Restaurant Management System

Requirements and Features

Version 1

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Document History

S#	Version	Name of Person	Date	Description of change
1	Version 1	Zarish Rafi	02/01/2018	Document created
2	Version 1	Zarish Rafi	04/01/2018	Added purpose
3	Version 1	Saadia Damani	07/01/2018	Added intended audience
4	Version 1	Hunzala Iqbal	08/01/2018	Added document convention
5	Version 1	Fayyaz Hussain Shah	10/01/2018	Added project features

Distribution List

Name	Role
Khalid Rasheed	Customer/Supervisor

Document Sign-Off

Version	Sign-off Authority	Sign-off Date
Version 1	Khalid Rasheed	10/01/2018

Supervisor's Signature.

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Introduction

1.1 Purpose

The automated Restaurant Management system automates and computerize the basic functionalities of a restaurant to ease the job at both he sides, customer's and staff..

1.2 Document Conventions

- Used of **bold,** underlined or *italics* letters in the document.
- Bullet points for easy reading.
- Heading font size: 14
- Normal font size: 12.
- Font style: Calibri (Body).
- Followed IEEE format.
- Page numbers at the bottom on every page.
- Pictures for easy understanding.
- Used superscripts that are referred to more information (in appendices).
- '*Not applicable*' will in *italics*.

1.3 Intended Audience and Reading Suggestions

The intended audience is the young, the old, basically anyone who likes pizza. This document will give you an overview of what this software will contain and how does it make it easier for people to order pizzas. The topics that are discussed are as follows:

- Products Functions.
- Product Perspective.
- User Interface.
- User Documentation.

1.4 Abbreviations

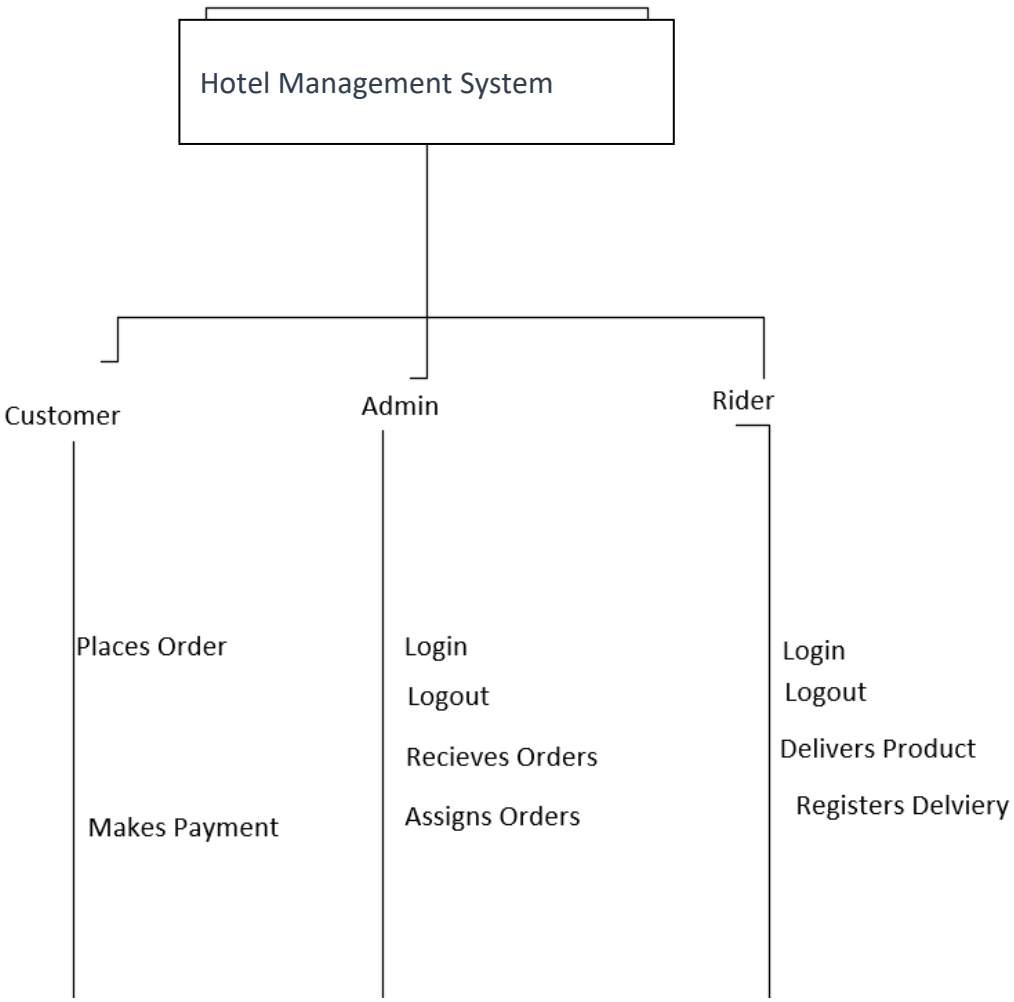
Abbreviations	***Meanings***
HMS	Hotel Management System
VS	Visual Studio
SQL Server	Structured Query Language Server
RAM	Random Access Memory
IIS	Internet Information Services
UML	Unified Modeling Language

