

**SDA PROJECT**  
**Restaurant Management System**

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# USECASE Diagram:



# Fully Dressed Usecase

## Use Case: Login

**Use Case ID:** UC1

**Actors:** Admin, Employee

**Description:** Allows both Admin and Employee to log into the system.

**Preconditions:**

- The user must be registered in the system.
- The user has login credentials (username and password).

**Postconditions:**

- User is authenticated and granted access to the system functions based on their role (Admin or Employee).

**Main Flow:**

1. The user selects "Login" on the main interface.
2. The system prompts the user to enter a username and password.
3. The user enters their credentials and submits the form.
4. The system authenticates the credentials.
5. If the credentials are valid, the user is directed to the main dashboard.

**Alternate Flow:**

- If the credentials are invalid, the system displays an error message, and the user is prompted to re-enter the correct credentials.

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## Use Case: Order

**Use Case ID:** UC2

**Actors:** Admin, Employee

**Description:** Allows Admin or Employee to create, view, and manage orders in the system.

**Preconditions:**

- The user must be logged in.
- Required products or services must be available in the inventory.

**Postconditions:**

- An order is created, saved in the system, and ready for processing or billing.

**Main Flow:**

1. The user selects "Order" from the dashboard.
2. The system displays available products or services.
3. The user selects items to include in the order.
4. The user enters customer information and order details.
5. The user confirms and submits the order.
6. The system saves the order and generates an order ID.

**Alternate Flow:**

- If an item is out of stock, the system notifies the user, and they can modify the order.
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## Use Case: Bill Generation

**Use Case ID:** UC3

**Actors:** Admin, Employee

**Description:** Allows Admin or Employee to generate bills for completed orders.

**Preconditions:**

- An order must be completed and ready for billing.

**Postconditions:**

- A bill is generated, stored, and a copy is provided to the customer.

**Main Flow:**

1. The user selects "Bill Generation" from the dashboard.
2. The system displays a list of completed orders awaiting billing.
3. The user selects an order to generate the bill.
4. The system calculates the total amount, taxes, and other fees.
5. The system generates a bill and provides a copy to the user for printing or saving.

**Alternate Flow:**

- If there is an issue with order details, the system displays an error message and allows the user to review the order.
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## Use Case: Add Employee

**Use Case ID:** UC4

**Actors:** Admin

**Description:** Allows the Admin to add a new employee to the system.

**Preconditions:**

- The Admin must be logged in.

**Postconditions:**

- A new employee account is created and can be used to log into the system.

**Main Flow:**

1. The Admin selects "Add Employee" from the dashboard.
2. The system displays a form for entering employee details (e.g., name, contact info, role).
3. The Admin fills out the form and submits it.
4. The system creates an employee account and stores the information.
5. The system notifies the Admin of the successful creation of the employee account.

**Alternate Flow:**

- If any required information is missing, the system displays an error message and prompts the Admin to complete the form.
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## Use Case: Sales

**Use Case ID:** UC5

**Actors:** Admin, Employee

**Description:** Allows the Admin or Employee to manage and view sales information.

**Preconditions:**

- The user must be logged in.
- There must be completed transactions or orders to view in the sales history.

**Postconditions:**

- Sales data is displayed, and users can analyze or export data if needed.

**Main Flow:**

1. The user selects "Sales" from the dashboard.
2. The system retrieves and displays sales data, including transactions, order history, and revenue.
3. The user can filter or search the data based on date, product, or customer.

4. The user can export the data to a file if needed.

**Alternate Flow:**

- If no sales data is available, the system displays a message indicating this.
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## Use Case: Report

**Use Case ID:** UC6

**Actors:** Admin, Employee

**Description:** Allows Admin or Employee to generate reports based on sales, orders, or employee performance.

**Preconditions:**

- The user must be logged in.

**Postconditions:**

- The requested report is generated and can be viewed or downloaded.

