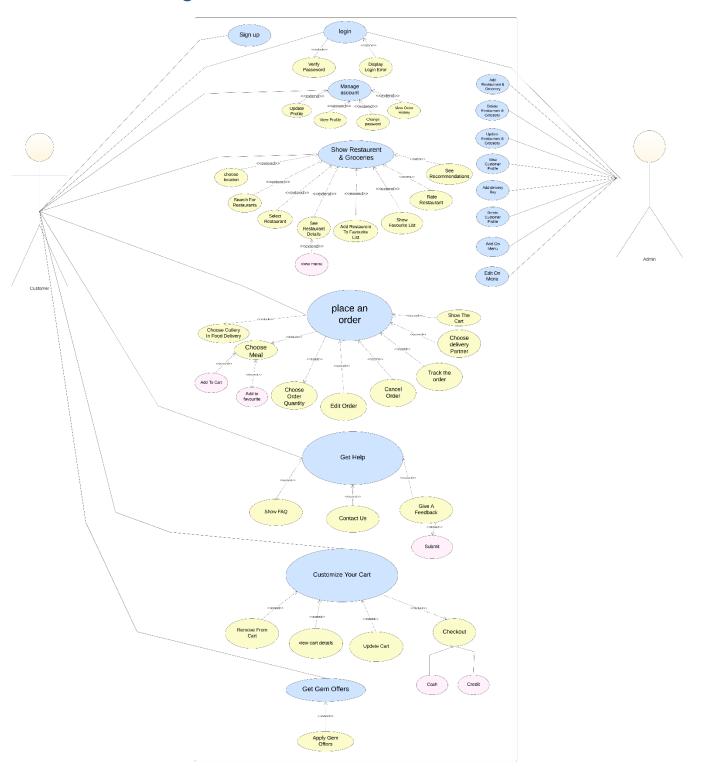
Usability

 UI designed in easy way, so the user can use the system smoothly after spending an hour on it.



3 - Use Case:

3.1 Use case diagram





3.2 detailed Use case

1-sign up

| Name | Sign up | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------|--|
| Intiatior | Customer. | |
| Descritption | The system allows the customer to create an account. | |
| Pre-Condition | The customer does not have an account | |
| Post- Condition | an account has been created | |
| Main success scenario | 1- The customer opens the website.2- The customer creates an account.3- An account has been created. | |
| Alternative scenario | 1-the system fails to save the customer data to database 2-the customer enter invalid information | |

2- Log In

| | -5 |
|-----------|---------------------|
| Name | |
| | Log In |
| Intiatior | |
| | Admin and customer. |



| Descritption | The system will allow the user to log in with username and password. |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Condition | The user opens the website. |
| Post- Condition | The user have his access on his profile on website. |
| Main success scenario | The user opens the website. The user enters his username and password. If his information is correct, he will enter the website successfully |
| Alternative scenario | The user enters wrong information. The system can't verify the entered data |

3- View customer

| Name | View customer |
|-----------------|------------------------------------------------------------|
| Intiatior | Admin. |
| Descritption | The system will allow the admin to view a choosen customer |
| Pre-Condition | The admin logged in |
| Post- Condition | The customer profile is displayed to the admin |



| Main success scenario | The admin opens the website The admin logged in. The admin selects to view the customer profile |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Alternative scenario | The system does not allow the admin to view customer profiles. |

4- Delete customer

| Name | Delet customer | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Intiatior | Admin. | |
| Descritption | The system will allow the admin to delete a choosen customer | |
| Pre-Condition | The admin logged in and view customer | |
| Post- Condition | The customer profile is succssfully deleted . | |
| Main success scenario | The admin opens the website. The admin logged in. The admin views a customer. The admin selects to delete this customer | |



| 1.admin can not access the customer profile 2. the sytem doesn't allow the admin to delete the customer profile |
|-----------------------------------------------------------------------------------------------------------------|
|-----------------------------------------------------------------------------------------------------------------|

5-search restaurant

| Name | Search restaurant | |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Intiatior | Customer | |
| Descritption | The system allow the customer to search for a restaurant. | |
| Pre-Condition | The customer logged in if he has an account or sign up if he has not. | |
| Post- Condition | The system display the restaurant the customer searched for. | |
| Main success scenario | The customer opens the website. The customer signs up or log in if he already has an account. The customer decides to search for his restaurant | |
| Alternative scenario | 1- The customer cannot find the restaurant he want.2- The system fails to show the search bar to the customer. | |

6-see recommendations

| Name | |
|----------|----------|
| IVAITIE | |
| ITALITIC | 1 |
| | |



| | See recommendations |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The system allows the customer to ask for a recommendation |
| Pre-Condition | The customer logged in if he has an account. |
| Post- Condition | The system displays the recommended restaurants. |
| Main success scenario | The customer opens the website. The customer logs in if he has an account. The customer asks for recommendation. The system displays the recommended restaurants. |
| Alternative scenario | 1- The system doesn't display any recommendations. |

7- choose location

| Name | Choose location |
|---------------|------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The system will ask the user about the location then the system will save the information to the database. |
| Pre-Condition | The customer opens the webtsite. |



| Post- Condition | customer write his location and saved by the system |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main success scenario | The customer opens the website. The customer logged in. The system ask customer for his location The customer adds his location The system submits his location |
| Alternative scenario | The customer cannot find his location in map The system can't submit the customer location |

8-select restaurant

| Name | Select restaurant |
|---------------|------------------------------------------------------------------------------------------------------------------------|
| | |
| Intiatior | |
| | Customer. |
| Descritption | The system shows the customer alot of restaurant to select from |
| Pre-Condition | The customer opens website and choose from restaurants. |
| Post- | |
| Condition | the customer selected the restaurant successfully and can access menu to order . |
| Main success | 1 T1 |
| scenario | The customer logged in successfully. The system allows the customer to search restaurant. |
| Scellario | 3. The system allows the customer to select any restaurant |
| Alternative | 1.the system doesn't allow the customer to select a |
| scenario | resturant |



9-Select meal

| Name | Select meal |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer |
| Descritption | The System must allow the user to Choose a meal from a menu of food |
| Pre-Condition | the customer enter to the website and choose the restaurant. |
| Post- Condition | The customer choose his meal |
| Main success scenario | The customer opens the website. The customer log in The customer chooses a restaurant. The system allows the customer to choose a meal. The system shows the customer the selected meal |
| Alternative scenario | 1- The customer can't find the meal he wants.2- The meal was sold out. |

10-choose delivery boy



| Name | Choose delivery boy |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The system allow the customer to choose a delivery boy. |
| Pre-Condition | The customer select a restaurant, order and add it to cart |
| Post- Condition | The customer has chosen the delivery boy he need. |
| Main success scenario | The customer selects a restaurant. The customer selects an order. The customer adds the order to his cart. The customer chooses the delivery boy from the options. |
| Alternative scenario | 1- The customer cannot find any available delivery boy. |

11- Toggle-not-cutlery

| Name | Toggle-not-cutlery |
|--------------|-------------------------------------------------------------------|
| Intiatior | Customer |
| Descritption | The system allow the customer to decide he need a cutlery or not. |



| Pre-Condition | The customer select a restaurant and his meal |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Post- Condition | The system has known he need a cutlery or not. |
| Main success scenario | The customer selects a restaurant. The customer selects an order. The customer adds the order to his cart. 4-The customer decide he need cutlery or not. |
| Alternative scenario | 1- The system fails to show the option to the customer. |

12-Add to cart

| Name | Add to cart |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The system allows the customer to add his order to cart |
| Pre- Condition | The customer choose a restaurant and a meal |
| Post- Condition | the customer added his meal to cart |
| Main success scenario | The customer opens the website. The customer logged in. The customer chooses the restaurant. The customer chooses and add the meal to cart. |



Alternative scenario

- 1- The customer can not find his order in the cart
- 2- The system doesn't response to the customer instractions

13-remove from cart

| Name | Remove from cart |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer |
| Descritption | The system allow the customer to remove a product from his cart |
| Pre-Condition | The customer select a restaurant and his order and add it to cart |
| Post- Condition | The product is removed from the cart. |
| Main success scenario | The customer selects a restaurant. The customer selects an order. The customer adds the order to his cart. The customer removes the order from his cart. |
| Alternative scenario | 1- The customer cannot find his order in the cart.2- The system doesn't response to the customer instructions |



14- cancel order

| Name | Cancel order |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The System must allow the customer to Cancel his Order at any time. |
| Pre-Condition | The customer must have opened the cart |
| Post- Condition | The order will be deleted from the cart |
| Main success scenario | The customer chooses the restaurant. The customer chooses the meal. The customer opens the cart. The system allows to user to delete the order from cart. the order is canceled |
| Alternative scenario | 1.the system doesn't response to the order canceling process |

15-check out

| Name | Check out |
|------|-----------|
| | |



| Intiatior | Customer. |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Descritption | The customer can choose the food and add to the cart and then choose the way who want pay by it |
| Pre-Condition | The customer would choose the food and choose the way of payment. |
| Post- Condition | The order will be saved |
| Main success scenario | 1-the customer choose the food 2-add the food to cart 3-choose way of payment 4-system will save the information |
| Alternative scenario | 1-the customer entered a wrong card number 2-the card hasn't enough sufficient funds 3-the system fails to save the information |

16-track order

| Name | Track order |
|-----------------|----------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The system allows the customer to track his order. |
| Pre-Condition | The customer will know about his order status. |
| Post- Condition | customer can follow his order untill it reach |



| Main success scenario | The customer chooses the order. The customer can enable gps Then can follow his order |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Alternative scenario | 1.the system fails to show the status of the order |

17- rate restaurant

| Name | Rate restaurant |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The System must allow customer to Rate The Restaurant and the Service. |
| Pre-Condition | The customer choose the restaurant and the meal, and his order is ended. |
| Post- Condition | The customer gives his opinion of the restaurant |
| Main success scenario | The customer chooses the restaurant. The customer chooses the meal. The order has ended. The system allows the customer to write his feedback. |
| Alternative scenario | 1-the system fails to save the rate that have been submitted by the user |



18- Add to fav

| Name | Add to fav |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | customer. |
| Descritption | The system will allow the customer to add a restaurant to his favorite list |
| Pre-Condition | The customer logged in and select a restaurant |
| Post- Condition | The customer added a restaurant to his favorite list . |
| Main success scenario | The customer opens the website. The customer logged in. The customer search for a restaurant The customer selects a restaurant. The customer adds this restaurant to his favorite list. |
| Alternative scenario | 1.the customer could not select the restaurant 2.the customer could not put the restaurant to his favorite list 3.the system doesn't response to customer instraction |

19-feedback

| Name | Feedback |
|------|----------|
| | |



| Intiatior | |
|-----------------------|-------------------------------------------------------------------------------------------------------------|
| | Customer. |
| Descritption | the customer record reaction to a restaurant, food, or performance of the service |
| Pre-Condition | The customer must log in to the website |
| Post- Condition | feedback sent to admin |
| Main success scenario | The customer logs in The customer writes feedback. Submit |
| Alternative scenario | 1-the system fails to save the feedback 2-the system doesn't allow the customer to leave his feedback |

20-Apply gem offers

| Name | Apply gem offers |
|--------------------|-------------------------------------------------------|
| Intiatior | Customer. |
| Descritption | The system allows the customer to use the gem offers. |
| Pre-Condition | The customer logged in and check gem offers |
| Post- Condition | The customer has an offer in his order . |



| Main success scenario | The customer opens the website. The customer logs in if he has an account. The customer checks gem offers. The customer applies gem offers. |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternative scenario | 1-the customer didn't find any available offers. 2-the system doesn't provide any offers. |

21- Add Restaurant

| Name | Add Restaurant |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Admin. |
| Descritption | The system will allow the admin to add a restaurant to the restaurants list |
| Pre-Condition | The admin logged in and select to add restaurant |
| Post- Condition | The restaurant is successfully added to the restaurant list . |
| Main success scenario | The admin opens the website. The admin logged in. The admin selects to add a new restaurant |
| Alternative scenario | 1-the system can't save the data 2-the system has error and can not response to admin instractions |



22- Delete Restaurant

| Name | Delete Restaurant |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Admin. |
| Descritption | The system will allow the admin to delete a specific restaurant form the restaurants list. |
| Pre-Condition | The customer logged in and select a restaurant |
| Post- Condition | The restaurant is successfully deleted from the restaurant list. |
| Main success scenario | The admin opens the website. The admin logged in. The admin selects a restaurant. The admin selects to delete this restaurant from the list |
| Alternative scenario | 1-the system can't save the data 2-the system has error and can not response to admin Instractions 3-the admin can't select the restaurant |

23- view Menu

| Name | View Menu |
|--------------|------------------------------------------------------------------------------|
| Intiatior | customer. |
| Descritption | The system will allow the customer to view the menu of a selected restaurant |



| Pre-Condition | The customer logged in and select a restaurant |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Post- Condition | The system displays the menu to the customer |
| Main success scenario | The customer opens the website. The customer logged in. The customer search for a restaurant The customer selects a restaurant. The customer selects to view the menu. |
| Alternative scenario | 1.the system doesn't response to customer Instraction 2.The customer can't access the menu 3.the menu has been deleted |

24- Add menu

| Name | Add menu |
|-----------------|----------------------------------------------------------------------------|
| Intiatior | |
| | Admin. |
| Descritption | The system will allow the admin to add a new menu to a selected restaurant |
| Pre-Condition | The admin logged in and select a restaurant |
| Post- Condition | The restaurant is successfully has a new menu |



| Main success scenario | The admin opens the website. The admin logged in. The admin selects a restaurant. The admin selects to add a menu for this restaurant. |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternative scenario | 1-the system can't save the data 2-the system has error and can not response to admin Instractions 3-The admin can't find the menu he wanna add |

24- Edit Menu

| Name | Edit Menu |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Admin. |
| Descritption | The system will allow the admin to edit on exisited menu from a restaurant |
| Pre-Condition | The customer logged in and select a restaurant |
| Post- Condition | The selected restaurant menu is edited with the new items |
| Main success scenario | The admin opens the website. The admin logged in The admin select restaurant The admin select to edit on a current menu |
| Alternative scenario | 1- The system doesn't accept the modified data2- The admin can't access the menu |

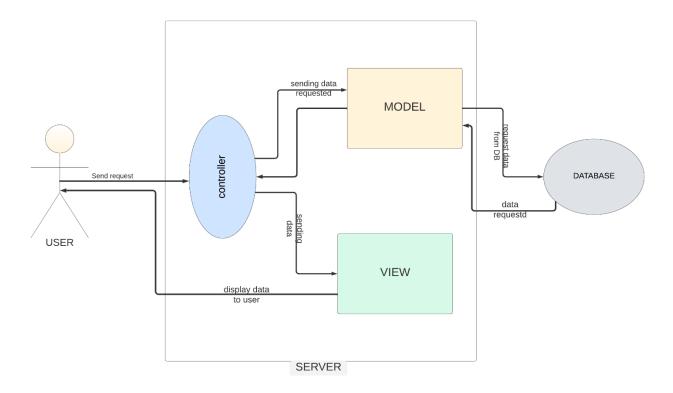


25- Add Delivery

| Name | Add delivery |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Intiatior | Admin. |
| Descritption | The system will allow the admin to add a new delivery boy |
| Pre-Condition | The admin logged in |
| Post- Condition | The new delivery boy will be avalibale to assiggn by a customer while ordering proccess. |
| Main success scenario | The admin opens the website The admin logged in The admin select to add a new delivery boy |
| Alternative scenario | 1. The system doesn't response to the instruction |



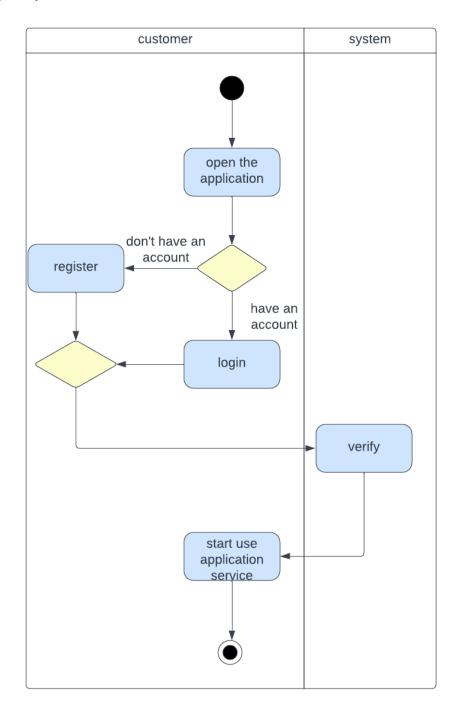
4 – System Architecture:





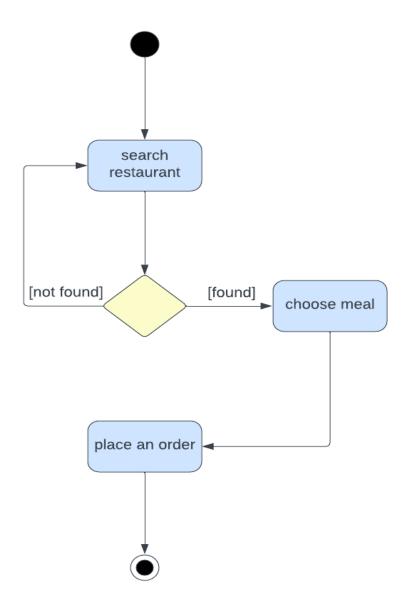
5 – Activity diagram

1 – Login & Sign Up



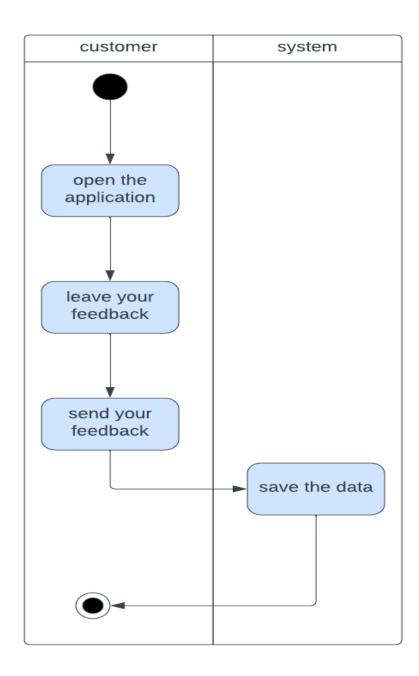


2 - Search Restaurant



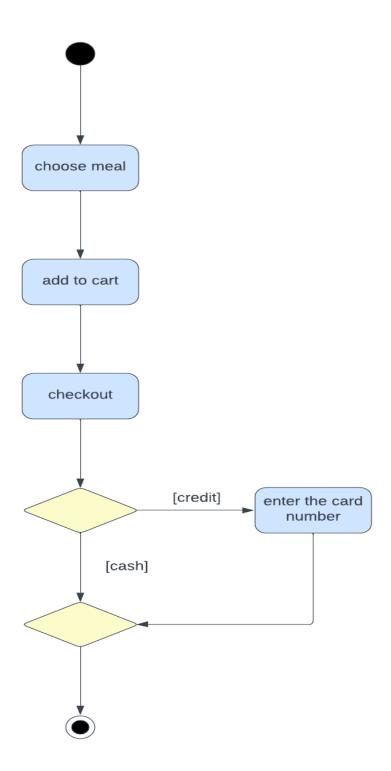


3 - feedback



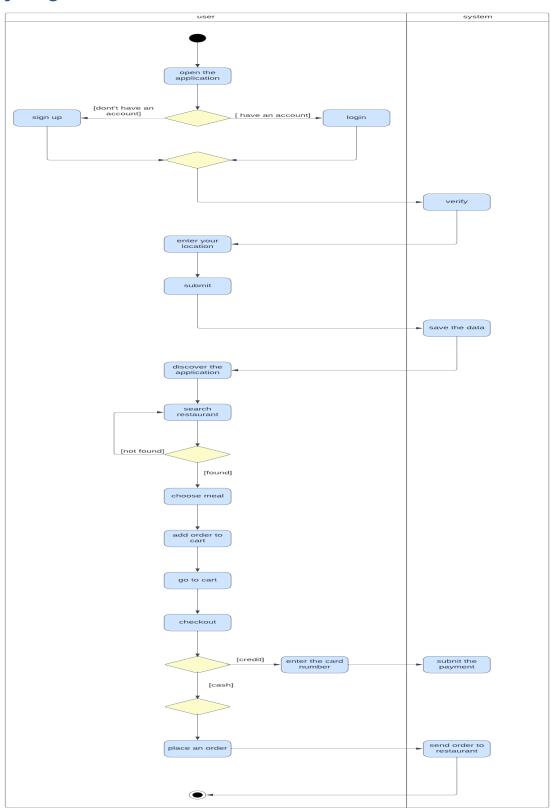


4 - Checkout





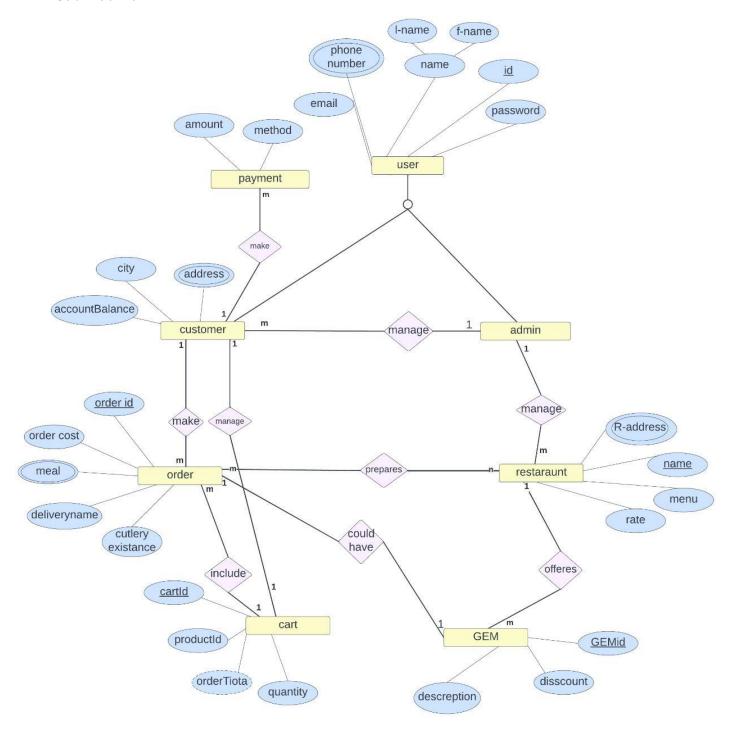
5 – Activity diagram





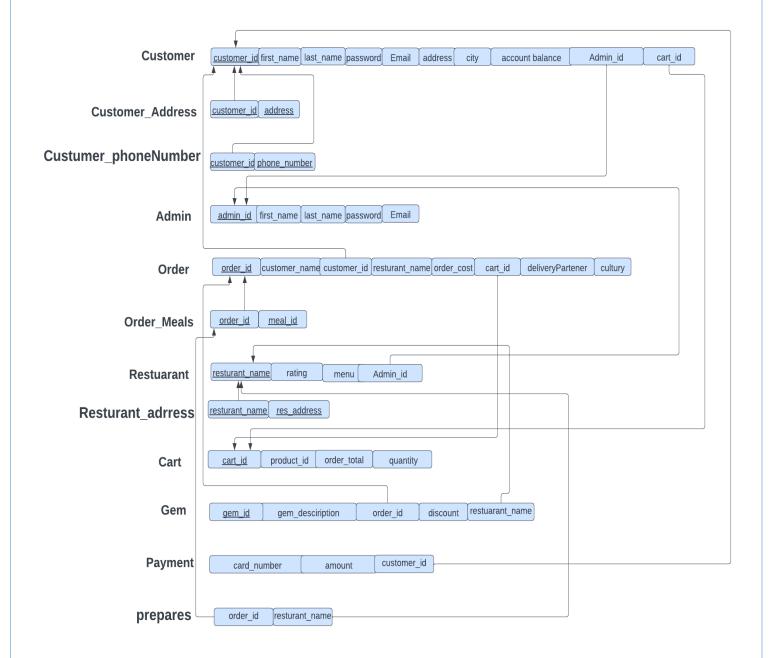
6 - Database Specification:

6.1 ERD:



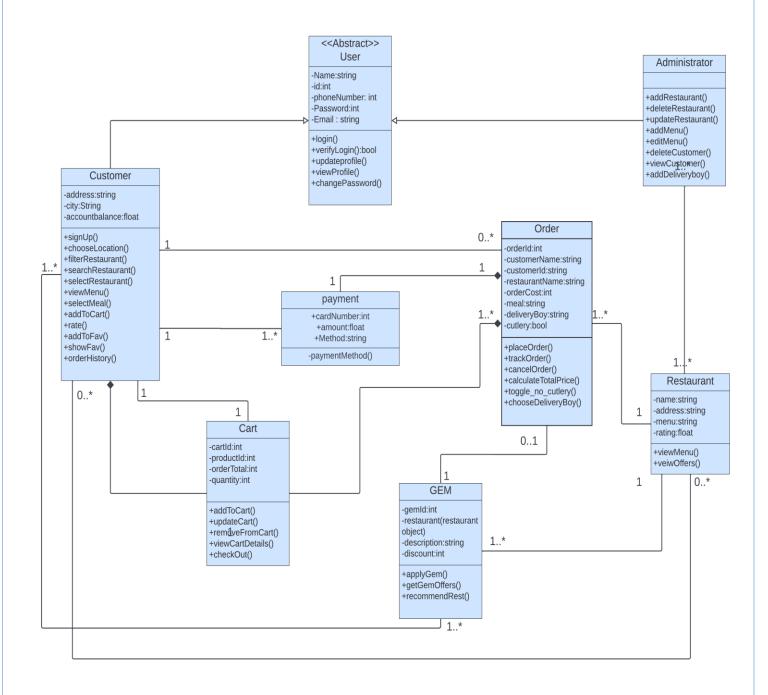


6.2 ERD Tables





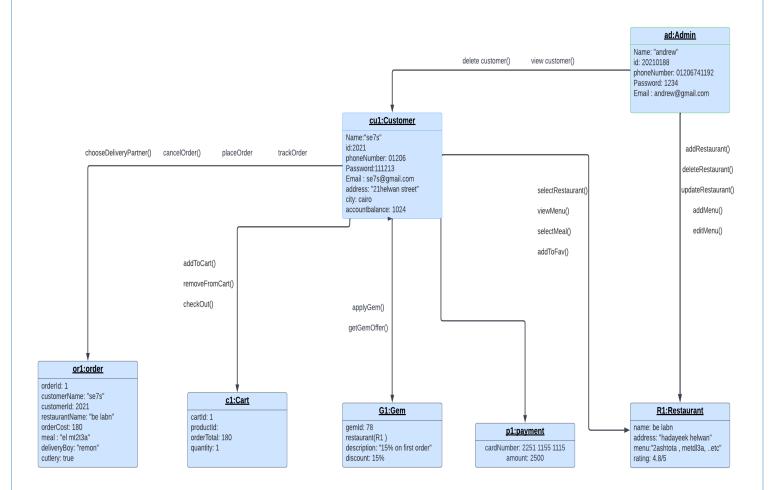
7 – Class diagram





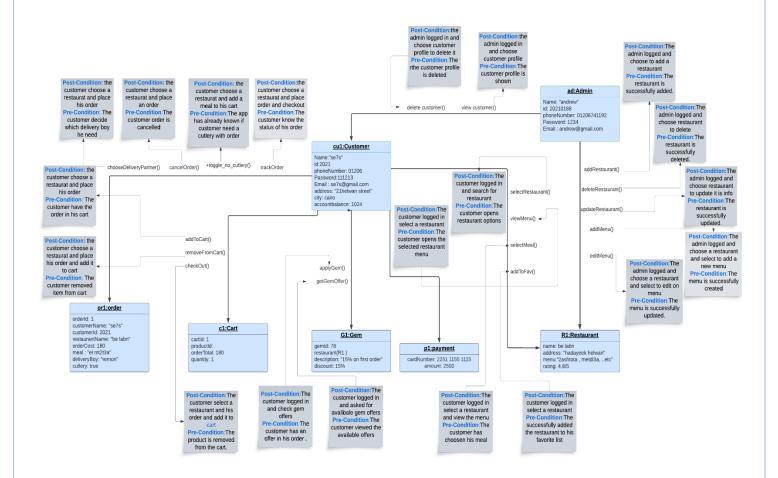
8 – Object diagram

1-



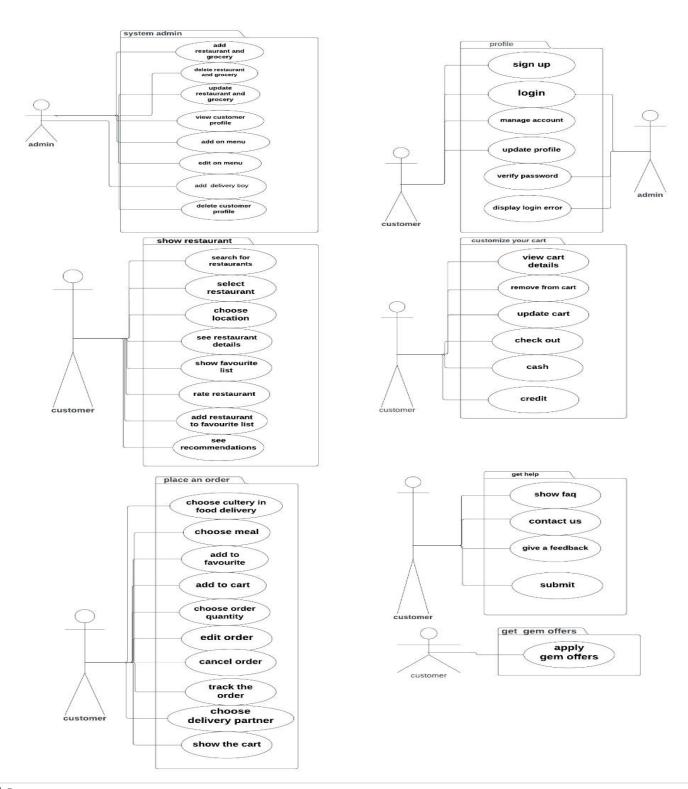