Overall Description

Functional Requirements

7.1: Functional Hierarchy

Figure 1-Functional Hierarchy



7.2: List of functional requirements

1. Customer can place an order without Waiter (Primary)(Done)
2. Login admin.
3. Record of the orders of a particular customer.
4. Generate bill.
5. Make different portals (Customer, Admin, Chef) (Under Process)
6. Admins Add/Update/Delete Staff Members (Under Process)
7. Admin Handles Inventory (Pending)

7.3: List of Actors and Use Cases

7.3.1 UML use case diagram

7.3.2 UML use case description

Actors description:

Name: Customer

Description: A Customer is a person who wants to buy pizza.

Name: Visitor

Description: A Visitor can see just the interface without logging in.

Name: Admin

Description: Admin is a person who is responsible to allot a sales person to the

Use case description:

Order and Preparation		
Use case Id	Figure 3	
Priority	Medium	
Triggers	When order has been finalized	
Primary Business Actors	1. Customer	
Other Participating Actors	1. System 2. Employee	
Description	After the order being finalized, the bill is presented to the customer and after the customer makes the payment, the order is dispatched and saved in the system.	
Pre-Condition:	1. U	
Typical Course of Events	**Actor Action**	**System Response**
	Step 1: The Customer selects the Item.	
	Step 2: The Customer selects Quantity.	
	Step 3: The customer types quantity.	
	Step 4: The customer clicks on "Add to my Cart"	**Step 5:** The system adds the order into the table
	Step 6: The Customer clicks on show my cart	**Step 7:** The system shows the order info.

	Step 8: The customer clicks on Proceed Payment	**Step 9:** The system shows billing interface.
	Step 10: The customer enters billing and delivery information.	
	Step 11: The customer clicks on "Proceed Order"	**Step 12:** The system puts the order into the que to be Prepared and provides the customer with its order process.
Alternate	1. The customer entered inappropriate quantity. 2. The customer entered incorrect payment information.	
Conclusion	When the order is generated, the customer is asked to give payment.	
Post Condition	1. If the customer has made payment successfully his or her order is in the que to be prepared and served.	

Sign in Employee	
Use case Id	Figure 2
Priority	High
Trigger	None
Primary Business Actors	1. Employee
Other Participating Actors	System

Description	This use case is for the Employees users who want to assigns rider to orders pending for delivery.	
Pre-Condition:	Employee Registration	
Typical Course of Events	**Actor Action**	**System Response**
	Step 1: This starts when the Employee clicks on Employee on the main interface.	**Step 2:** The System responds by displaying the sign-in page where Employee can enter its details.
	Step 3: The Employee enters the required User name information.	**Step 4:** The system checks weather the provided user name area is not empty with the help of Validation.
	Step 5: The user enters its password for its account.	**Step 6:** The system displays the password to the user in hidden format and check whether the Password area is not empty.
	Step 7: User clicks the sign-in button to get himself/herself sign-in.	**Step 8:** The system then validates the entered information, making sure that the entered user name and password are valid for one user account in the system and that the required password is entered for the given User Name.

Alternate	1. At any time, the User may choose to cancel the sign-in process. At which point, the processing is discontinued and the user account remains sign-out. 2. If the User entered an invalid username and/or password, the following occurs: • The system points out the reasons why the User authentication failed. • The system presents the User with suggestions for changes necessary to allow the User to pass authentication. • The system prompts the User to re-enter the valid information.
Conclusion	The use case concludes when the Registered User login's our software and displays all features available for the role the user is associated with it.
Post Condition	1. If the use case was successful, the User's Home Page will be displayed. 2. If use case was not successful then the state of the system is unchanged.

Sign out		
Use case Id	Figure 2	
Priority	Medium	
Trigger	None	
Primary Business Actors	1. Employee	
Other Participating Actors	System	
Description	The sign-in user will leave their portals	
Pre-Condition:	1. The User is a member of a site and is sign-in.	
	Actor Action	**System Response**

Typical Course of Events	**Step 1:** The user clicks on the Logout button.	**Step 2:** The System save the current state of the user and leave the session of the user was Ended by the System.
Alternate	1. Due to any System issues the User was unable to successfully sign-out of the software.	
Conclusion	The use case concludes when it is completed successfully, then the user will sign-out of the software.	
Post Condition	1. If the use case was successful, the User sign-out from the software. 2. If use case was not successful then some information might be lost or User is still sign-in.	

Order Processing /Serving		
Use case Id	Figure 2	
Priority	High	
Trigger	Employee Login	
Primary Business Actors	1. Employee 2. Chef	
Other Participating Actors	1. System	
Description	The Employee will check the orders pending for Preparation and assign Chef to it.	
Pre-Condition:	1. Orders with no Chefs assigned.	
	Actor Action	**System Response**

Typical Course of Events	**Step1:** Admin logs in to the system supplying user name and password	**Step2:** System validates its login information
	Step 3: Employee selects the order.	**Step 4:** System provides the list of available Chefs.
	Step 5: Employee assigns the available Chef.	**Step 6:** System saves the changes.
Alternate	1. Chef is not available 2. Order has been cancelled	
Conclusion	Once the order is assigned to the Chef the Chef sets to prepare the order.	
Post Condition	1. Order with un assigned rider.	

