SOFTWARE DESIGN DESCRIPTIONS

FOR

ONLINE ORDERING SYSTEM

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CHANGE HISTORY

This document is the first version of *ONLINE ORDERING SYSTEM*, Software Design Descriptions that was released on December, 2021. The subsequent changes will be mentioned in this part of the Software Design Descriptions.

PREFACE

The document contains the Software Design Descriptions of *ONLINE ORDERING SYSTEM*. The mission of the project is to develop a web-based ordering system for CEN421-System Analysis and Design Course given by Havva Esin Ünal.

The goal of the Software Design Descriptions is to define the technical and managerial processes necessary to develop software work products that the *ONLINE ORDERING SYSTEM* requirements. This system is prepared according to IEEE standard **[1]**. The Software Design Descriptions is in content compliance with the IEEE standard 1058-1998 in which the contents of this standard are rearranged and a mapping is provided. That is, the content compliant Software Design Descriptions is mapped into various clauses and subclauses of the IEEE standard 1058-1998.

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1. INTRODUCTION

1.1 Purpose and Scope of the SDD

This document provides a representation and model of the software within the limitations indicated in the SRS document of the software.

SDD document has an important role in the development and maintenance of the system. Therefore, all the design information needed by project managers, quality assurance staff, configuration managers, software designers, programmers, tester, and maintainers are contained in the SDD document of the system.

The scope of the SDD document is to design all the design information needed. This document contains a structural overview of all modules, interfaces, and data. It also contains a detailed design of each module. The objective of this document is to provide sufficient design information to allow for successful implementation and testing of the project.

1.2 Definitions and Acronyms

Administrators: Developers of the project. (Members of DIGII)

Customers: The people who order.

Deliverers: Meal deliverers like waiters or motorcycle courier.

DFD: Data Flow Diagram.

DIGII: Software development and project team of ONLINE ORDERING SYSTEM.

Dream Squad: Subcontractor of DIGII.

IEEE: Institute of Electrics & Electronics Engineering.

Online Ordering System: A web-based project developed by DIGII for CEN421-System Analysis and Design Course.

Restaurants: Places that receive the orders.

SDD: Software Design Description

SRS: Software Requirements Specification.

Supervisor: The instructor of the CEN421 - System Analysis and Design lecture (named Havva Esin Ünal)

2. REFERENCES

[1] IEEE Std 1058-1998, IEEE Standard for Software Management Plans.

[2] IEEE Std 830-1998. IEEE Recommended Practice for Software Requirements Specifications

[3] IEEE Std 1016-1998, IEEE Recommended Practice for Software Design Descriptions

[4] IEEE Std 1063-1998, IEEE Standard for Software User Documentation

[5] Software Requirements Specification for Online Ordering System, 15th November, 2021

3. DECOMPOSITION DESCRIPTION

The modules of the Online Ordering System are listed in Appendix A.

3.1 Module Decomposition

1) *Module 1: Customer Module*

Identification:	Module 1 Customer Module
Type:	Packet
Purpose:	To represent the collection of interfaces for customers of the Online Ordering System.
Function:	This module will enable customers to make the necessary entries to the Online Order System site so that they can perform basic operations such as logging in to the site, adding and removing food, ordering food, and sending the entered entries to the system, as well as updating and deleting by the admins.
Subordinates:	Module 1.1 Customer_Site_User_Authentication Module 1.2 Customer_Site_User_Update Module 1.3 Customer_Site_User_Deletion Module 1.4 Customer_Site_User_Meal_Order Module 1.5 Customer_Site_User_Search Module 1.6 Customer_Site_User_Feedback Module 1.7 Customer_Site_User_Help_Request

2) ***Module 2: Restaurant (Manager) Module***

Identification:	Module 2 Restaurant (Manager) Module
Type:	Packet
Purpose:	To represent the collection of interfaces for restaurants of the Online Ordering System.
Function:	This module will enable restaurants to make the necessary entries to the Online Order System site so that they can perform basic operations such as logging in to the site, adding and removing food, managing the menu of the restaurant, and sending the entered entries to the system, as well as updating and deleting by the admins.
Subordinates:	Module 2.1 Restaurant_Site_Restaurant_Addition Module 2.2 Restaurant_Site_Restaurant_Deletion Module 2.3 Restaurant_Site_Restaurant_Menu_Manage Module 2.4 Restaurant_Site_User_Search Module 2.5 Restaurant_Site_User_Meal_Order Module 2.6 Restaurant_Site_User_Feedback Module 2.7 Restaurant_Site_User_Help_Request

3) ***Module 3: Deliverer Module***

Identification:	Module 3 Deliverer Module
Type:	Packet
Purpose:	To represent the collection of interfaces for admins of the Online Ordering System.
Function:	This module will enable the entries sent by the deliverer to view the orders and to complete the basic operations related to showing the in the Online Ordering System.
Subordinates:	Module 3.1 Deliverer_Site_User_Meal_Order Module 3.2 Deliverer_Site_User_Feedback

3.2 Concurrent Process Decomposition

This topic is not applicable for Online Ordering System SDD.

3.3 Data Decomposition

1) *Data Entity 1: Customer_Information_File*

Identification:	Data Entity 1 Customer_Information_File
Type:	Data store
Purpose:	To store the information regarding customers.
Function:	full_name: created_at: phone: email: address: user_type: password:
Subordinates:	None.

2) *Data Entity 2: Deliverer_Information_File*

Identification:	Data Entity 2 Deliverer_Information_File
Type:	Data store.
Purpose:	To store the information regarding the deliverer.
Function:	The structure of the entity for each individual entry shall be as follows: deliverer_name: deliverer_password: price: weight: created_at: delivered_at: order_id:
Subordinates:	None.

3) *Data Entity 3: Restaurant_Information_File*

Identification:	Data Entity 3 Restaurant_Information_File
Type:	Data store.
Purpose:	To store the information regarding restaurants.
Function:	The structure of the entity for each individual entry shall be as follows: manager_name: created_at: phone: description: address: • For the menu section the structure of the entity for each individual entry shall be as follows: restaurant_id: name: price: weight: • For the order section the structure of the entity for each individual entry shall be as follows: user_id: created_at: delivered_at: • For the order items section the structure of the entity for each individual entry shall be as follows: order_id:
Subordinates:	None.

4. DEPENDENCY DESCRIPTION

4.1 Inter-module Dependencies

1) *Module 1.1: Customer_Site_User_Authentication*

Identification:	Module 1.1 Customer_Site_User_Authentication
Type:	Class
Purpose:	To provide an interface, where the customers shall enter the necessary inputs in order to login to the Online Ordering System, and to send the inputs entered to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 17 Appendix D
Resources:	

2) *Module 1.2: Customer_Site_User_Update*

Identification:	Module 1.2 Customer_Site_User_Update
Type:	Class
Purpose:	To provide an interface where existing customers can enter the necessary entries to update their information and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 18 Appendix D
Resources:	

3) *Module 1.3: Customer_Site_User_Deletion*

Identification:	Module 1.3 Customer_Site_User_Deletion
Type:	Class
Purpose:	To provide an interface where existing customers can enter the necessary entries to delete their information or delete their meals or what they ordered and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 19 Appendix D
Resources:	

4) ***Module 1.4: Customer_Site_User_Meal_Order***

Identification:	Module 1.4 Customer_Site_User_Meal_Order
Type:	Class
Purpose:	To provide an interface where existing customers can enter the necessary entries ordering what they want to order and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 24 Appendix D
Resources:	

5) ***Module 1.5: Customer_Site_User_Search***

Identification:	Module 1.5 Customer_Site_User_Search
Type:	Class
Purpose:	To provide an interface where existing customers can enter the necessary entries to search for the restaurant customers want to order meals or they can prefer the restaurants and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 22 Appendix D
Resources:	

6) ***Module 1.6: Customer_Site_User_Feedback***

Identification:	Module 1.6 Customer_Site_User_Feedback
Type:	Class
Purpose:	To provide an interface where an existing customers can enter the necessary entries they can give feedback to the restaurants and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 25 Appendix D
Resources:	

7) ***Module 1.7: Customer_Site_User_Help_Request***

Identification:	Module 1.7 Customer_Site_User_Help_Request
Type:	Class
Purpose:	To provide an interface where existing customers can enter the necessary entries they can send a help request to the restaurants and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 26 Appendix D
Resources:	

8) ***Module 2.1: Restaurant_Site_Restaurant_Addition***

Identification:	Module 2.1 Restaurant_Site_Restaurant_Addition
Type:	Class
Purpose:	To provide an interface where existing restaurants can enter the necessary entries to add their meals information or add their meals or what they ordered and sent the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 20 Appendix D
Resources:	

9) ***Module 2.2: Restaurant_Site_Restaurant_Deletion***

Identification:	Module 2.2 Restaurant_Site_Restaurant_Deletion
Type:	Class
Purpose:	To provide an interface where existing restaurants can enter the necessary entries to delete their meals information or delete their meals or what they ordered and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 21 Appendix D
Resources:	

10) ***Module 2.3: Restaurant_Site_Restaurant_Menu_Manage***

Identification:	Module 2.3 Restaurant_Site_Restaurant_Menu_Manage
Type:	Class
Purpose:	To provide an interface where existing restaurants can enter the necessary entries to add or remove their food information and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 23 Appendix D
Resources:	

11) ***Module 2.4: Restaurant_Site_User_Search***

Identification:	Module 2.4 Restaurant_Site_User_Search
Type:	Subroutine
Purpose:	To provide an interface where users can enter the necessary entries to search for the food information or dishes of the existing restaurants or what they have ordered and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 22 Appendix D
Resources:	

12) ***Module 2.5: Restaurant_Site_User_Meal_Order***

Identification:	Module 2.5 Restaurant_Site_User_Meal_Order
Type:	Subroutine
Purpose:	To provide an interface where users can see the food information or dishes of the existing restaurants and enter the necessary entries to order and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 24 Appendix D
Resources:	

13) ***Module 2.6: Restaurant_Site_User_Feedback***

Identification:	Module 2.6 Restaurant_Site_User_Feedback
Type:	Subroutine
Purpose:	To provide an interface where existing restaurants can enter the necessary entries they can give feedback to the customers and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 25 Appendix D
Resources:	

14) ***Module 2.7: Restaurant_Site_User_Help_Request***

Identification:	Module 2.7 Restaurant_Site_User_Help_Request
Type:	Subroutine
Purpose:	To provide an interface where existing restaurants can enter the necessary entries they can send a help request to the customers and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 26 Appendix D
Resources:	

15) ***Module 3.1: Deliverer_Site_User_Meal_Order***

Identification:	Module 3.1 Deliverer_Site_User_Meal_Order
Type:	Subroutine
Purpose:	To provide an interface where users can enter the required selections and order from restaurants.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 24 Appendix D
Resources:	

16) *Module 3.2: Deliverer_Site_User_Feedback*

Identification:	Module 3.2 Deliverer_Site_User_Feedback
Type:	Subroutine
Purpose:	To provide an interface where existing deliverer can enter the necessary entries they can give feedback to the restaurant and send the entered entries to the system.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 25 Appendix D
Resources:	

4.2 Inter-process Dependencies

This topic is not applicable for Online Ordering System SDD.

4.3 Data Dependencies

1) *Data Entity 1: Customer_Information_File*

Identification:	Data Entity 1 Customer_Information_File
Type:	Data store
Purpose:	To store the information regarding customers.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 27 Appendix D

2) *Data Entity 2: Deliverer_Information_File*

Identification:	Data Entity 2 Deliverer_Information_File
Type:	Data store.
Purpose:	To store the information regarding the deliverer.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 28 Appendix D

3) *Data Entity 3: Restaurant_Information_File*

Identification:	Data Entity 3 Restaurant_Information_File
Type:	Data store.
Purpose:	To store the information regarding restaurants.
Dependencies:	The functional requirements of this module are represented by DFD diagrams in figure 29 Appendix D

5. INTERFACE DESCRIPTION

5.1 Module 1: Customer Module

1) *Module 1.1: Customer_Site_User_Authentication*

Identification:	Module 1.1 Customer_Site_User_Authentication
Function:	This module shows that user to enter the Full_Name, phone,email, address, password and user_type. It is used to make the login process; the customer can login from this page, and go to the related page customer view page according to the login user and password. If the visitor doesn't have any user name and password, then he/she would be registered to our system by following the new user or register link.
Interfaces:	Interfaces in the SRS **[5]**

2) *Module 1.2: Customer_Site_User_Update*

Identification:	Module 1.2 Customer_Site_User_Update
Function:	This module shows that user to enter the Full_Name, phone,email, address, password and user_type. It is used to make the update process; the customer can login the page, and go to the related page customer view page according to the login user and password. If the visitor wants to change their user name, password and the other functions, then he/she would be change.
Interfaces:	Interfaces in the SRS **[5]**

3) *Module 1.3: Customer_Site_User_Deletion*

Identification:	Module 1.3 Customer_Site_User_Deletion
Function:	This module shows that user to enter the Full_Name, phone,email, address, password and user_type. It is used to make the delete process; the customer can view the page about deletion, and go to the related customer view page according to the user information page. If the visitor wants to change their username, password and the other functions, then he/she would be changed.
Interfaces:	Interfaces in the SRS **[5]**

4) *Module 1.4: Customer_Site_User_Meal_Order*

Identification:	Module 1.4 Customer_Site_User_Meal_Order
Function:	This module shows that user, The product list of the chosen restaurants are listed in this page. The customer can put a tick into checkboxes for products that they wanted to buy.
Interfaces:	Interfaces in the SRS **[5]**

5) *Module 1.5: Customer_Site_User_Search*

Identification:	Module 1.5 Customer_Site_User_Search
Function:	This module shows that user, The restaurants on the system are listed in this page. Therefore, customers can pick the restaurant that they wanted to eat from.
Interfaces:	Interfaces in the SRS **[5]**

6) *Module 1.6: Customer_Site_User_Feedback*

Identification:	Module 1.6 Customer_Site_User_Feedback
Function:	This module shows that user can give feedback about the meals or production to the restaurants or deliverers. This module is the ability to do feedback.
Interfaces:	Interfaces in the SRS **[5]**

7) *Module 1.7: Customer_Site_User_Help_Request*

Identification:	Module 1.7 Customer_Site_User_Help_Request
Function:	This module shows that user can ability to ask their questions or problems about the delivery etc.this module is about the help request function.
Interfaces:	Interfaces in the SRS **[5]**

5.2 Module 2: Restaurant (Manager) Module

1) *Module 2.1: Restaurant_Site_Restaurant_Addition*

Identification:	Module 2.1 Restaurant_Site_Restaurant_Addition
Function:	This module shows that restaurants adding and editing the product_name, price and ingredients. It's designed for the restaurants can doing addition meals or products.
Interfaces:	Interfaces in the SRS **[5]**

2) *Module 2.2: Restaurant_Site_Restaurant_Deletion*

Identification:	Module 2.2 Restaurant_Site_Restaurant_Deletion
Function:	This module shows that restaurants deleting and editing the product_name, price and ingredients. It's designed for the restaurants can doing deleting meals or products.
Interfaces:	Interfaces in the SRS **[5]**

3) *Module 2.3: Restaurant_Site_Restaurant_Menu_Manage*

Identification:	Module 2.3 Restaurant_Site_Restaurant_Menu_Manage
Function:	This module shows that restaurants can manage the menu. It's designed for the restaurants to access and view their menus and the list of products. Also, they can edit the menu.
Interfaces:	Interfaces in the SRS **[5]**

4) *Module 2.4: Restaurant_Site_User_Search*

Identification:	Module 2.4 Restaurant_Site_User_Search
Function:	This module shows that restaurants can be seen by the user if the user search , The restaurants on the system are listed in this page. Therefore, customers can pick the restaurant that they wanted to eat from.
Interfaces:	Interfaces in the SRS **[5]**

5) *Module 2.5: Restaurant_Site_User_Meal_Order*

Identification:	Module 2.5 Restaurant_Site_User_Meal_Order
Function:	This module shows that restaurants can access the user's orders.
Interfaces:	Interfaces in the SRS **[5]**

6) *Module 2.6: Restaurant_Site_User_Feedback*

Identification:	Module 2.6 Restaurant_Site_User_Feedback
Function:	This module shows that restaurants can see the customer's thoughts and ideas about the meal or product so the restaurant owner can use the function of show method.
Interfaces:	Interfaces in the SRS **[5]**

7) *Module 2.7: Restaurant_Site_User_Help_Request*

Identification:	Module 2.7 Restaurant_Site_User_Help_Request
Function:	This module shows that restaurants can see the customer's problems and questions. That will be seen on the restaurant site.
Interfaces:	Interfaces in the SRS **[5]**

5.3 Module 3: Deliverer Module

1) *Module 3.1: Deliverer_Site_User_Meal_Order*

Identification:	Module 3.1 Deliverer_Site_User_Meal_Order
Function:	This module shows that the deliverer only can view the orders and give feedback about delivering status.
Interfaces:	Interfaces in the SRS **[5]**

2) ***Module 3.2: Deliverer_Site_User_Feedback***

Identification:	Module 3.2 Deliverer_Site_User_Feedback
Function:	This module shows that deliverer only that the customer sends their thoughts and ideas about the meal or product so the deliverer can see it on the page.
Interfaces:	Interfaces in the SRS **[5]**

6. DETAILED DESIGN DESCRIPTION

The design descriptions of the Online Ordering System are represented by flowcharts in Appendix C.

6.1 Module Detailed Design

- **Identification:** Module 1.1 Customer_Site_User_Authentication
- **Processing:** The internal details of this module is given in Figure 1 in Appendix C.

- **Identification:** Module 1.2 Customer_Site_User_Update
- **Processing:** The internal details of this module is given in Figure 2 in Appendix C.

- **Identification:** Module 1.3 Customer_Site_User_Deletion
- **Processing:** The internal details of this module is given in Figure 3 in Appendix C.

- **Identification:** Module 1.4 Customer_Site_User_Meal_Order
- **Processing:** The internal details of this module is given in Figure 4 in Appendix C.

- **Identification:** Module 1.5 Customer_Site_User_Search
- **Processing:** The internal details of this module is given in Figure 5 in Appendix C.

- **Identification:** Module 1.6 Customer_Site_User_Feedback
- **Processing:** The internal details of this module is given in Figure 6 in Appendix C.

- **Identification:** Module 1.7 Customer_Site_User_Help_Request
- **Processing:** The internal details of this module is given in Figure 7 in Appendix C.

- **Identification:** Module 2.1 Restaurant_Site_Restaurant_Addition
- **Processing:** The internal details of this module is given in Figure 8 in Appendix C.

- **Identification:** Module 2.2 Restaurant_Site_Restaurant_Deletion
- **Processing:** The internal details of this module is given in Figure 9 in Appendix C.

- **Identification:** Module 2.3 Restaurant_Site_Restaurant_Menu_Manage
- **Processing:** The internal details of this module is given in Figure 10 in Appendix C.

- **Identification:** Module 2.4 Restaurant_Site_User_Search
- **Processing:** The internal details of this module is given in Figure 11 in Appendix C.

- **Identification:** Module 2.5 Restaurant_Site_User_Meal_Order
- **Processing:** The internal details of this module is given in Figure 12 in Appendix C.

- **Identification:** Module 2.6 Restaurant_Site_User_Feedback
- **Processing:** The internal details of this module is given in Figure 13 in Appendix C.

- **Identification:** Module 2.7 Restaurant_Site_User_Help_Request
- **Processing:** The internal details of this module is given in Figure 14 in Appendix C.

- **Identification:** Module 3.1 Deliverer_Site_User_Meal_Order
- **Processing:** The internal details of this module is given in Figure 15 in Appendix C.

- **Identification:** Module 3.2 Deliverer_Site_User_Feedback
- **Processing:** The internal details of this module is given in Figure 16 in Appendix C.

6.2 Data Detailed Design

- **Identification:** Data Entity 1: Customer_Information_File
- **Data:** The data must be represented by the following way;
  full_name: , created_at: , phone:, email:, address:, user_type:, password:
- The detailed description of data elements used in this data entity is given in Appendix B

- **Identification:** Data Entity 2: Deliverer_Information_File
- **Data:** The data must be represented by the following way;
  deliverer_name:, deliverer_password:, price: , weight:, created_at:, delivered_at:, order_id:
- The detailed description of data elements used in this data entity is given in Appendix B

- **Identification:** Data Entity 3: Restaurant_Information_File
- **Data:** The data must be represented by the following way;
  manager_name: created_at: phone: description: address: restaurant_id: name: price: weight: user_id: created_at: delivered_at: order_id:
- The detailed description of data elements used in this data entity is given in Appendix B

APPENDIX A

Module List:

Module 1: Customer Module

Module 1.1 Customer_Site_User_Authentication

Module 1.2 Customer_Site_User_Update

Module 1.3 Customer_Site_User_Deletion

Module 1.4 Customer_Site_User_Meal_Order

Module 1.5 Customer_Site_User_Search

Module 1.6 Customer_Site_User_Feedback

Module 1.7 Customer_Site_User_Help_Request

Module 2: Restaurant (Manager) Module

Module 2.1 Restaurant_Site_Restaurant_Addition

Module 2.2 Restaurant_Site_Restaurant_Deletion

Module 2.3 Restaurant_Site_Restaurant_Menu_Manage

Module 2.4 Restaurant_Site_User_Search

Module 2.5 Restaurant_Site_User_Meal_Order

Module 2.6 Restaurant_Site_User_Feedback

Module 2.7 Restaurant_Site_User_Help_Request

Module 3: Deliverer Module

Module 3.1 Deliverer_Site_User_Meal_Order

Module 3.2 Deliverer_Site_User_Feedback

APPENDIX B

Description of Common Data Elements

Name	Format	Allowed Range	Allowed Range
full_name:	String	Alphanumeric characters	Username of the user
created_at:	String	Alphanumeric characters	Place that the creation happens when the order is done.
phone:	Int	Alphanumeric characters	Phone number of the user
email:	String	Alphanumeric characters	Email of the user
address:	String	Alphanumeric characters	Address of the user's address
user_type:	String	Alphanumeric characters	User type for the user
password:	String	Alphanumeric characters	Password of the user
deliverer_name:	String	Alphanumeric characters	Name of the deliverer
deliverer_password:	String	Alphanumeric characters	Password of the deliverer
price:	Double	Alphanumeric characters	Customers access the price of the meal or product
weight:	Int	Alphanumeric characters	Weight of the meal or product
created_at:	String	Alphanumeric characters	Place that the creation happens when the order is done for the deliverer
delivered_at:	String	Alphanumeric characters	Place that the deliver happens when the order is done for the deliverer
order_id:	Int	Alphanumeric characters	Order id of the meals or products for the deliverer
manager_name:	String	Alphanumeric characters	Manager name of the restaurants
created_at:	String	Alphanumeric characters	Place that the creation happens when the order is done for the restaurants
phone:	Int	Alphanumeric characters	Phone number of the restaurants
description:	String	Alphanumeric characters	Description of the restaurants and meals or products
address:	String	Alphanumeric characters	Restaurants access the information about the address of the user's address.
restaurant_id:	Int	Alphanumeric characters	Restaurant id of the restaurants
name:	String	Alphanumeric characters	Restaurant view the name of the customer name
price:	Double	Alphanumeric characters	Price of the meals and products
weight:	Int	Alphanumeric characters	Weight of the meals and products
user_id:	String	Alphanumeric characters	Restaurant view the user id of the customer
created_at:	String	Alphanumeric characters	Restaurant view the creation choice of the customer
delivered_at:	String	Alphanumeric characters	Restaurant view the delivery of the customer
order_id:	Int	Alphanumeric characters	The id created by the restaurant for the order id