2-





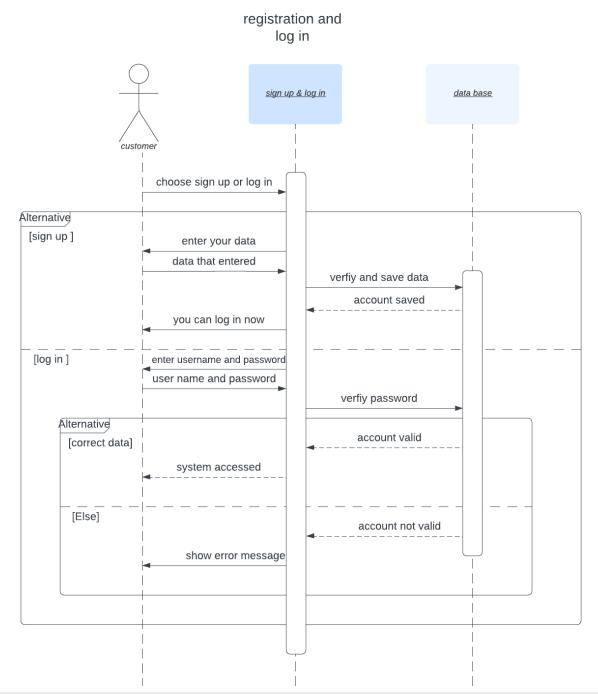
9 – Package diagram





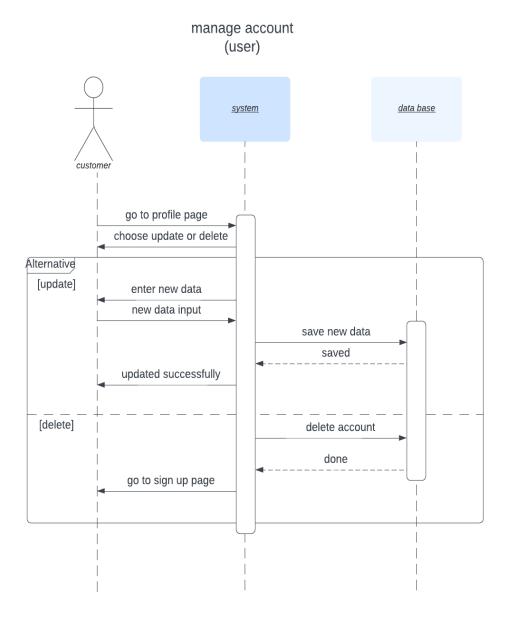
10 - Sequence Diagram:

1 - Registration:



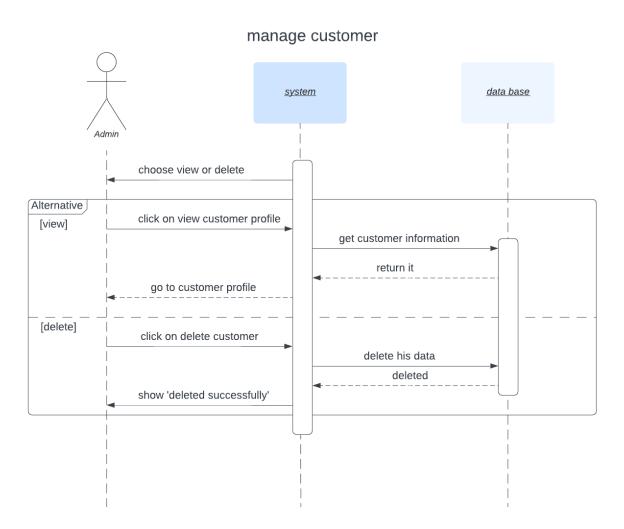


2-Manage account (user)



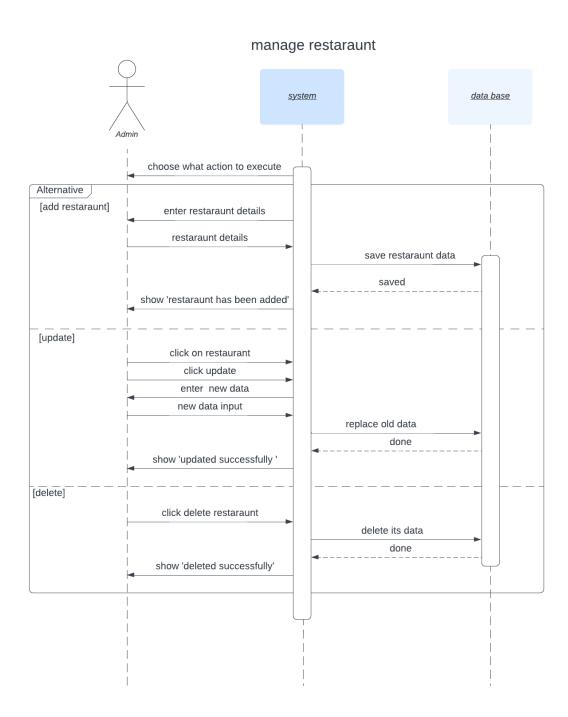


3-Manage customer (admin)



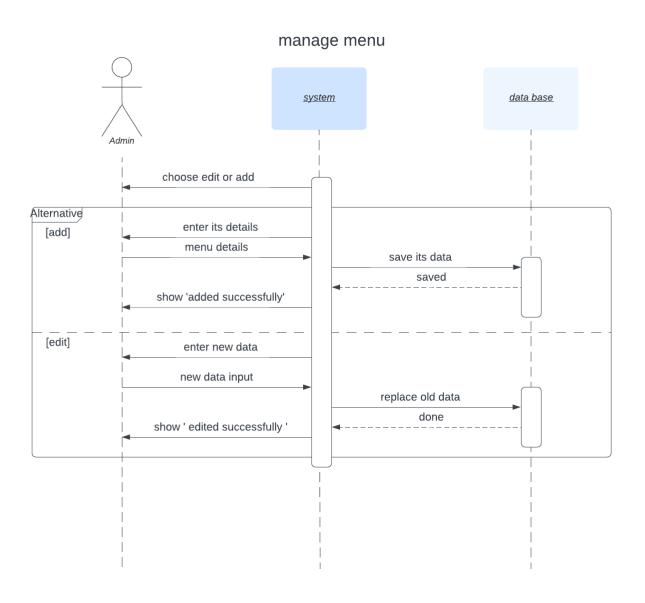


4-Manage Restaurant (admin)





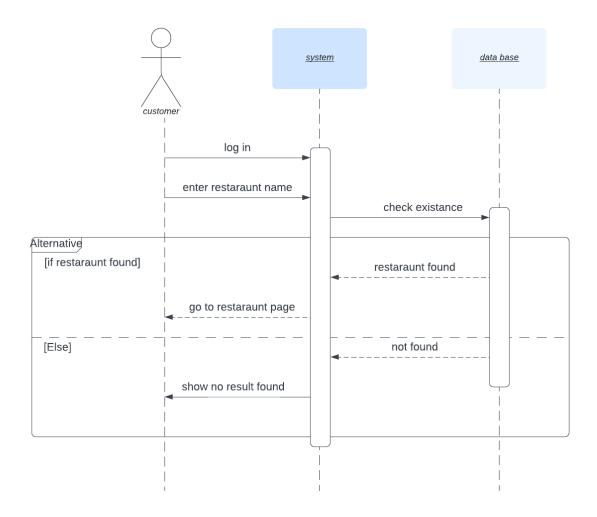
5 - Manage Menu (admin)