Proposed Objects List from Use Cases

Order	Preparation	Customer
Employee	Chef	Payment

Initial Class Diagram

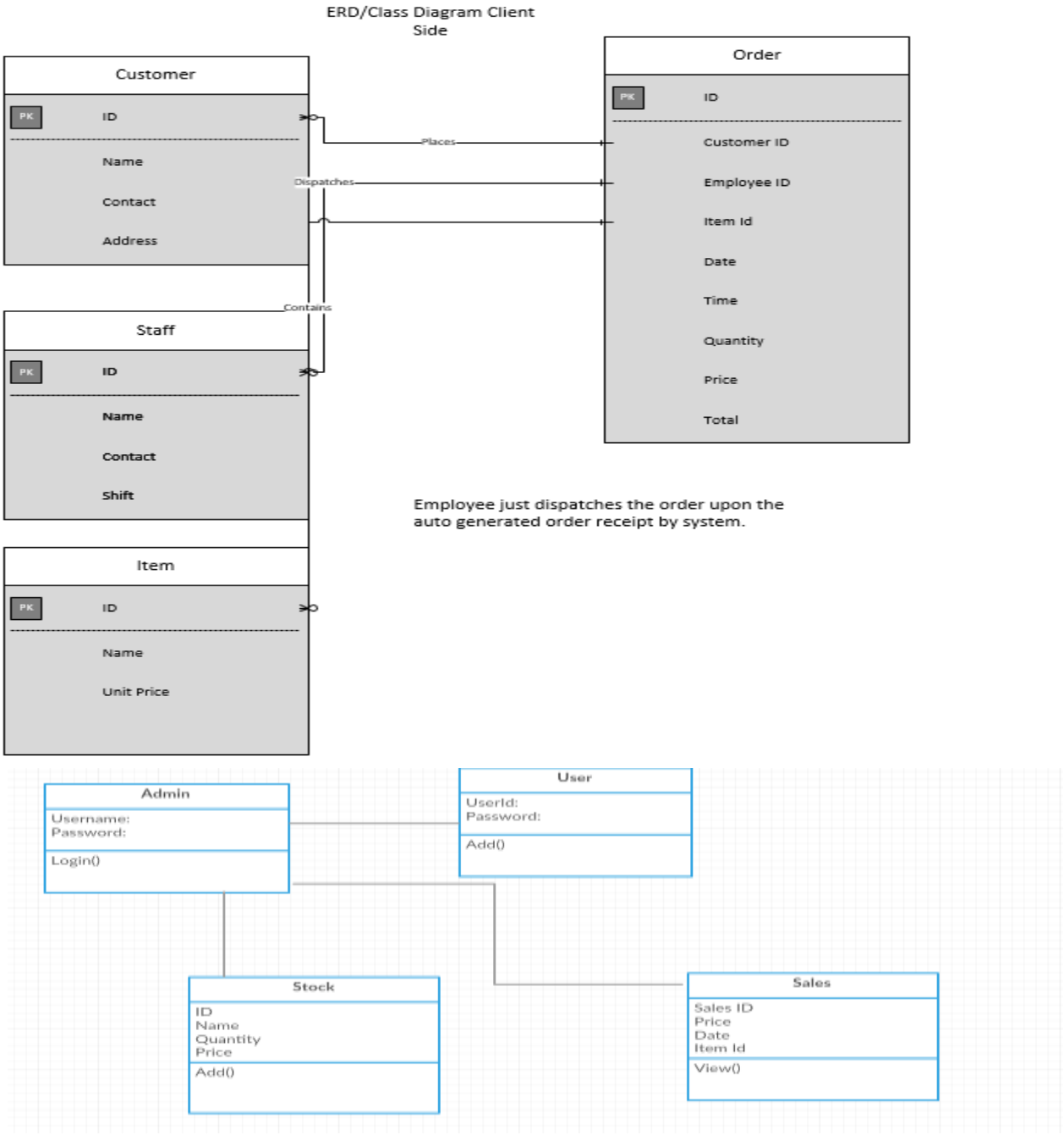


Figure 2 - Class Diagrams

Use Case Diagram

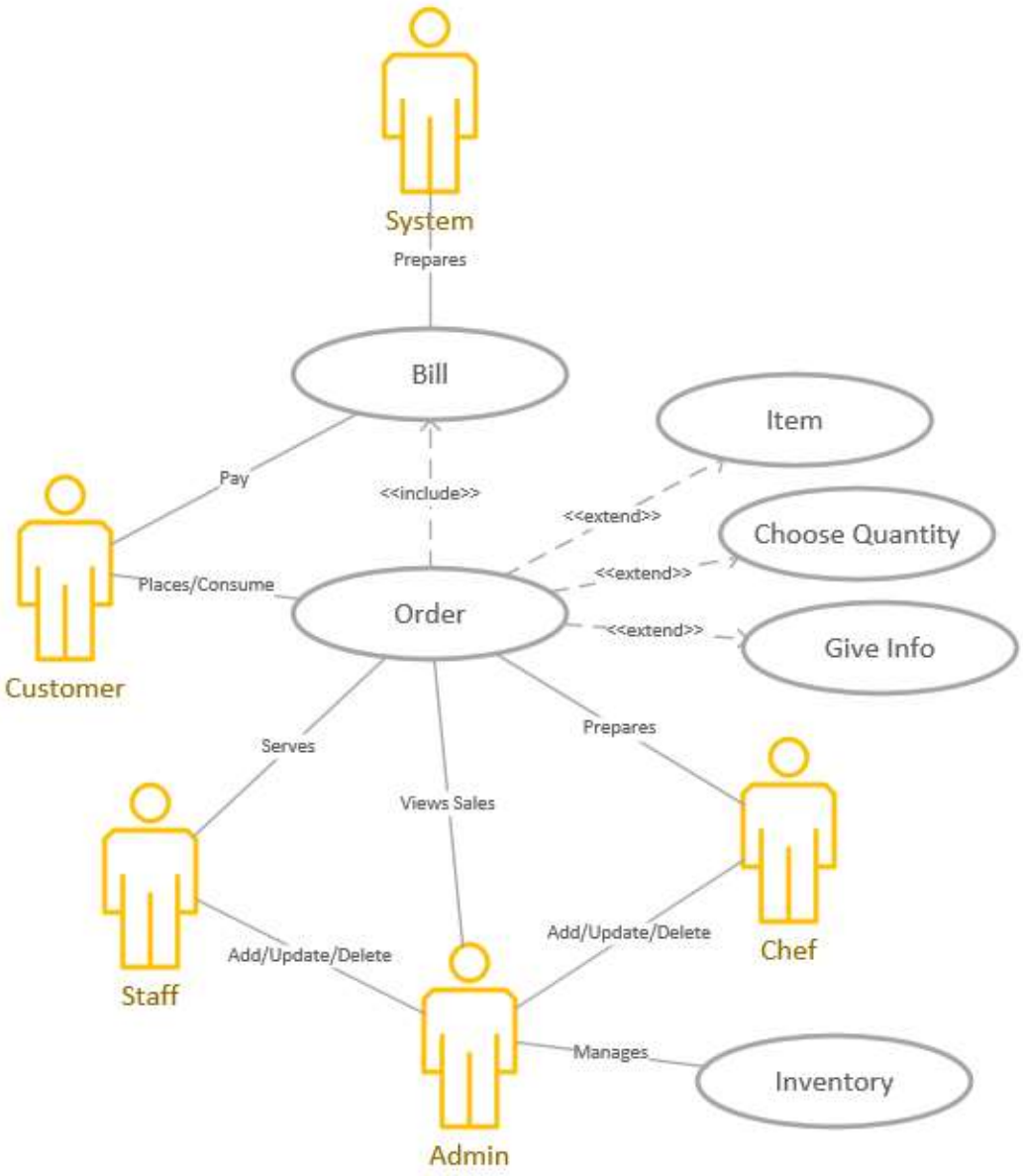


Figure 3-Use Case for Customer

Sequence Diagram

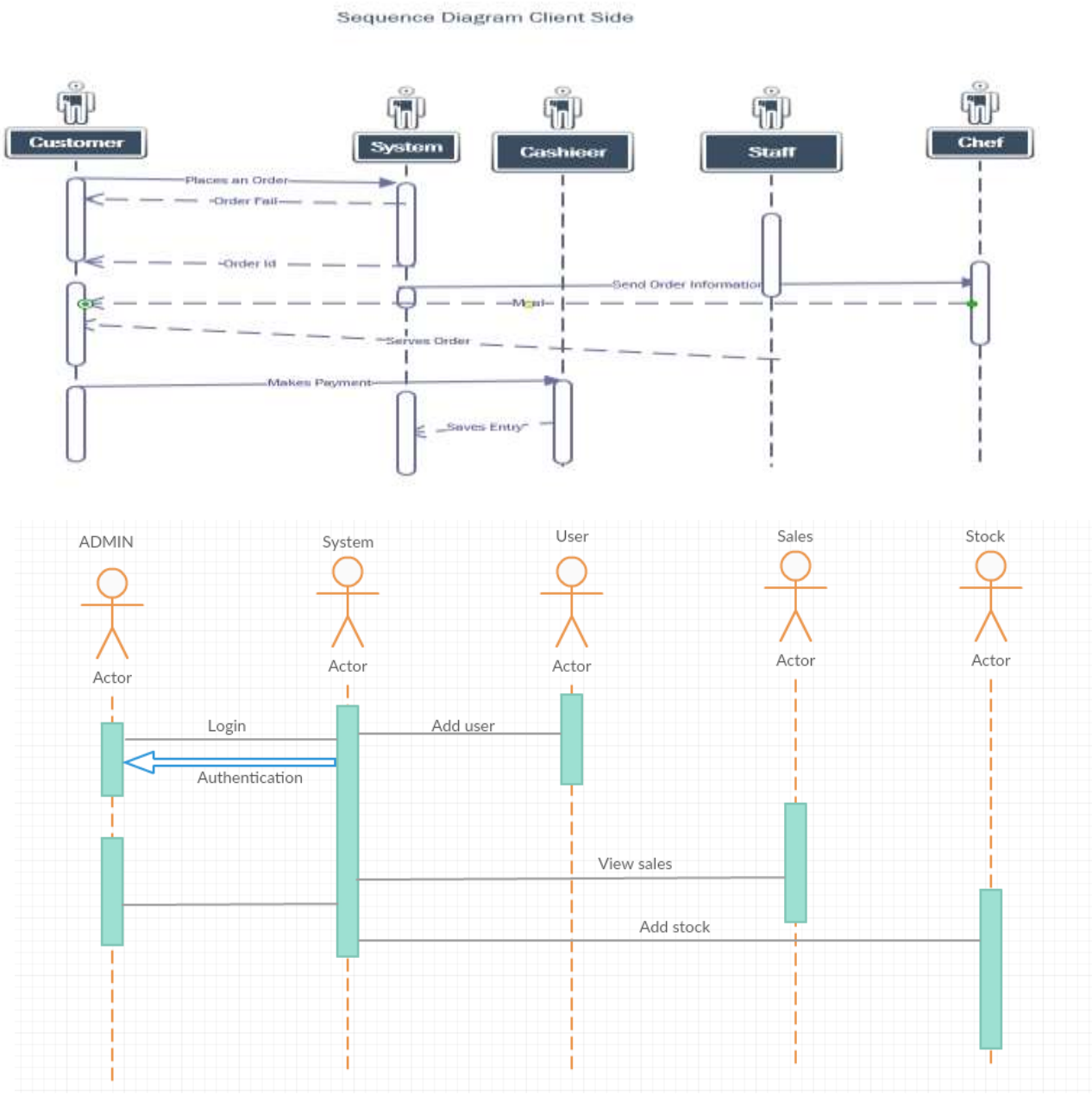


Figure 4 - Sequence Diagram

Data Flow Diagram Level 0

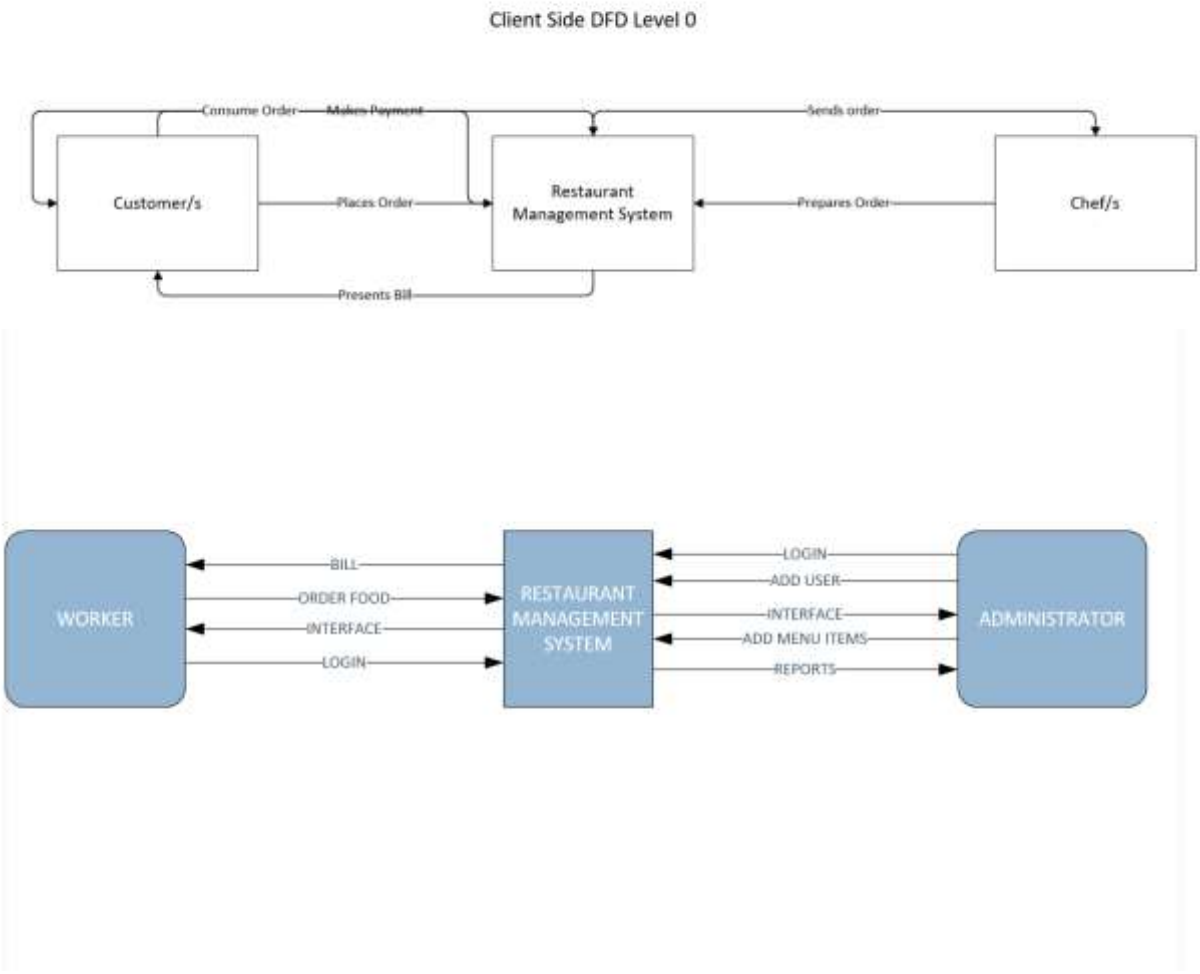
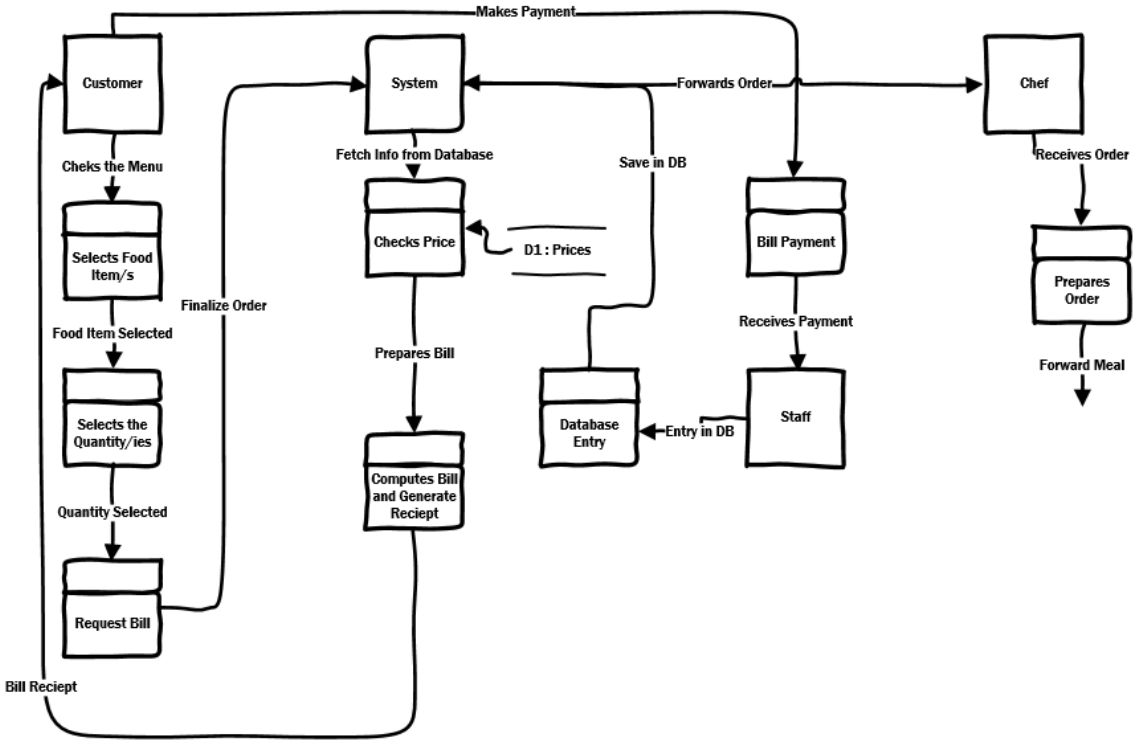


Figure 5 - DFD Level -0

Data Flow Diagram Level 1

DFD Level 1 Client Side



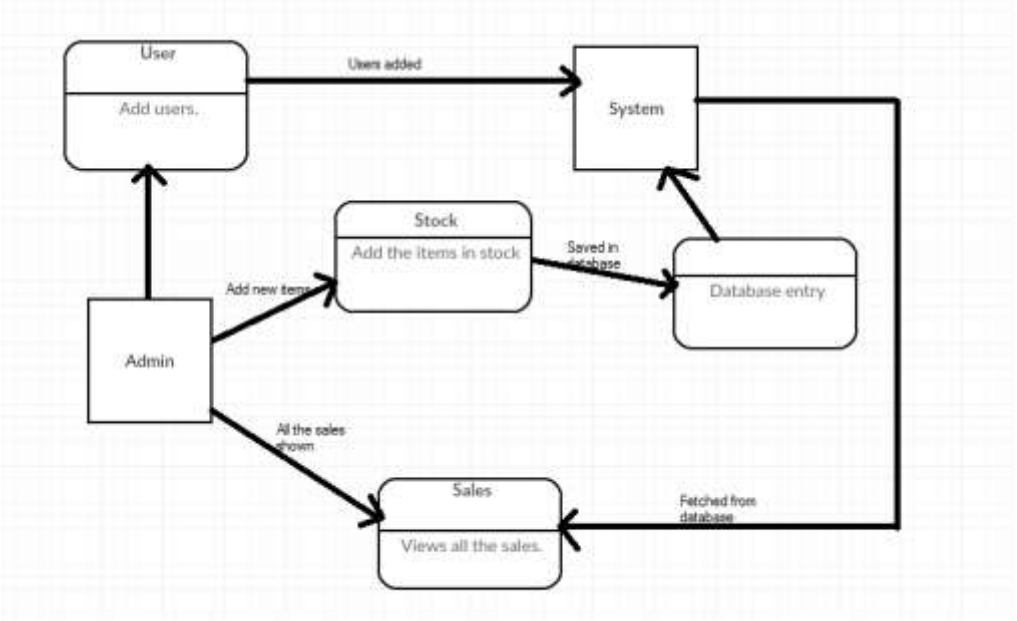


Figure 6 - DFD Level - 1

List of Non-Functional Requirements

10.1 Performance Requirements
10.2 Safety Requirements

Since the system is handling sensitive data of the franchise, high emphasis will be given on security.

Safety is one of the major concerns ensuring that all the data is safe and consistent. As far as the system breakdown is concerned, the content will be saved even at that time.

10.3 Security Requirements

There are certain risks involved when discussing about the security measures. This would include the following:

- If any business policy regarding the software system got leaked it might go in the favor of the opponents. This includes architecture, database schema and etc.
- If unauthorized user accesses any of the software dedicated terminals, it might leak the basic user information, which can be harmful for both user and the franchise. Example could be of the customers' financial record. It contains important data of every user. Thus the system should following web security standards to ensure security.

10.4 User Documentation

- User manual
- Online help
- Tutorials

Appendices

Not Applicable