APPENDIX C

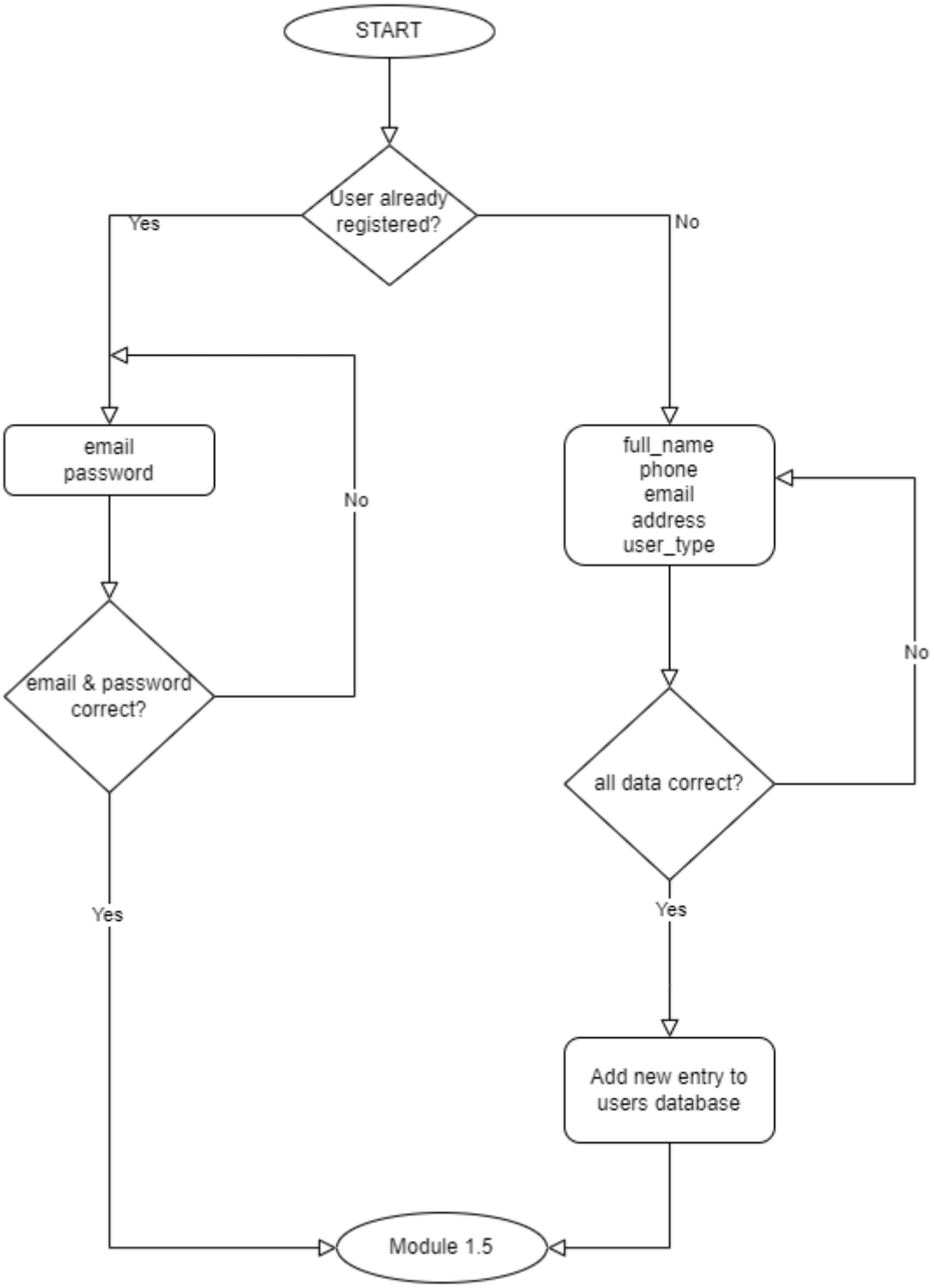

Figure 1: The Flowchart of Module 1.1 Customer_Site_User_Authentication

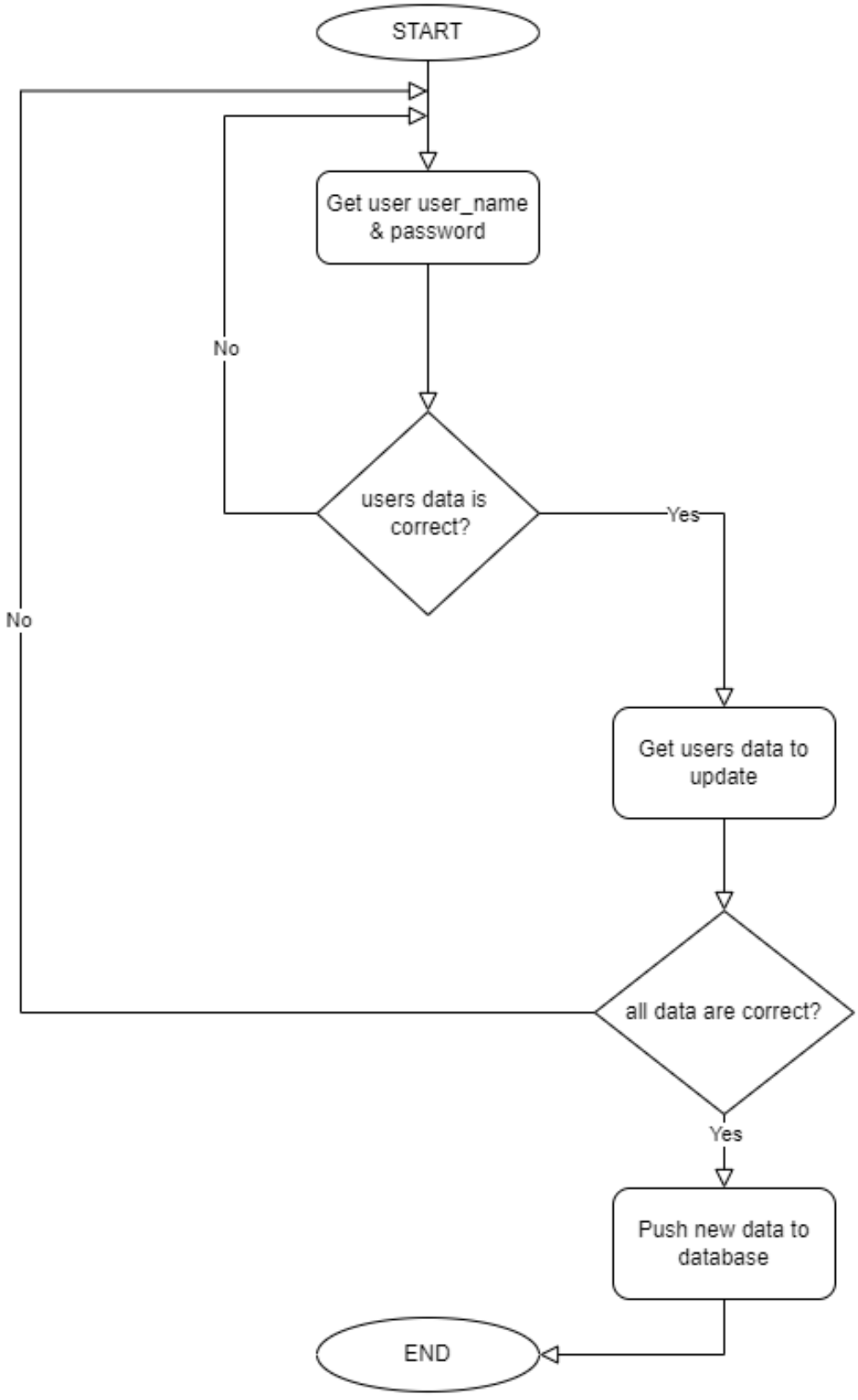

Figure 2: The Flowchart of Module 1.2 Customer_Site_User_Update

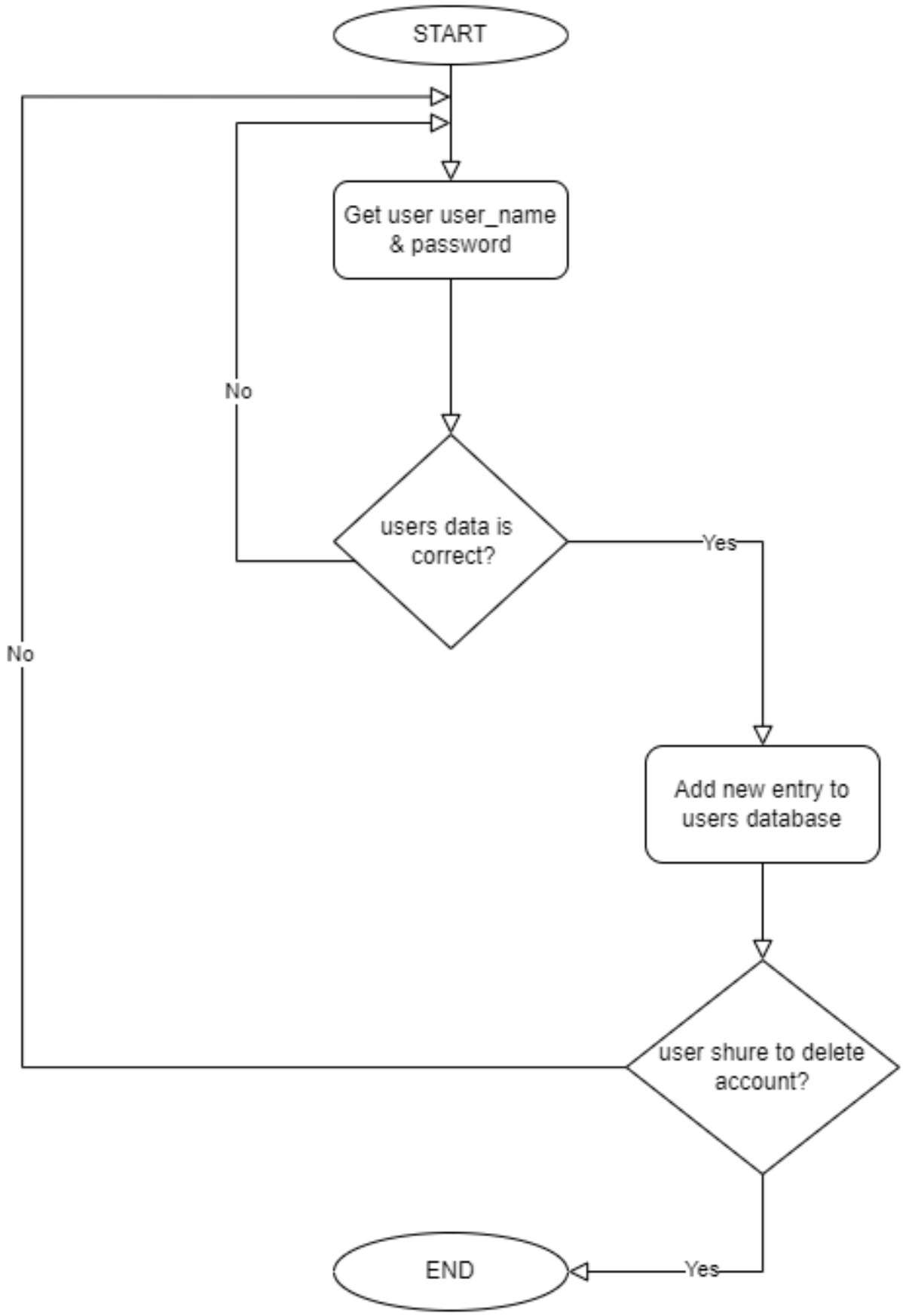

Figure 3: The Flowchart of Module 1.3 Customer_Site_User_Deletion

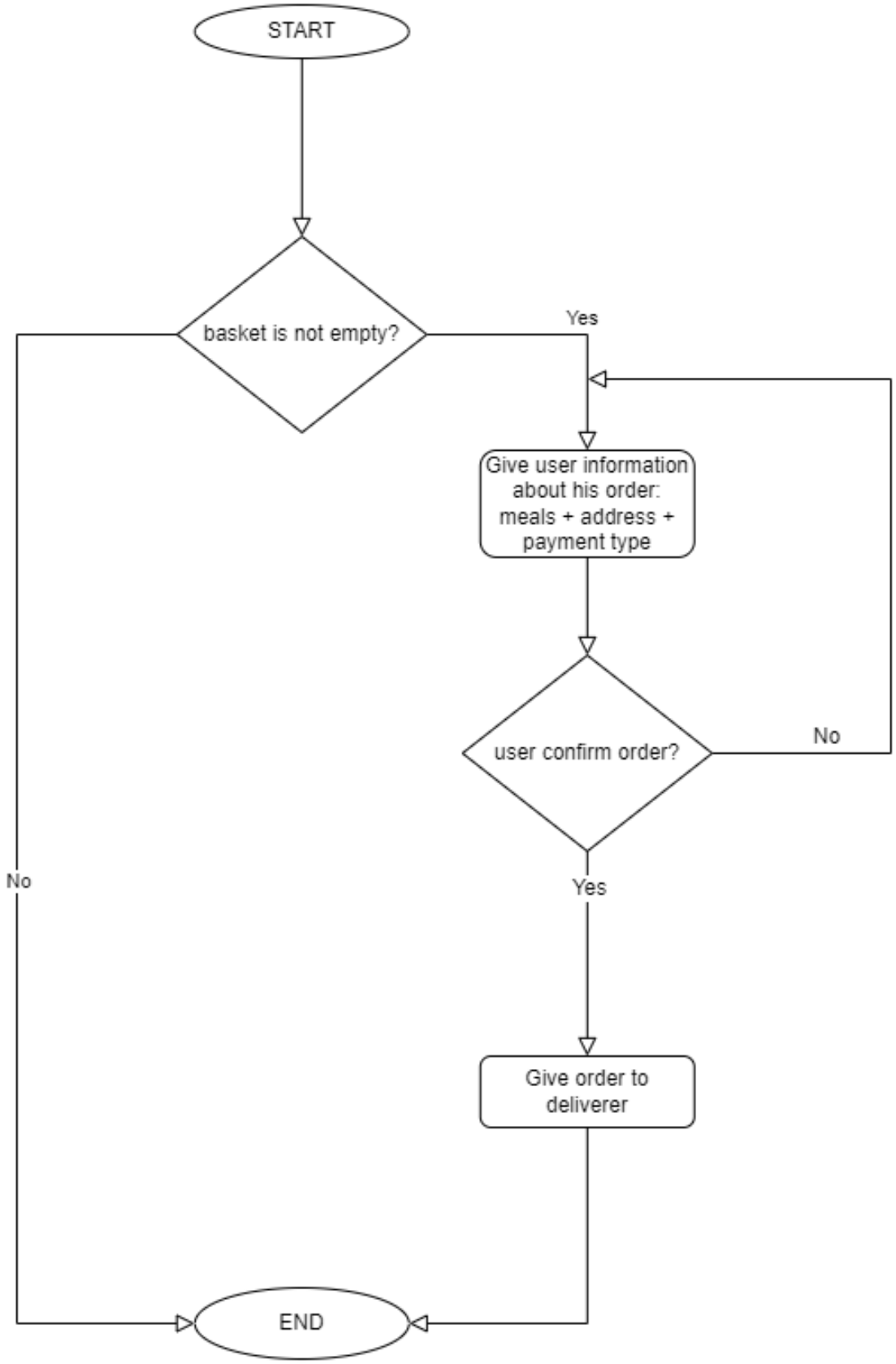

Figure 4: The Flowchart of Module 1.4 Customer_Site_User_Meal_Order

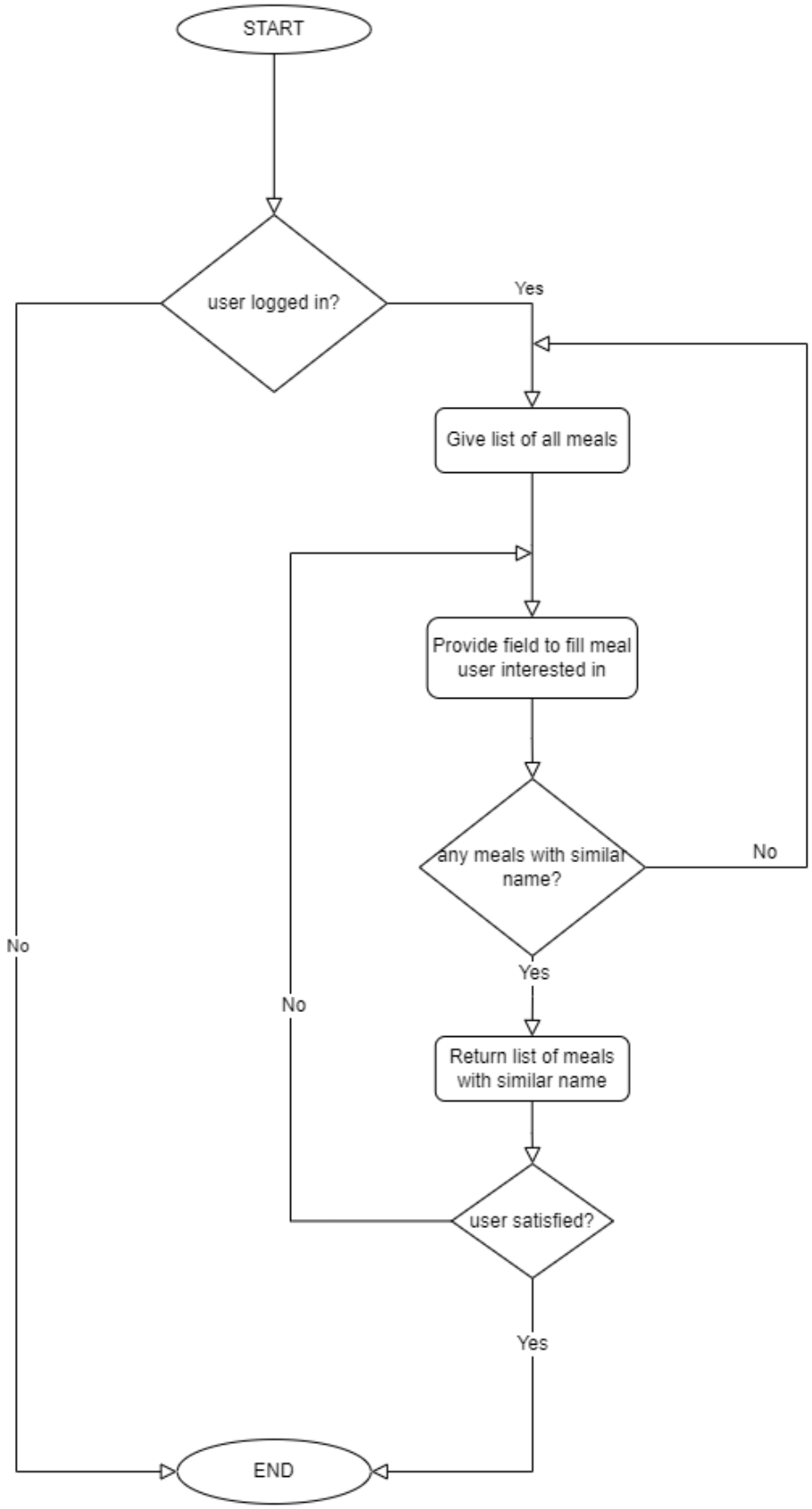

Figure 5: The Flowchart of Module 1.5 Customer_Site_User_Search

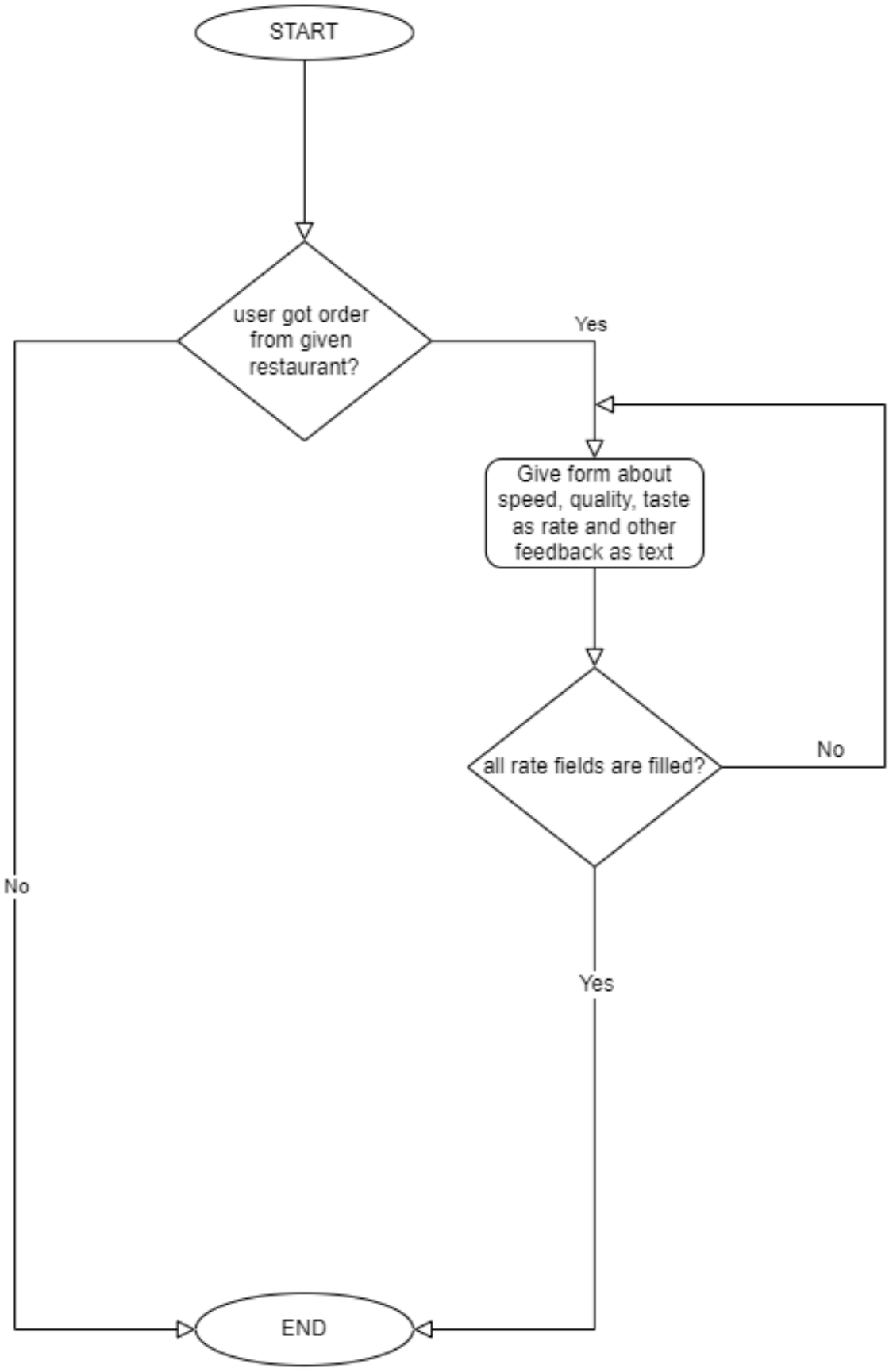

Figure 6: The Flowchart of Module 1.6 Customer_Site_User_Feedback

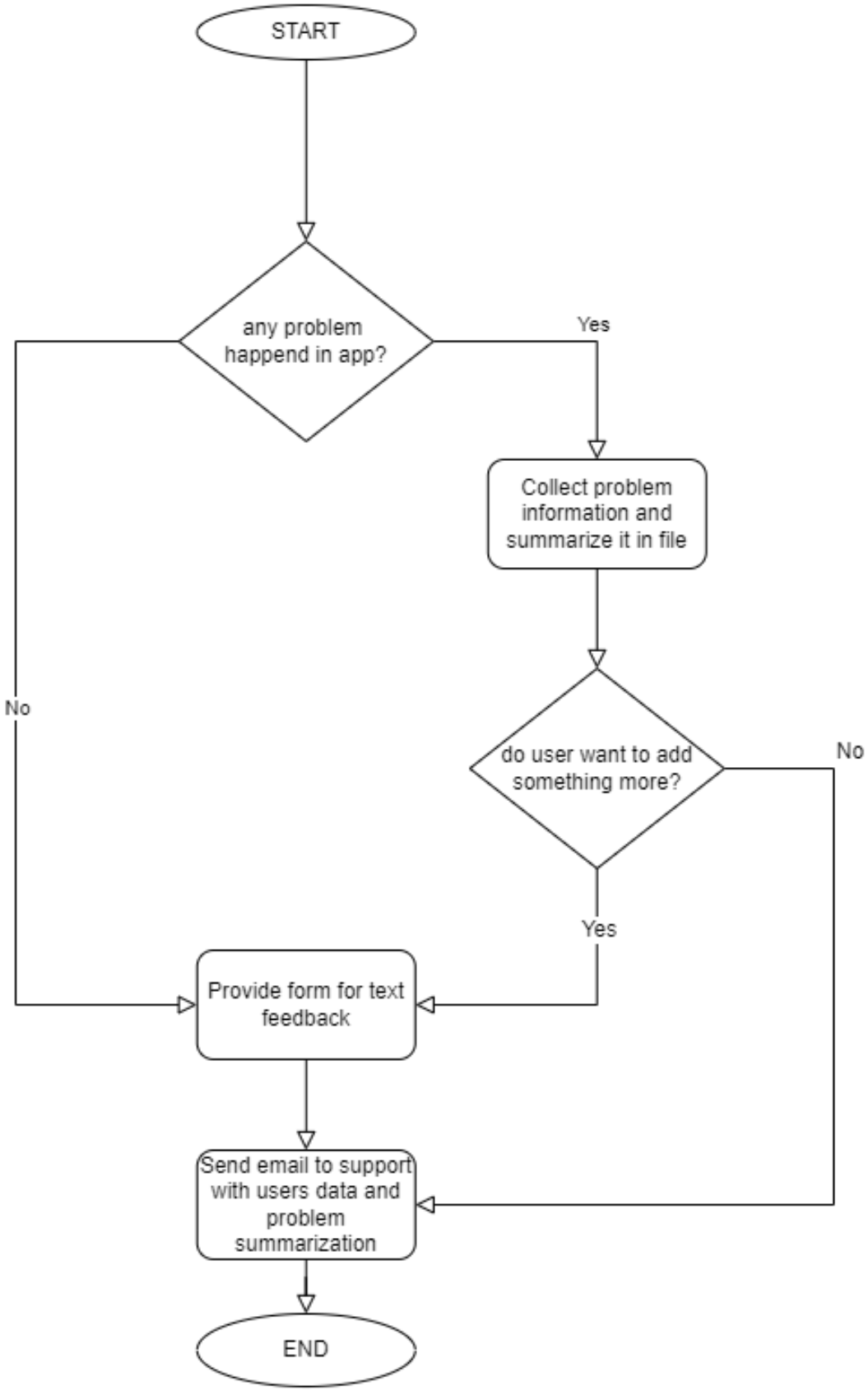

Figure 7: The Flowchart of Module 1.7 Customer_Site_User_Help_Request

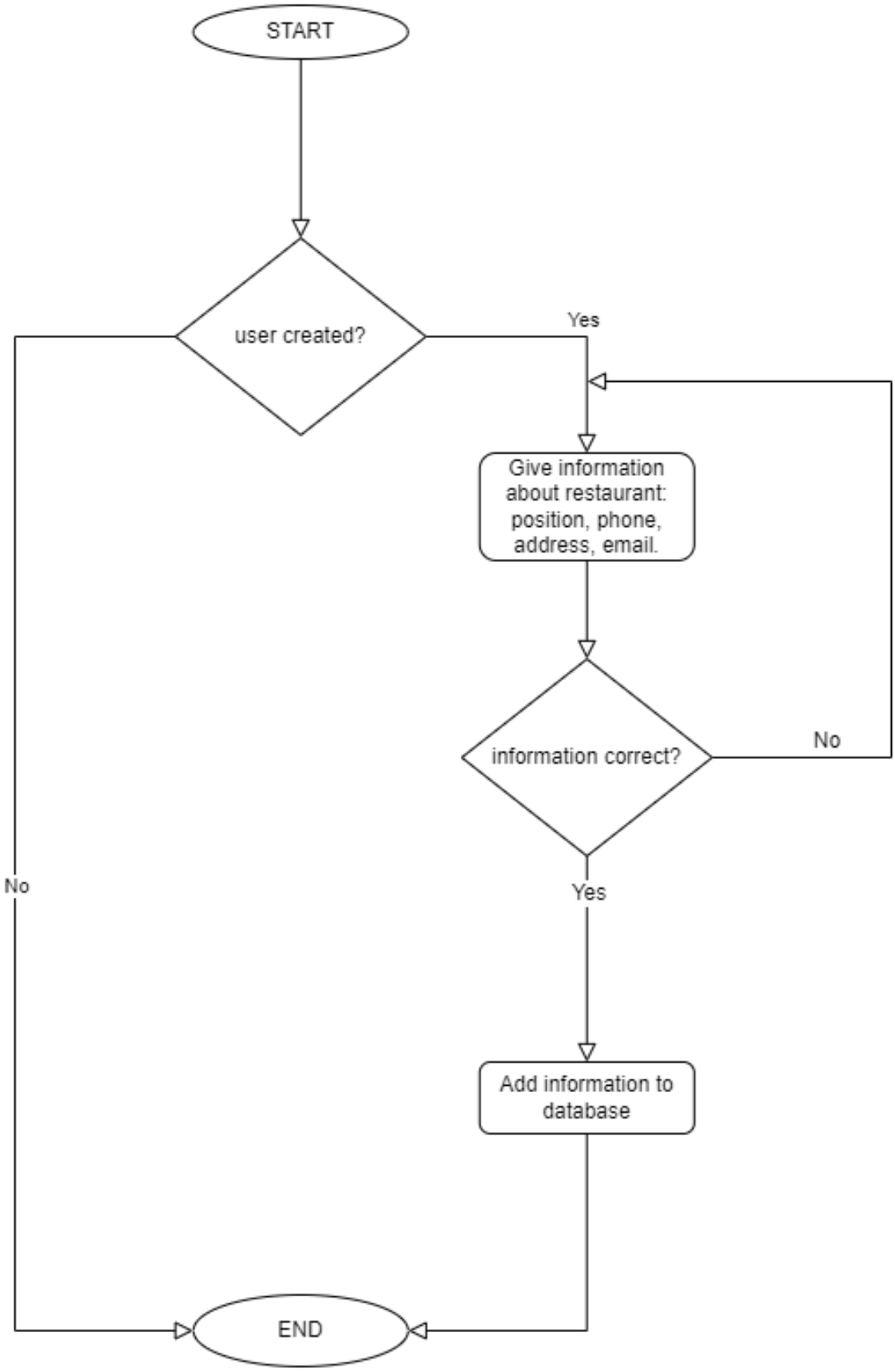

Figure 8: The Flowchart of Module 2.1 Restaurant_Site_Restaurant_Addition

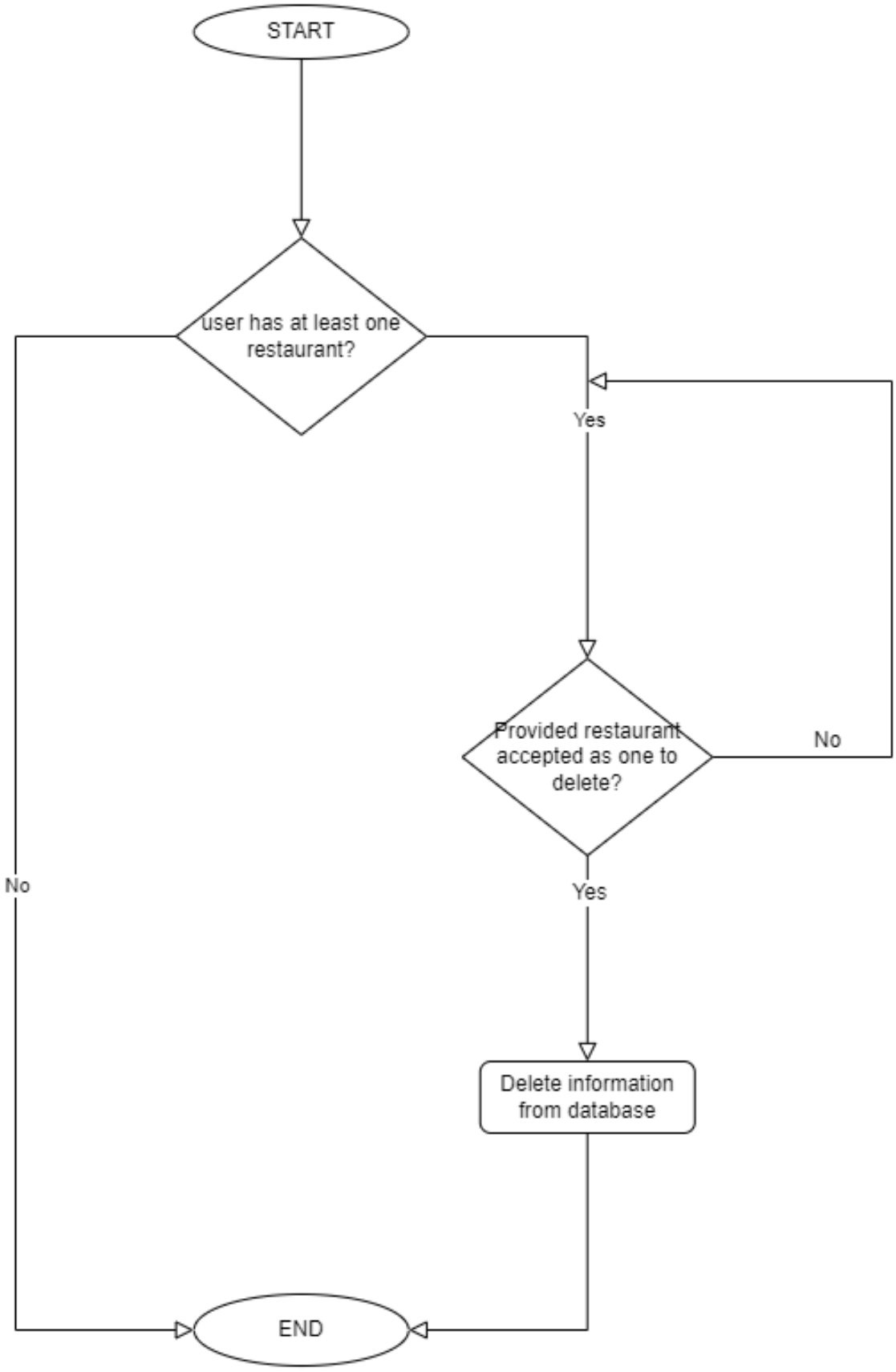

Figure 9: The Flowchart of Module 2.2 Restaurant_Site_Restaurant_Deletion

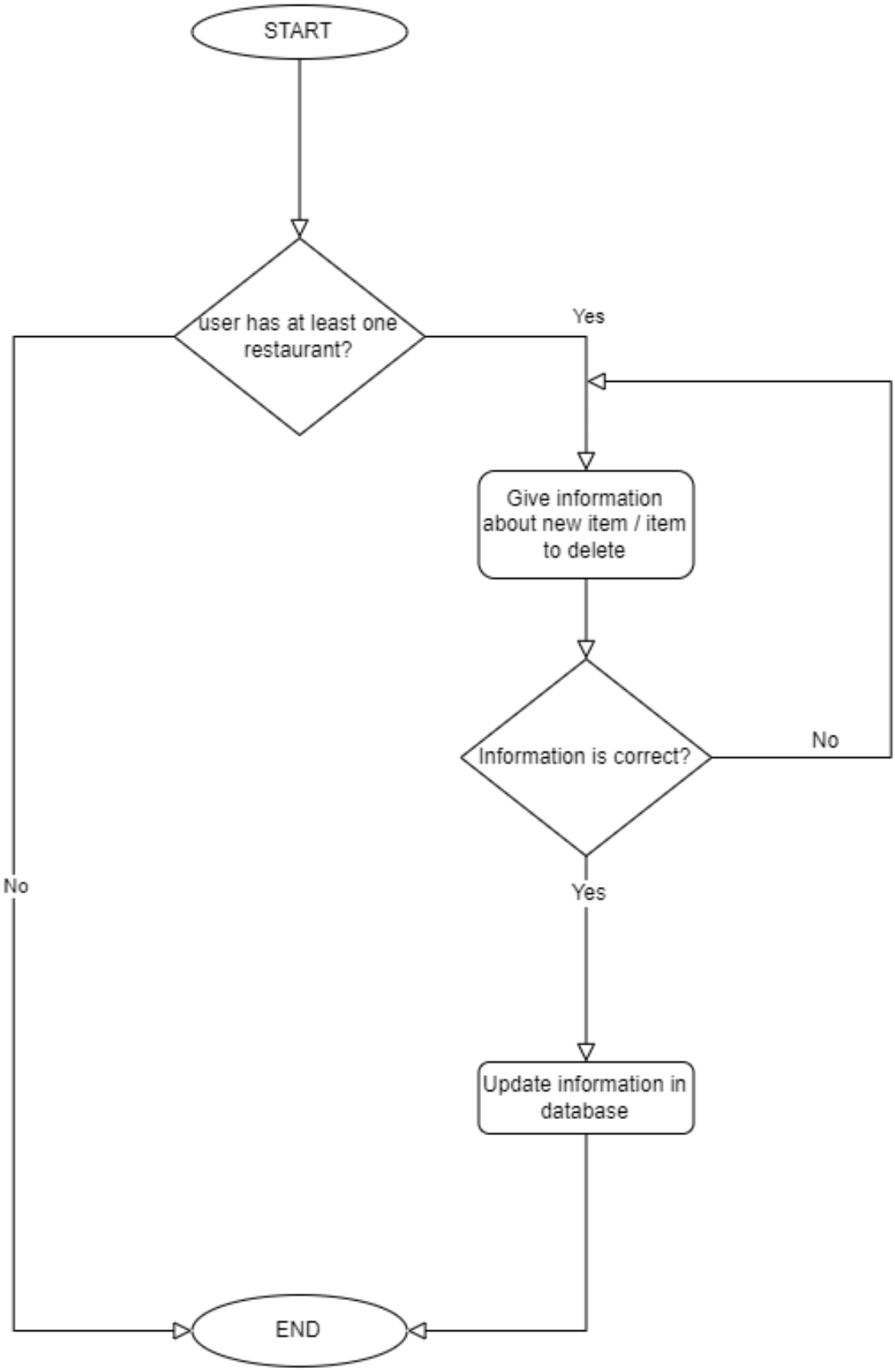

Figure 10: The Flowchart of Module 2.3 Restaurant_Site_Restaurant_Menu_Manage

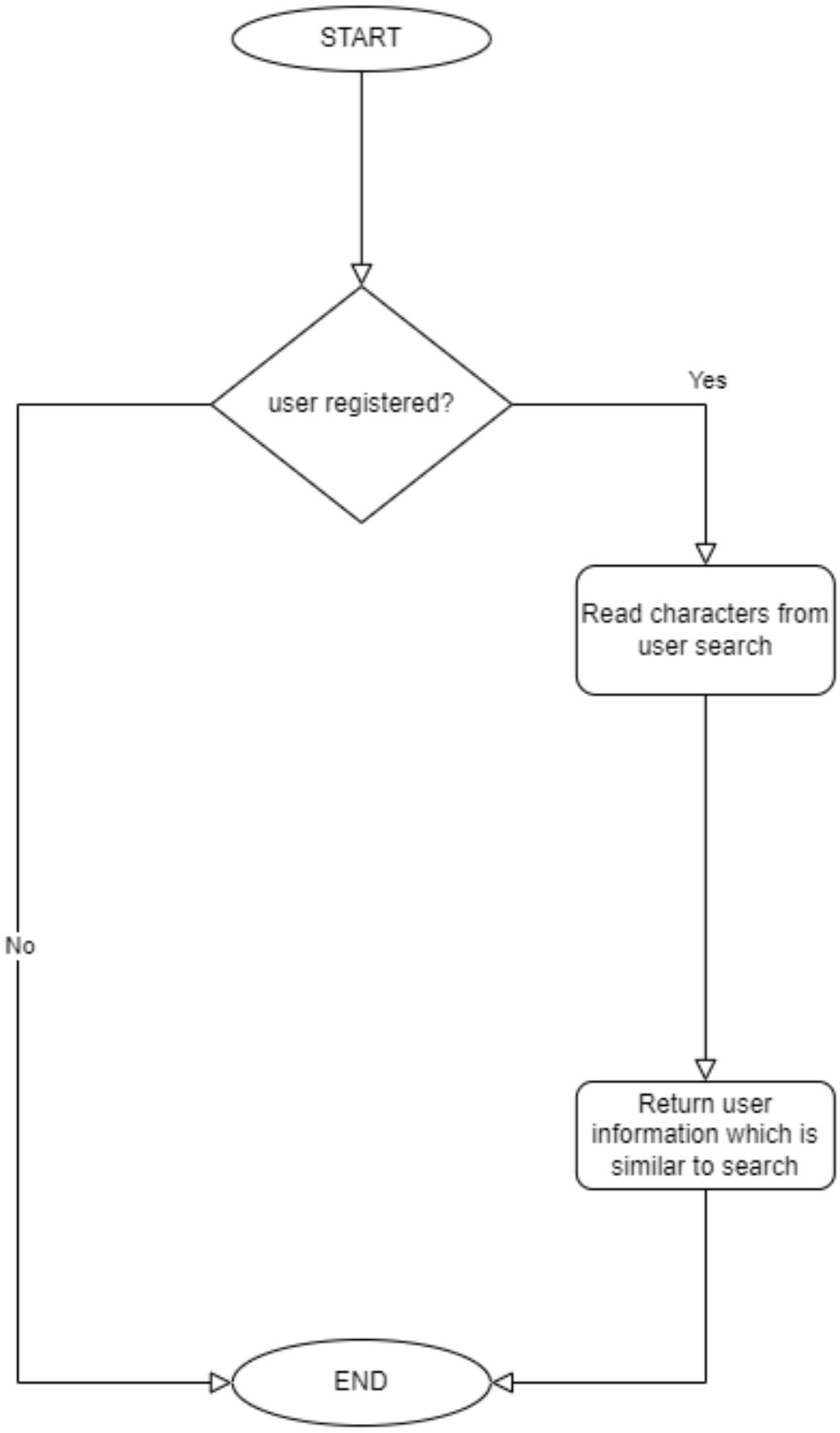

Figure 11: The Flowchart of Module 2.4 Restaurant_Site_User_Search

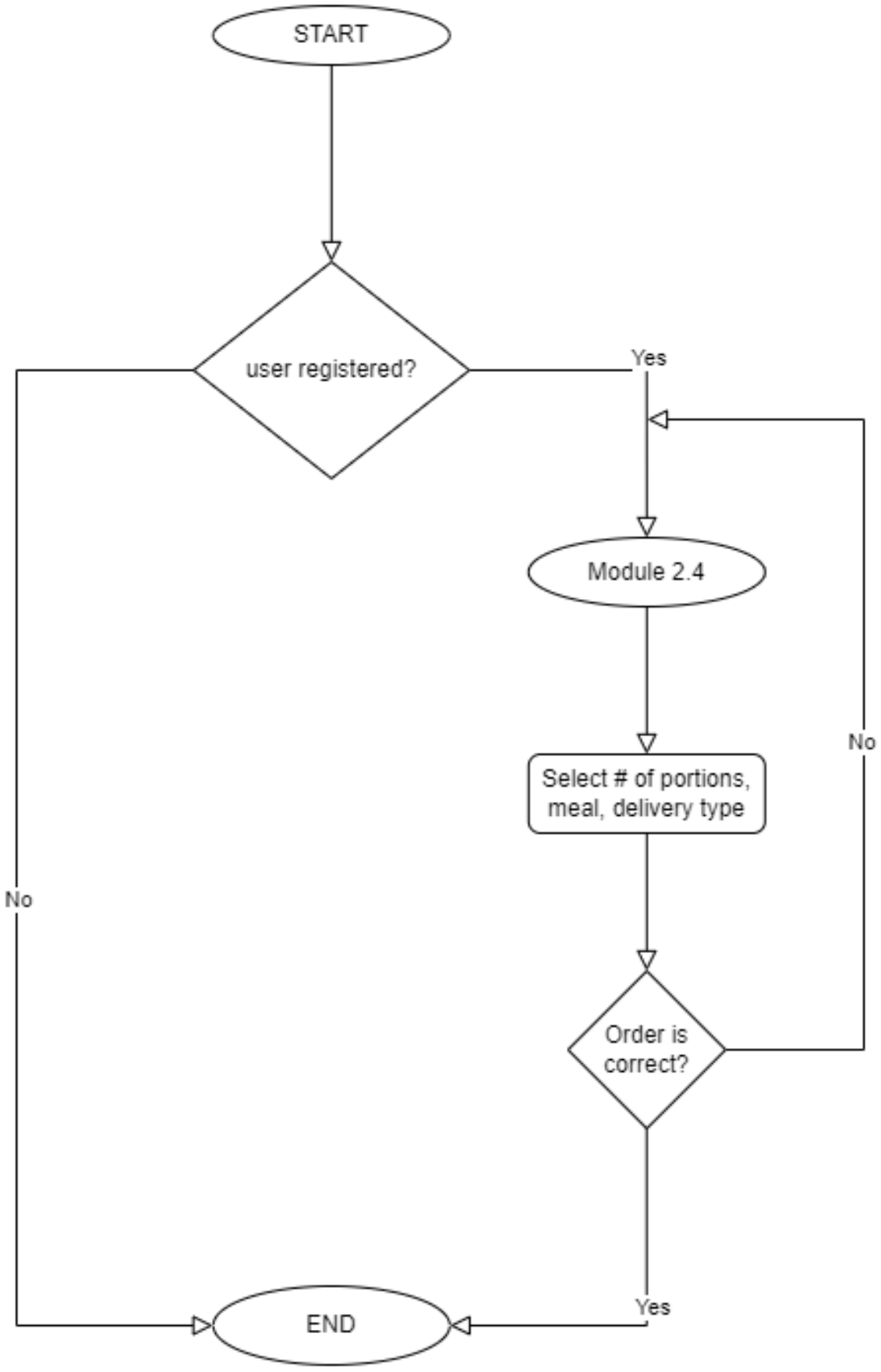

Figure 12: The Flowchart of Module 2.5 Restaurant_Site_User_Meal_Order

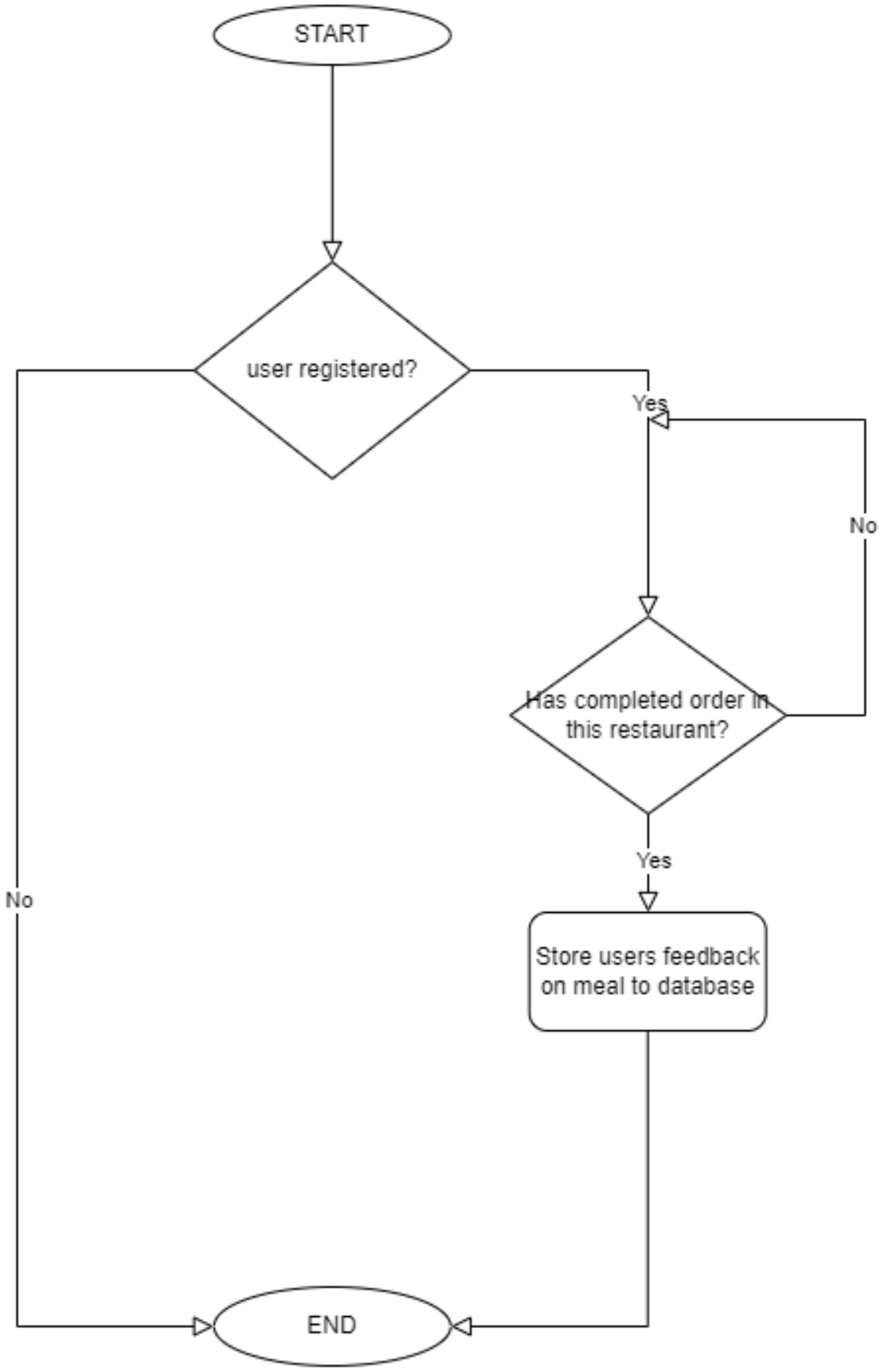

Figure 13: The Flowchart of Module 2.6 Restaurant_Site_User_Feedback

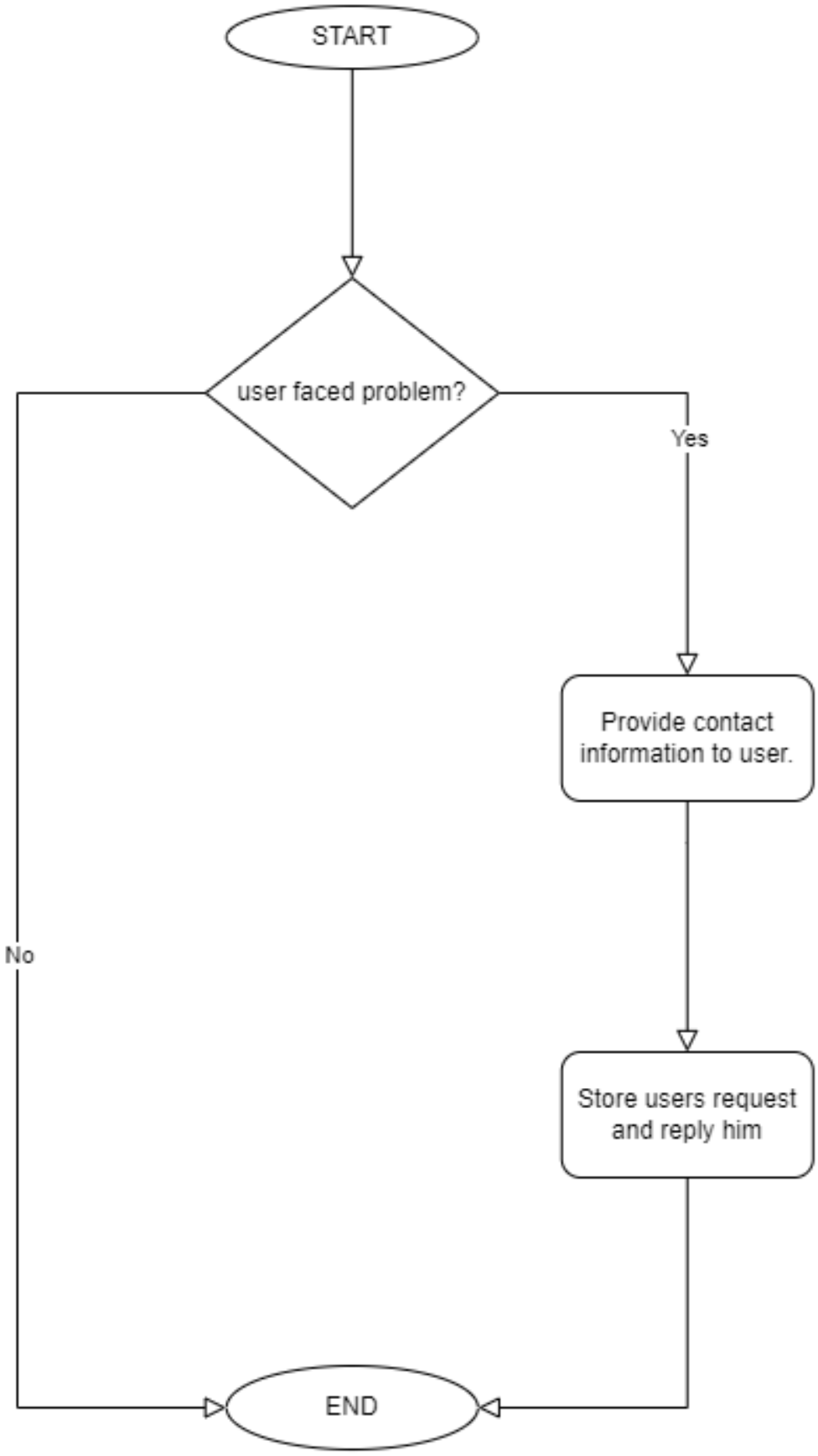

Figure 14: The Flowchart of Module 2.7 Restaurant_Site_User_Help_Request

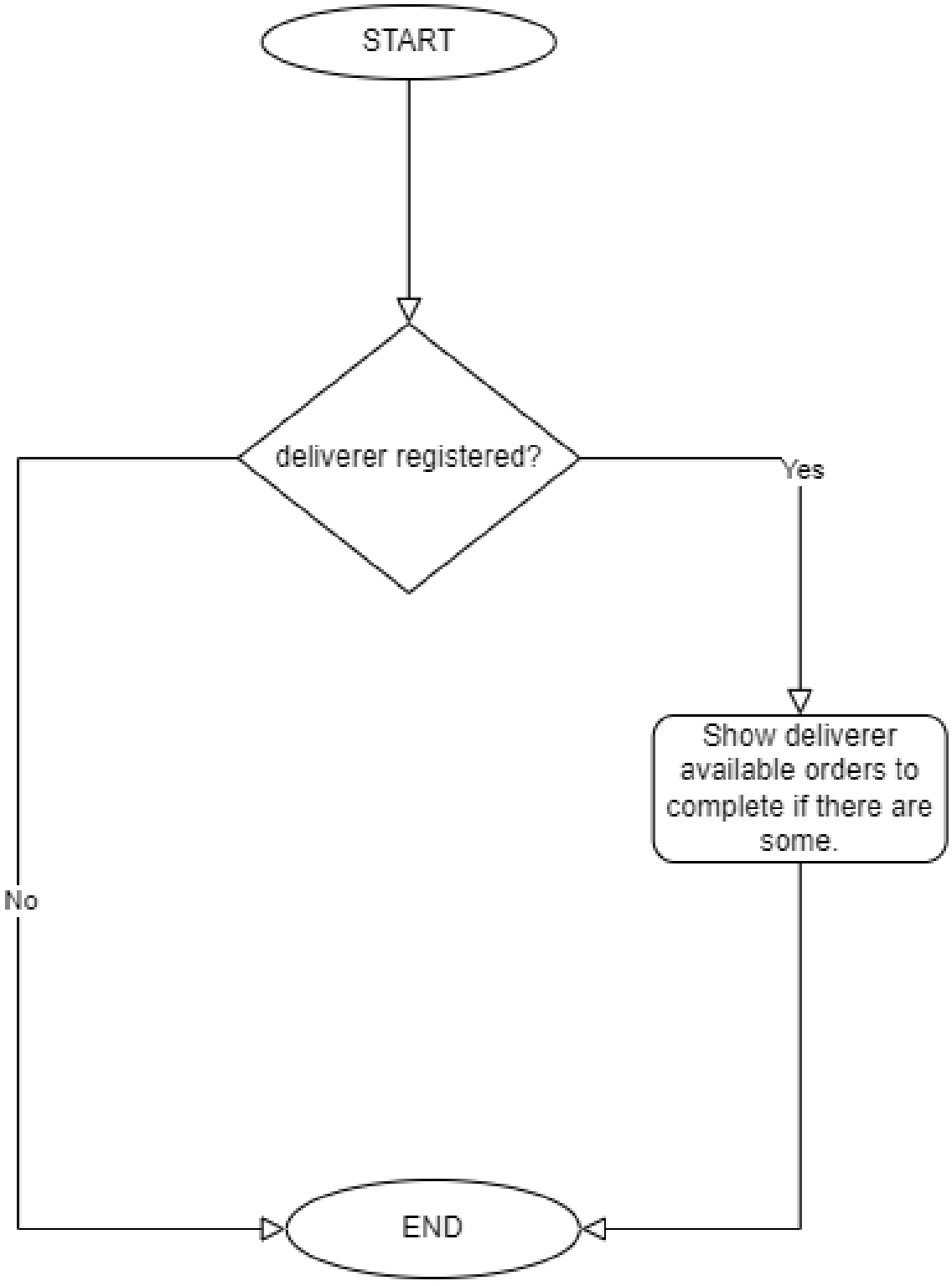

Figure 15: The Flowchart of Module 3.1 Deliverer_Site_User_Meal_Order

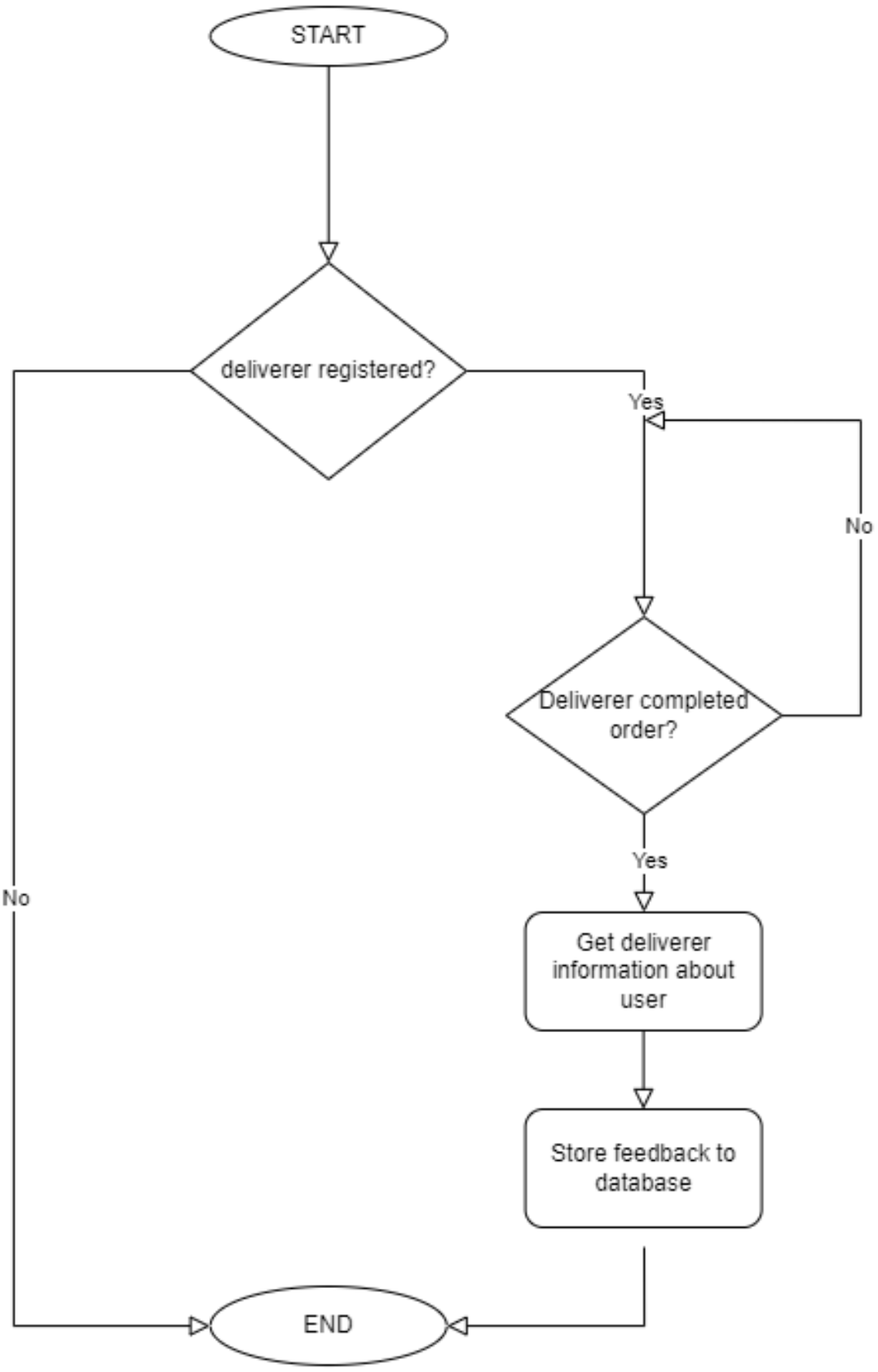

Figure 16: The Flowchart of Module 3.2 Deliverer_Site_User_Feedback

APPENDIX D

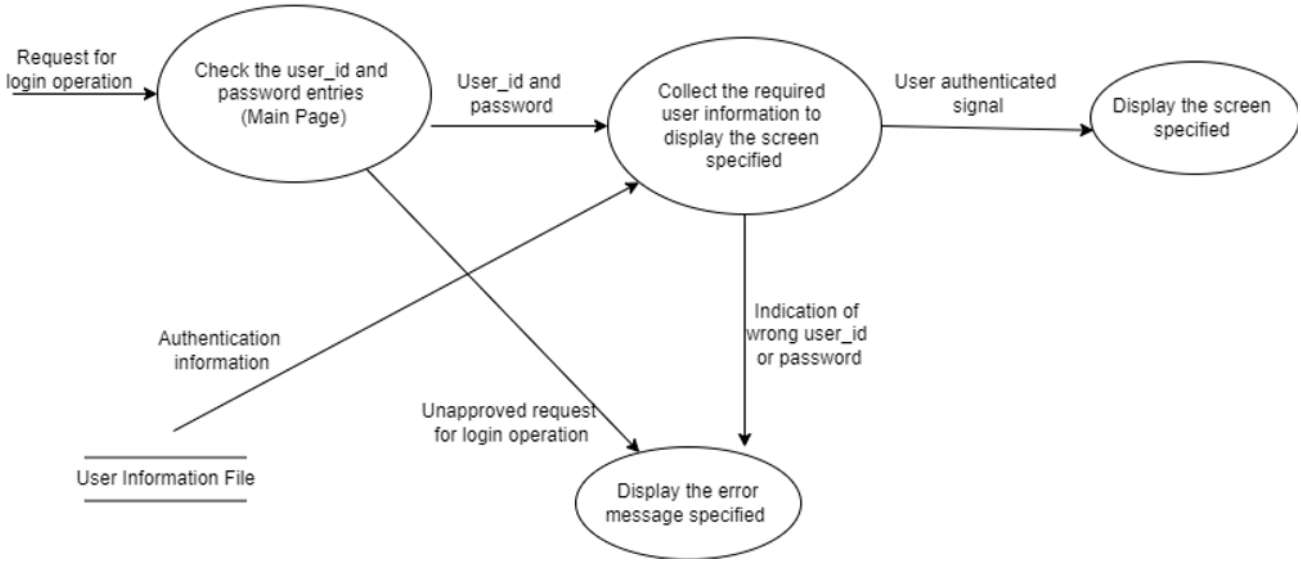

Figure 17: User Authentication Function

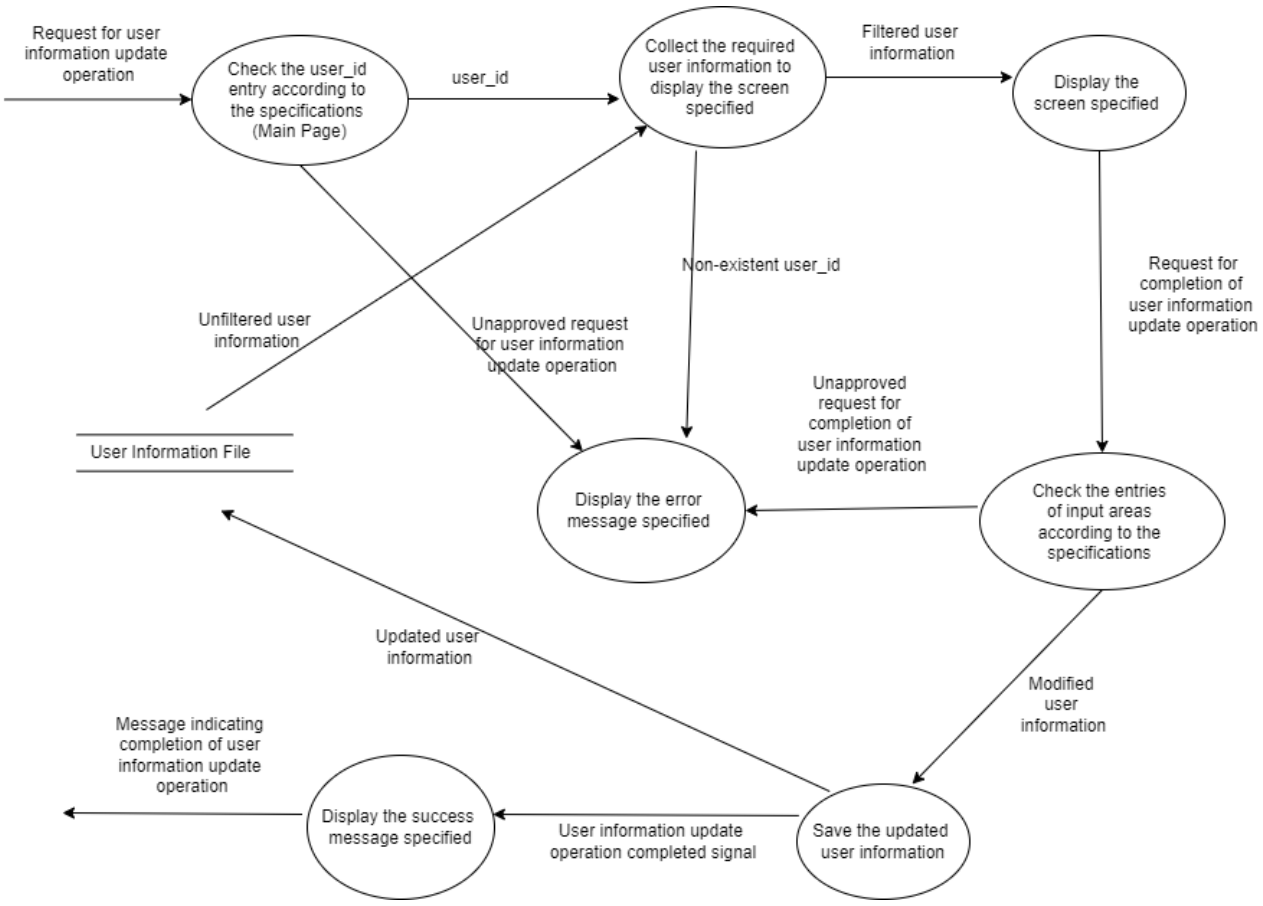

Figure 18: User Update Function

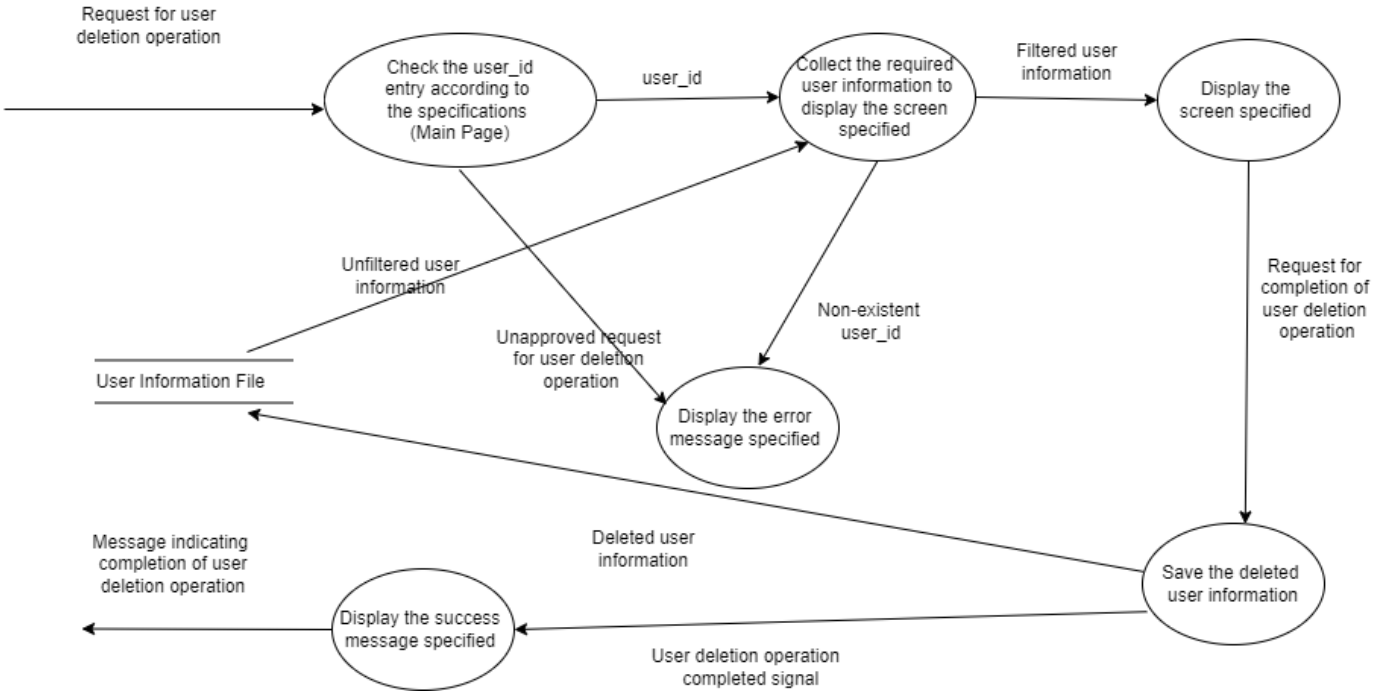

Figure 19: User Delete Function

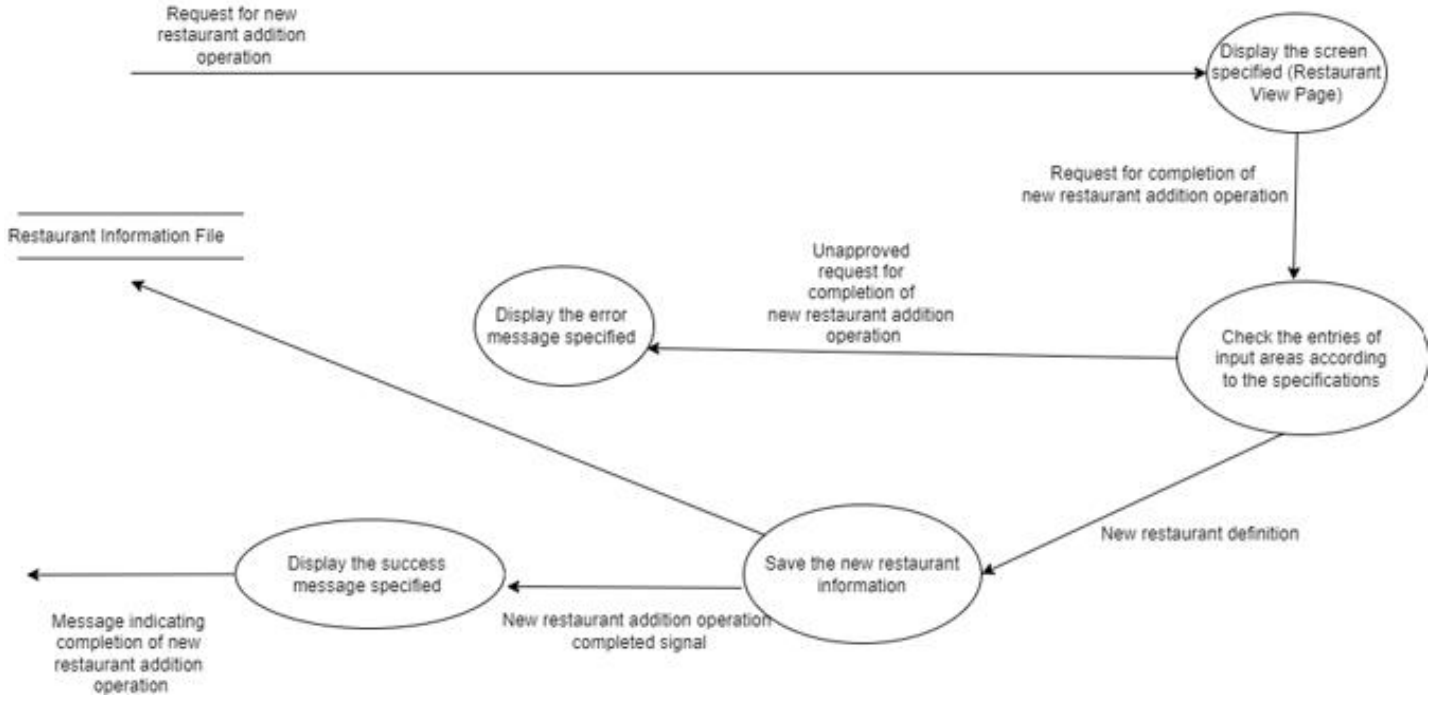

Figure 20: Add Restaurant Function

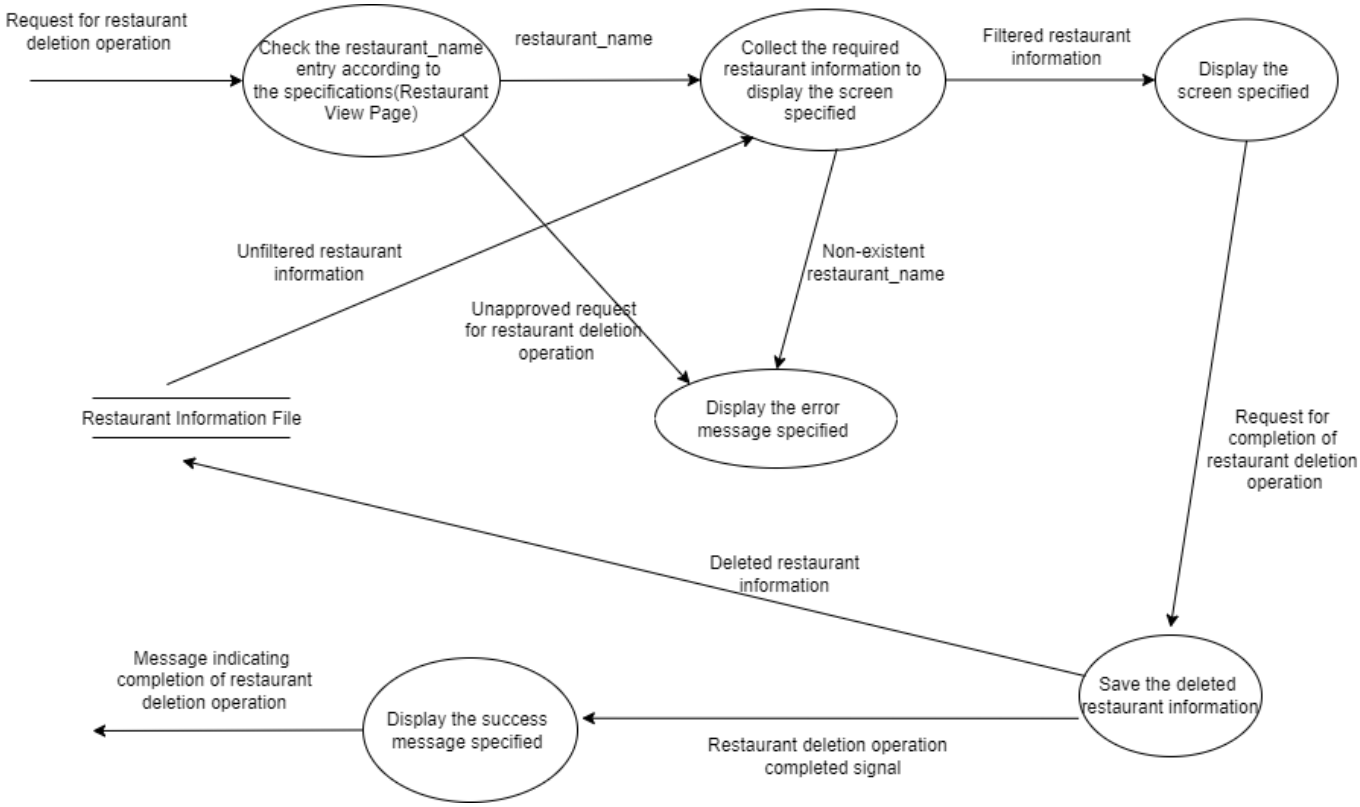

Figure 21: Delete Restaurant Function

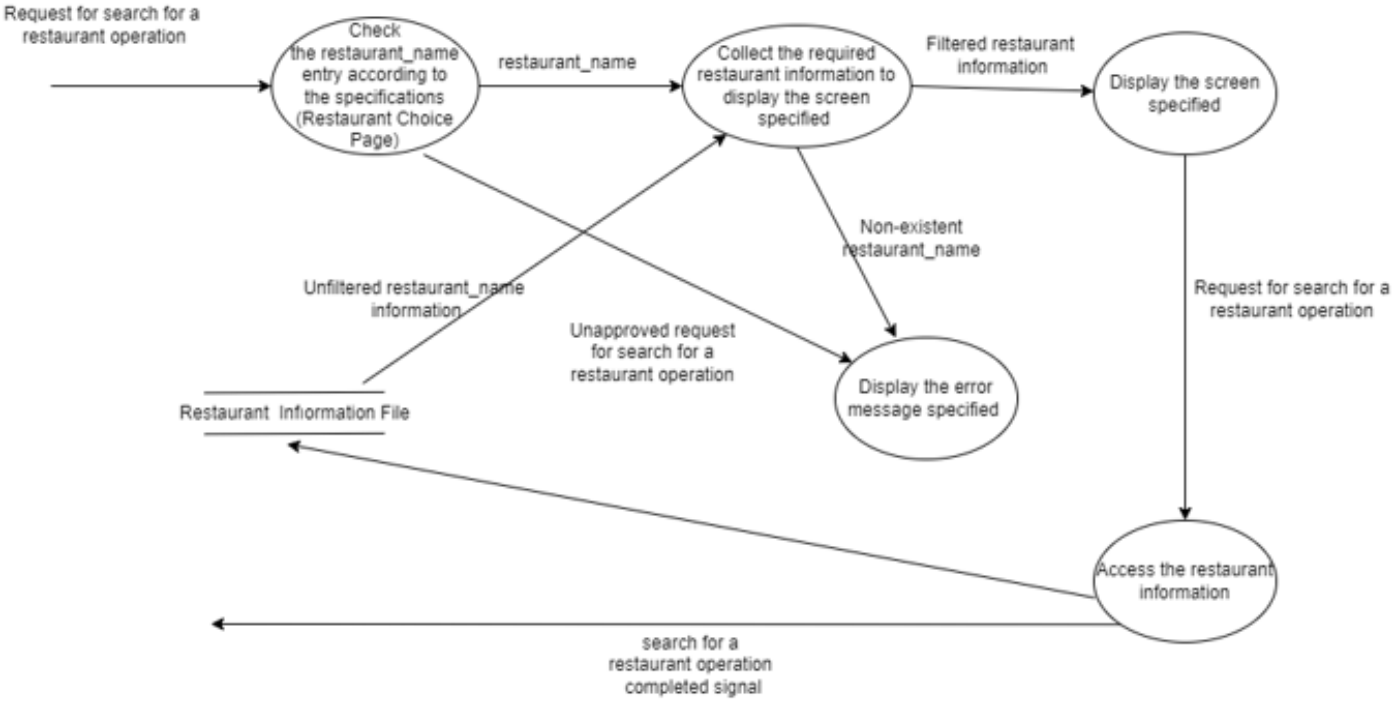

Figure 22: Search for a Restaurant Function

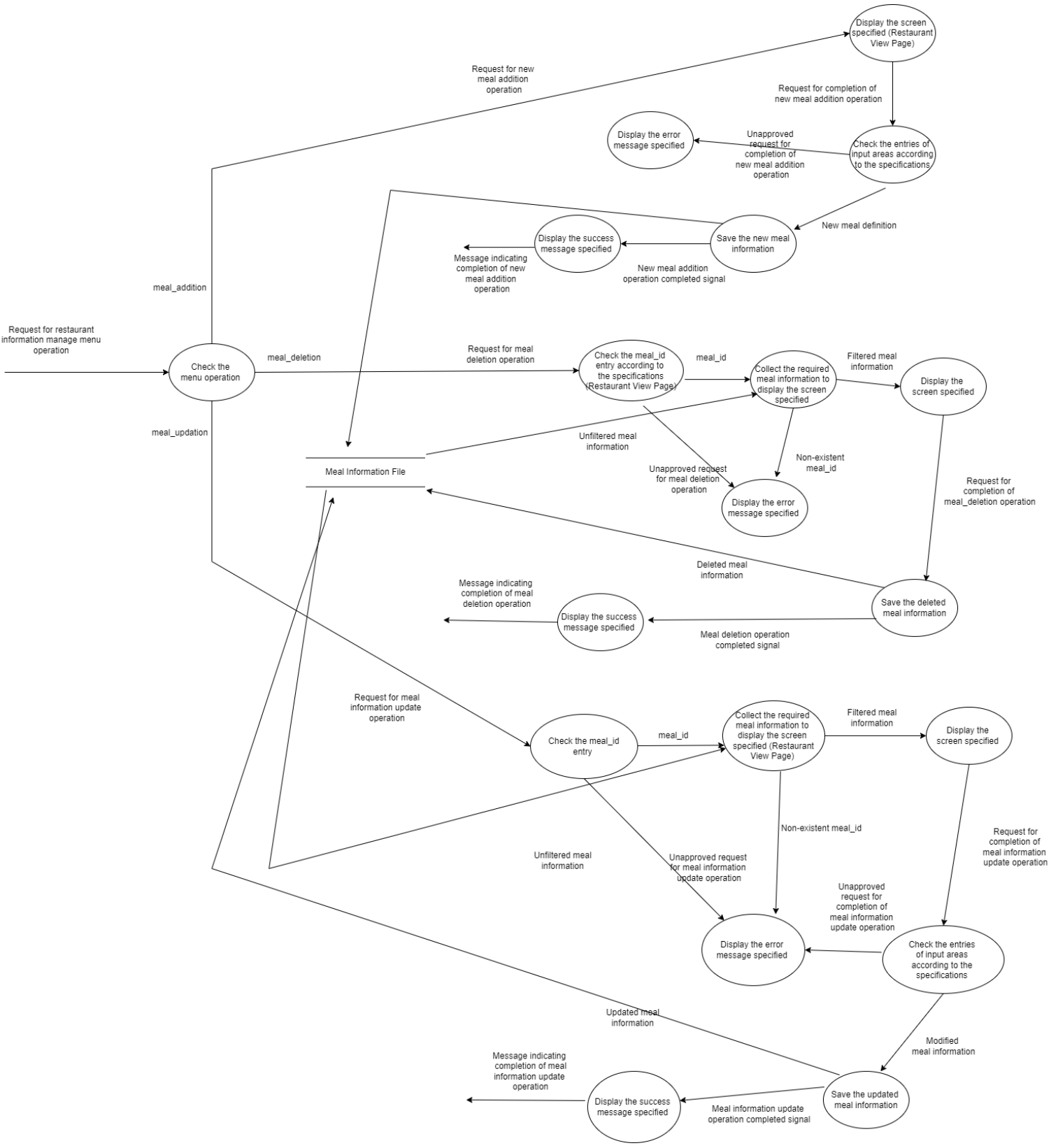

Figure 23: DFD for Manage Menu of Restaurant Function

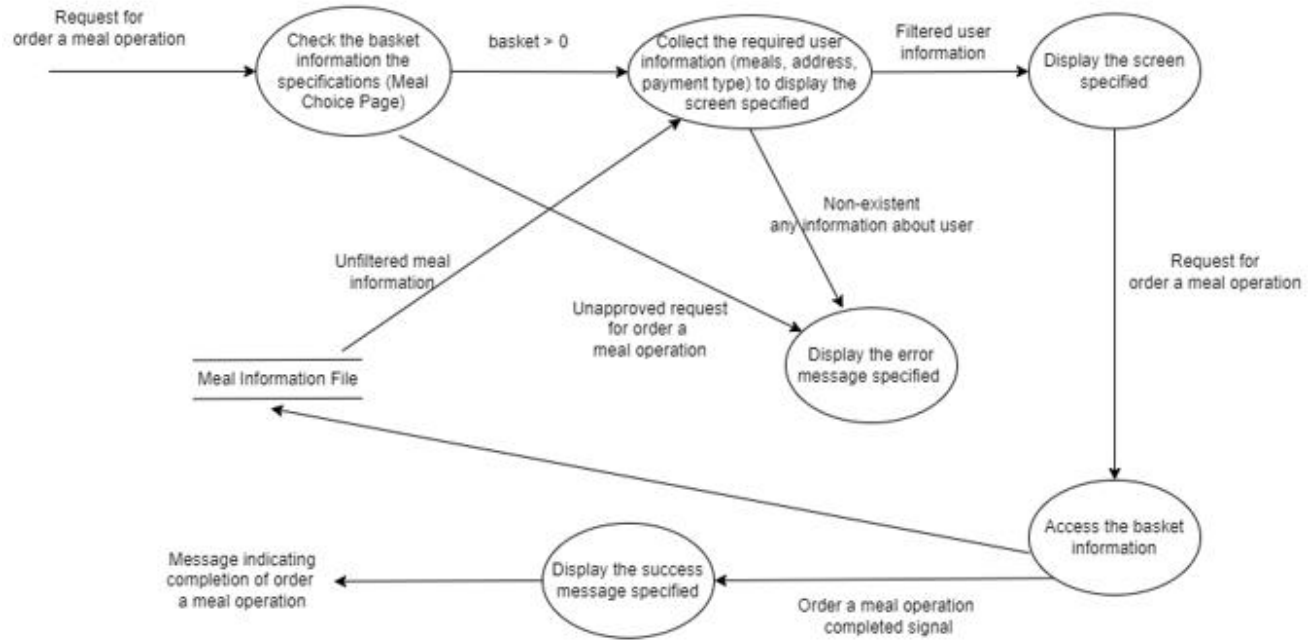

Figure 24: DFD for Order a Meal Function

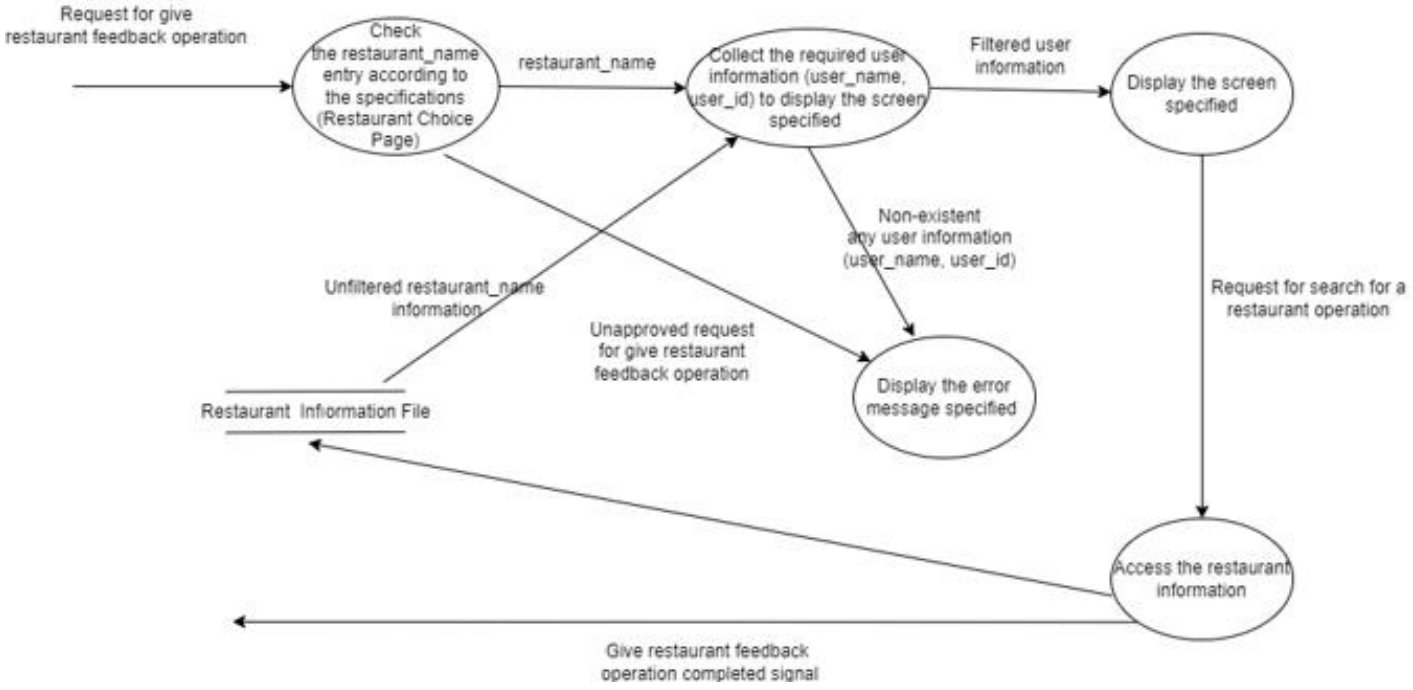

Figure 25: DFD for Give Restaurant Feedback Function

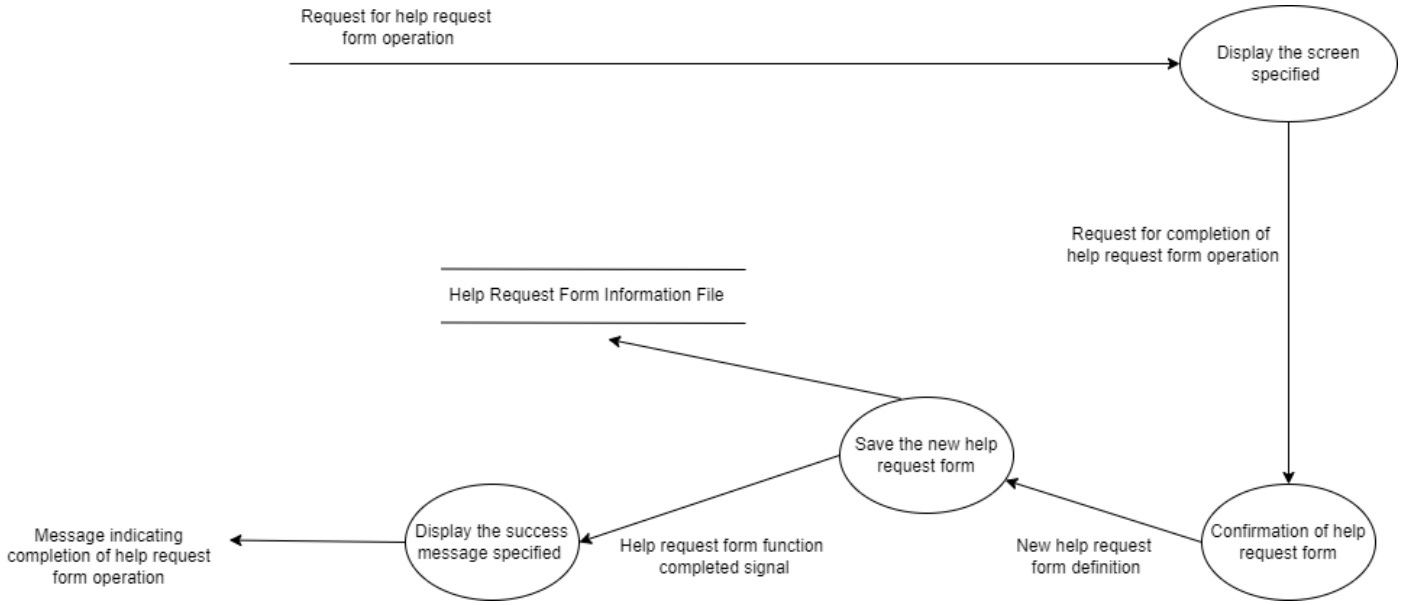

Figure 26: DFD for Help Request Function

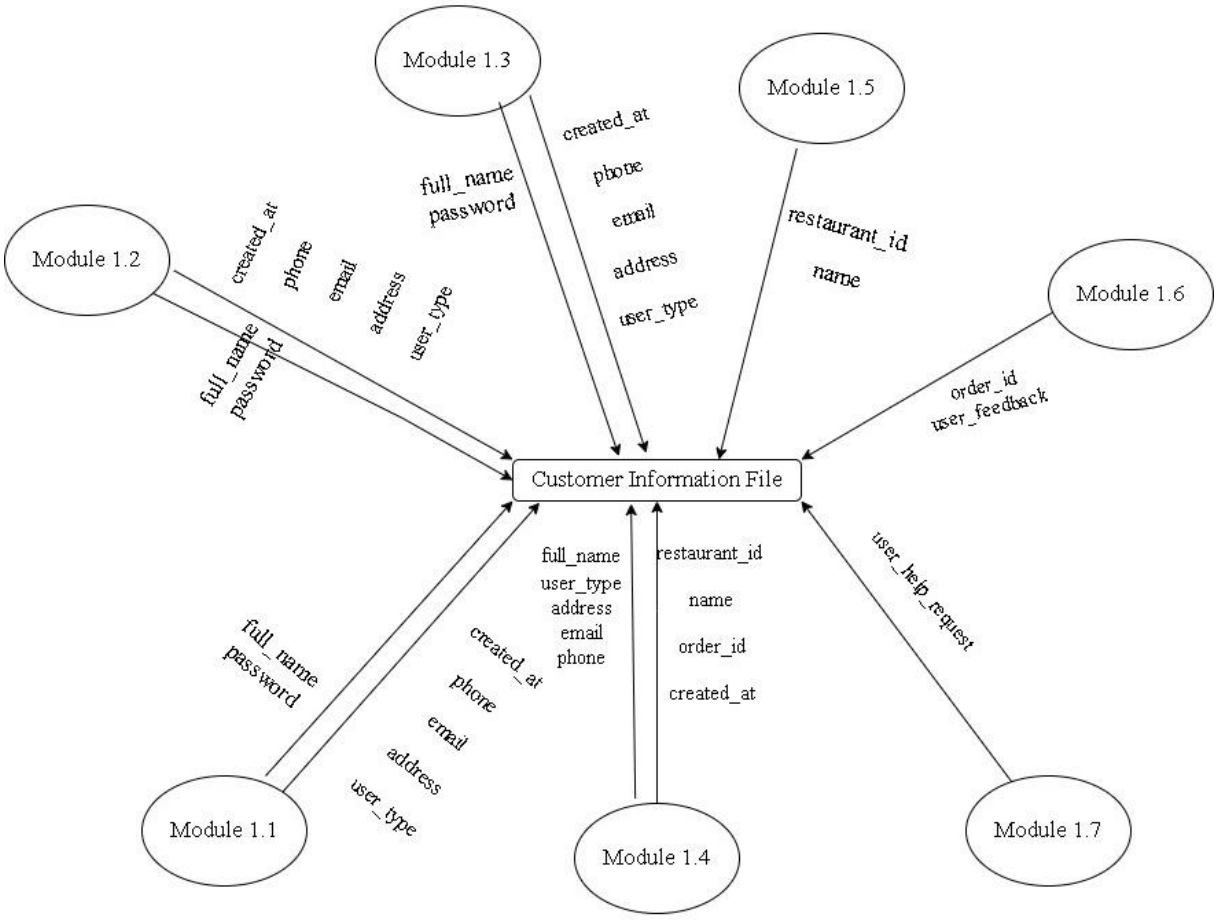

Figure 27: Customer Information File

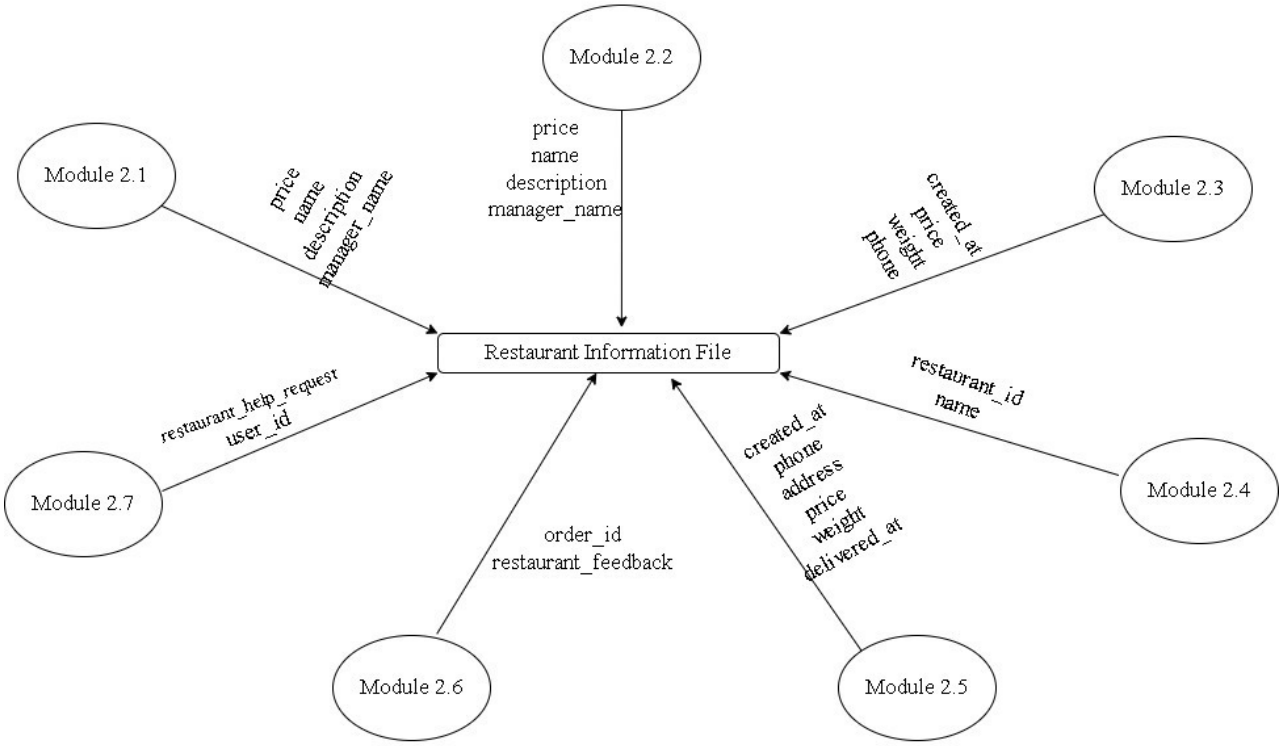

Figure 28: Restaurant Information File

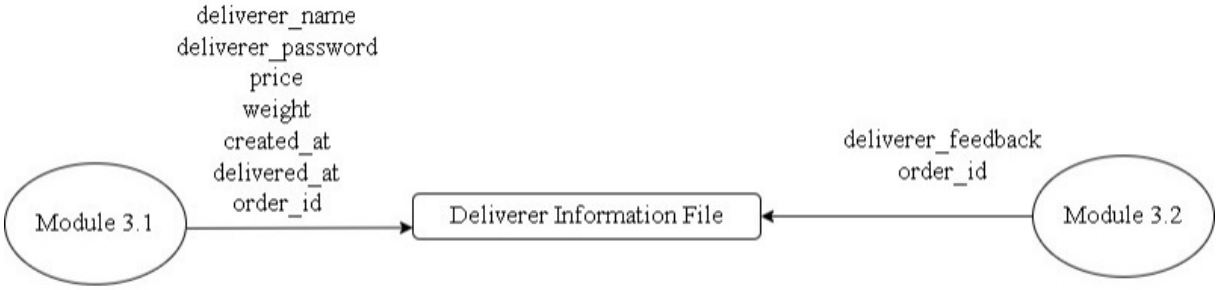

Figure 29: Deliverer Information File