6- Search restaurant

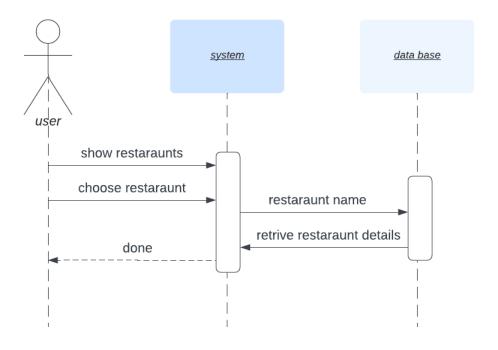
search restaraunt





7- Restaurant Details

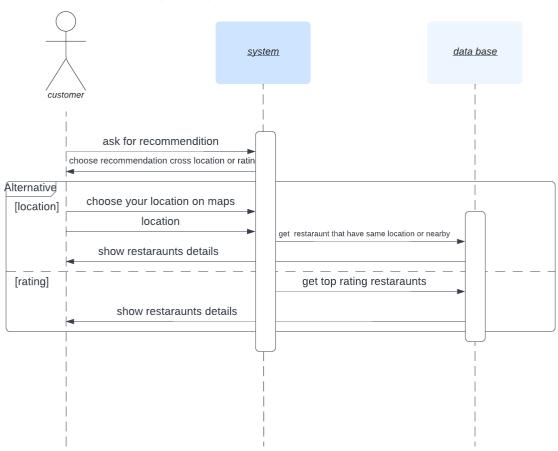
see restaraunt details





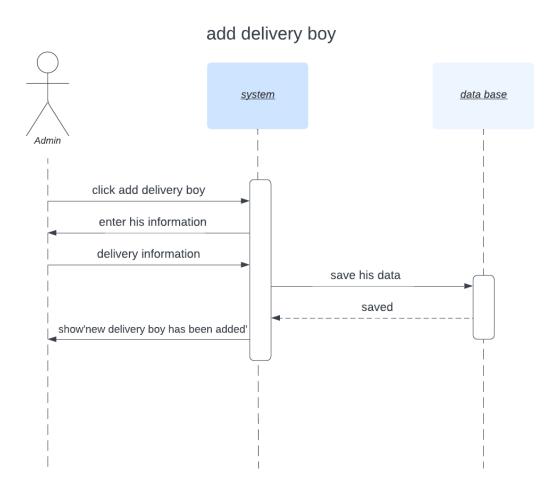
8 – see recommendations

see restaraunt recommendation





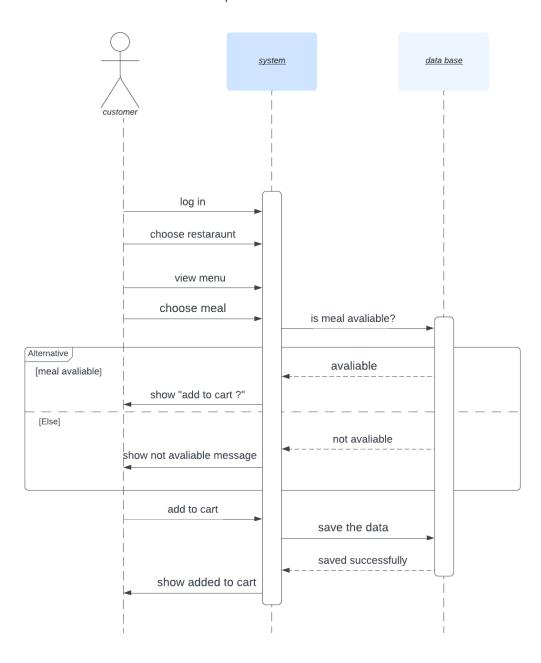
9 -Add delivery





10 - Place order

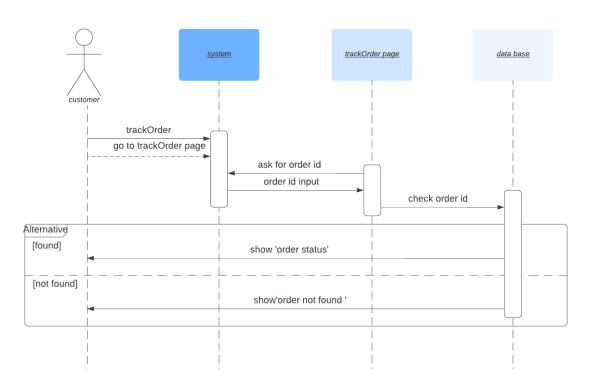
place an order





11 - Track Order

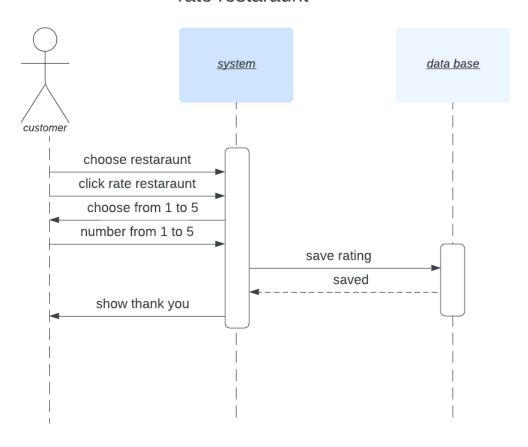
track order





12 - Rate Restaurant

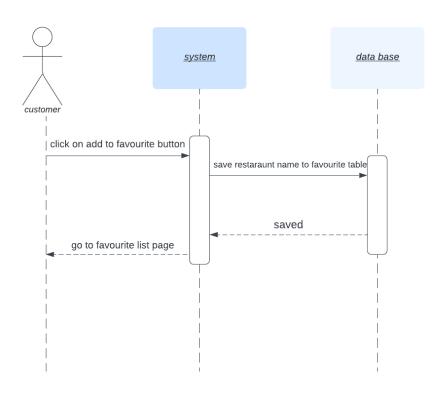
rate restaraunt





13 - Add to Favourite

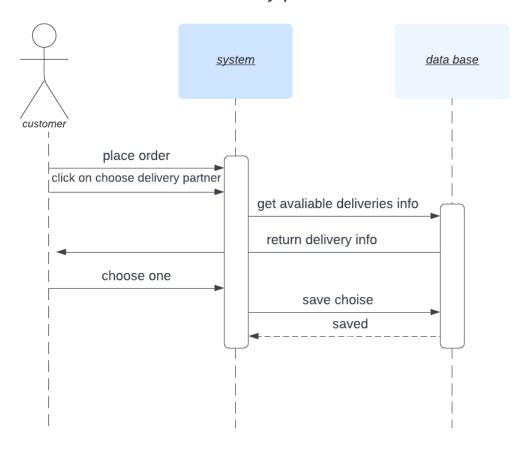
add to favourite





14 - Choose Delivery

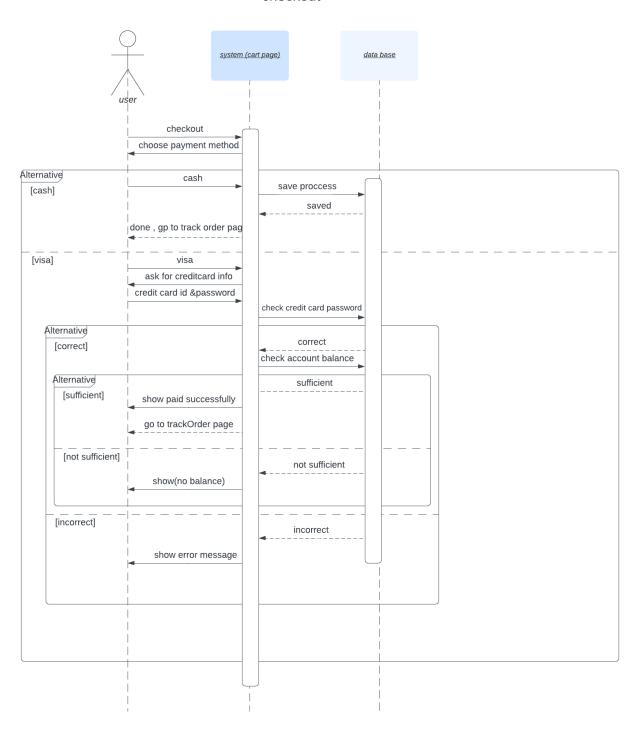
choose delivery partner





15 - Checkout

checkout





16 - Feedback

feedback