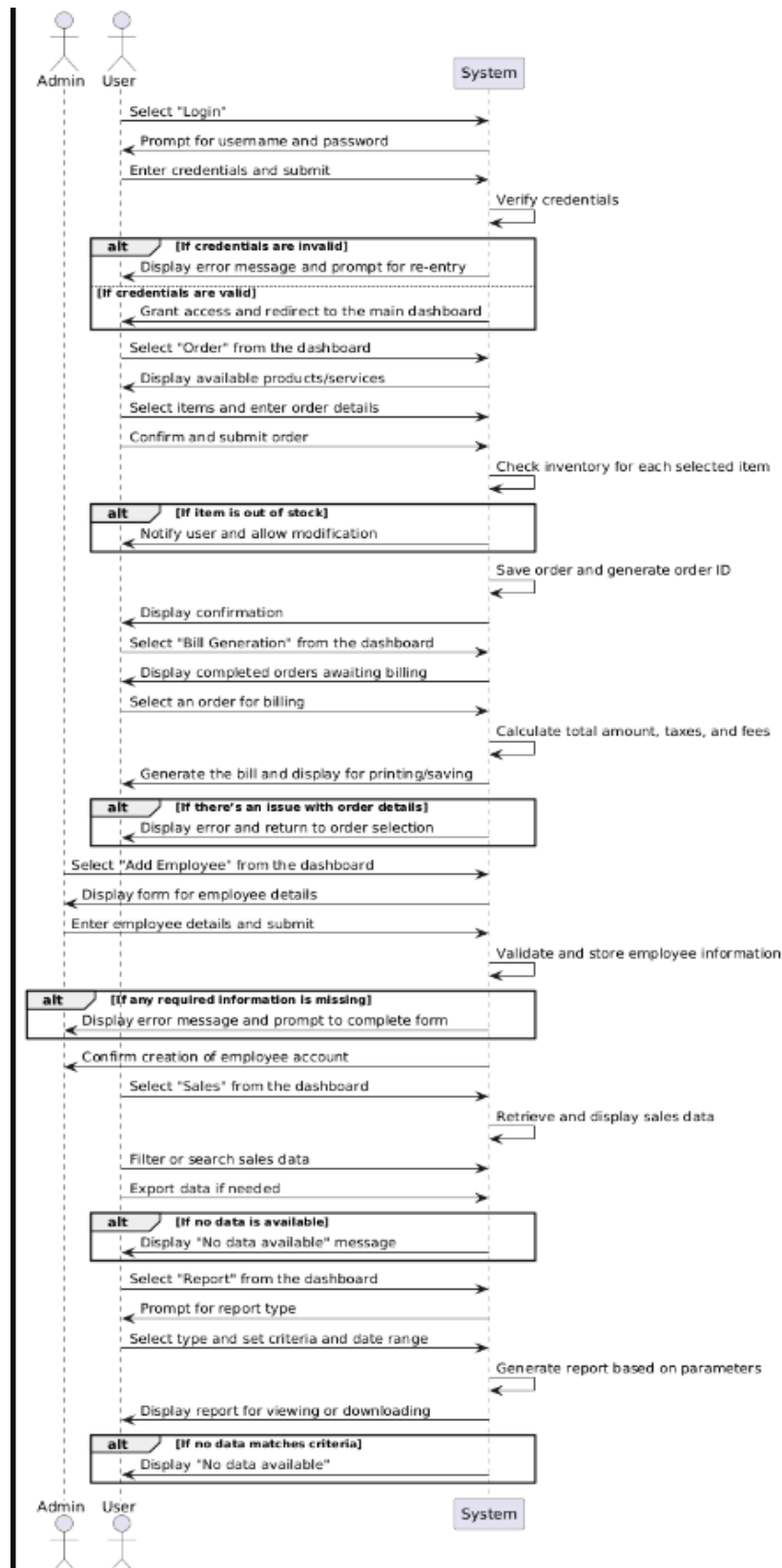
**Main Flow:**

1. The user selects "Report" from the dashboard.
2. The system prompts the user to select the type of report (e.g., sales, order summary, employee performance).
3. The user selects criteria and date ranges for the report.
4. The system generates the report based on the selected parameters.
5. The report is displayed, and the user can download or print it.

**Alternate Flow:**

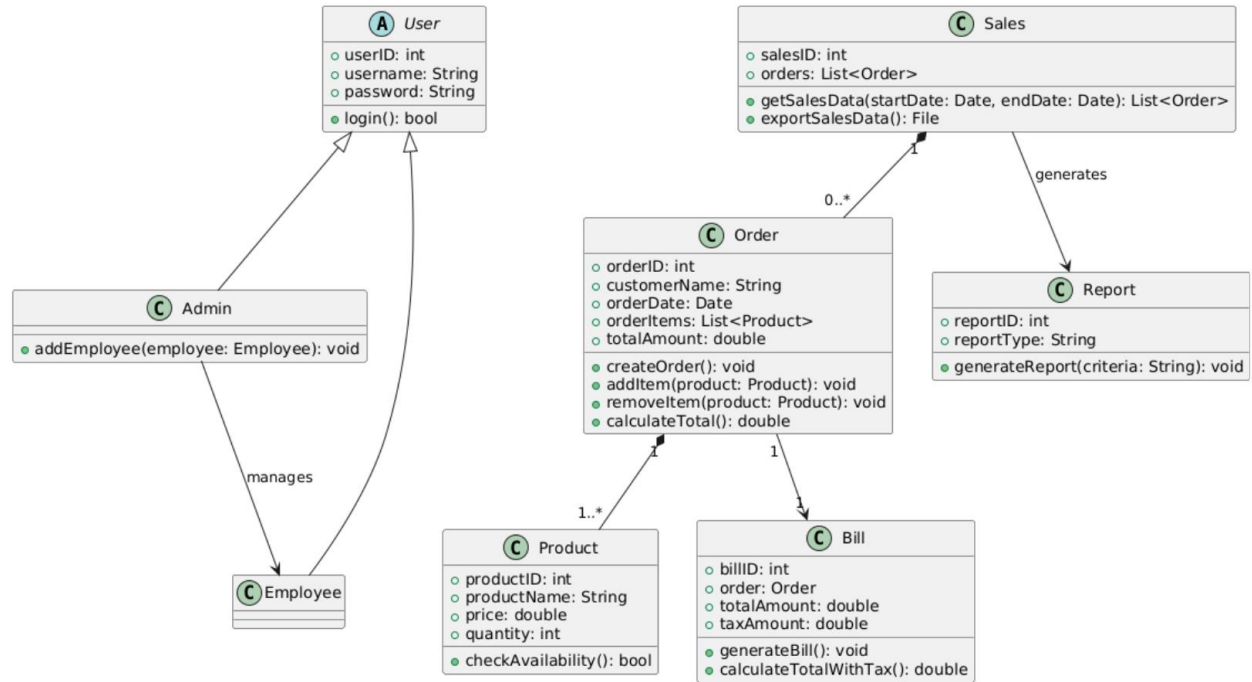
- If no data matches the selected criteria, the system displays a message saying "No data available for the selected parameters."

## SSD:



# Class Diagram:

Restaurant Management System Class Diagram





## Package Diagram:

