SIR SYED UNIVERSITY OF ENGINEERING & TECHNOLOGY
BIONFORMATICS DEPARTMENT

FALL 2020

BIOINFORMATICS SOFTWARE DEVELOPMENT (BI-402)
Assignment 2

Semester: VIII | Batch: 2017
Due Date: 10-Aug-2020 | Max Marks: 2

Instructions:

- Attempt all questions

Question #1: (0.5 Marks)

A Company decides to develop a website, which lets people buy and sell their software applications. This company works as negotiator between buyers and sellers and takes commission for the service. The company aims to develop this website user friendly.
You are required to study this idea deeply and prepare Functional and non-functional Requirement specification of placing online order module.
Note: Before writing this functional and non-functional specification, try to understand the domain carefully going through some websites where online order placing is done.

Question #2: (0.5 Marks)

Scenario:
The Pizza Ordering System The Pizza Ordering System allows the user of a web browser to order pizza for home delivery. To place an order, a shopper searches to find items to purchase, adds items one at a time to a shopping cart, and possibly searches again for more items.
When all items have been chosen, the shopper provides a delivery address. If not paying with cash, the shopper also provides credit card information.
The system has an option for shoppers to register with the pizza shop. They can then save their name and address information, so that they do not have to enter this information every time that they place an order.
Develop a use case diagram, for a use case for placing an order, PlaceOrder. The use case should show a relationship to two previously specified use cases, IdentifyCustomer, which allows a user to register and log in, and PaybyCredit, which models credit card payments.

Question #3: (0.5 Marks)

Scenario:

- Consider a mail order company that distributes CDs and tapes at discount prices to its members.
- When an order processing clerk receives an order form, she verifies that the sender is a member by checking the MEMBER FILE.
- If the sender is not a member, the clerk returns the order along with a membership application form.
- If the customer is a member, the clerk verifies the order item data by checking the ITEM FILE.
- Then the clerk enters the order data and saves it to the DAIILY ORDERS FILE.
- At the same time the clerk also prints an invoice and shipping list for each order, which are forwarded to the ORDER FULFILLMENT DEPARTMENT for processing there.

Develop the Context Level DFD and DFD Level 0 Diagram for the above scenario.

Question #4: (0.5 Marks)

Scenario:

The case study is about the process of reserving a flight. First, you enter the dates. Once you submit your desired flight plan, you can enter your personal information and at the same time the system could be searching availability. The system flow then joins back into one and you can select the specific flight on the dates you want to fly. After this in the system there are two different paths dependent on whether you are using reward points. In case of reward points you have to enter points and at the same time the system holds your reservation. After that payment information is entered, the system performs two processes at the same time. One is the system marks seat as taken and the other is the system processes payment. The system after that sends out a confirmation email.

Develop the Activity diagram of above scenario.

*****************Best of Luck*****************

NAME TALHA NAEEM ROLL NO 2017-BI-005 Date:

ASSIGNMENT 2

Q1

Solution

Functional Requirements of Online Website

→ Provide Username and real name.

→ Provide password details.

→ The web application shall accept customer orders.

→ The web application shall be able to cash a sale.

→ The web application shall produce a recipt detailing a customers purchase information, items purchased, cost of each item and total cost.

→ The web application shall be able to produce weekly, monthly and yearly reports about sales.

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Date:

Non-functional Requirments of Online Website

→ The web application shall be easy to use by all employees including sales representatives and managers.

→ The web application shall be available in several languages.

→ The web application shall allow several sales to make at the same time without downgrading performance

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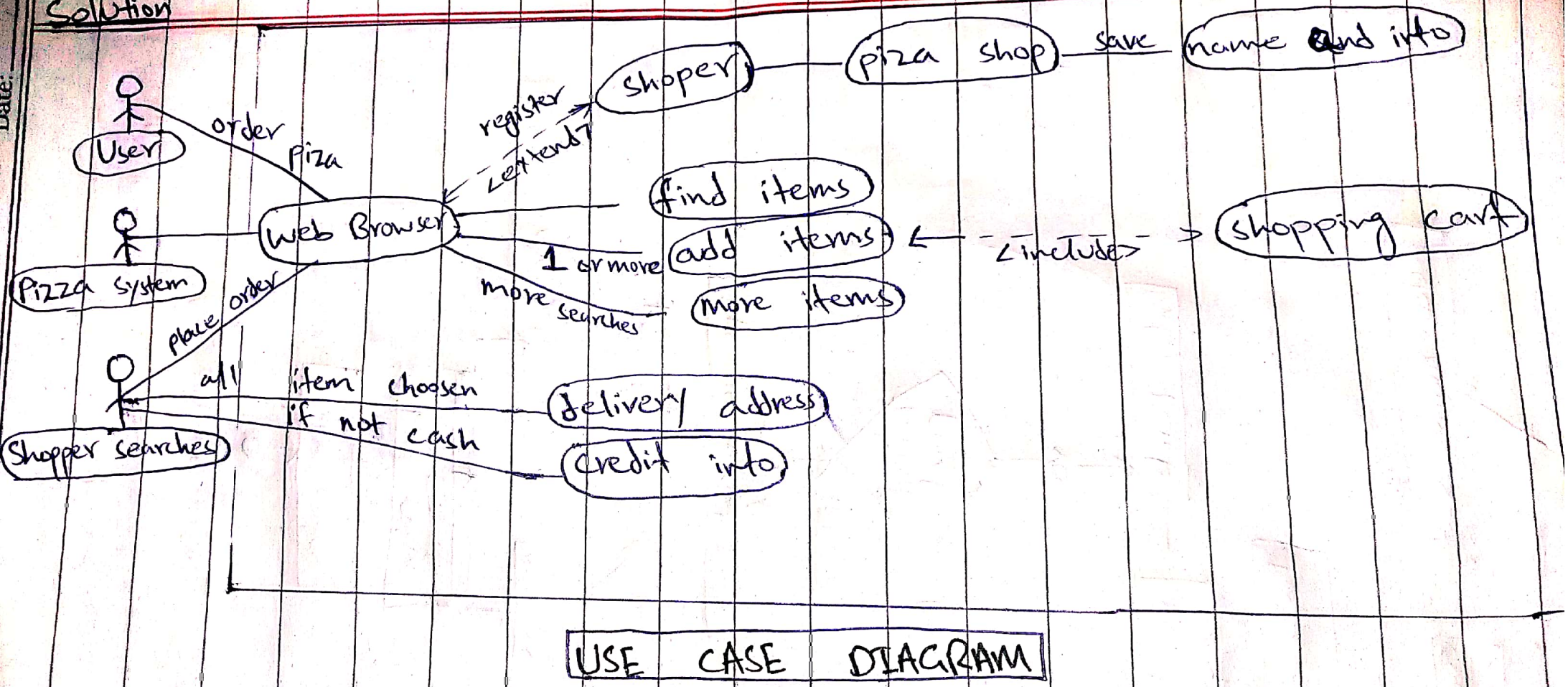
Q2

Solution



USE CASE DIAGRAM

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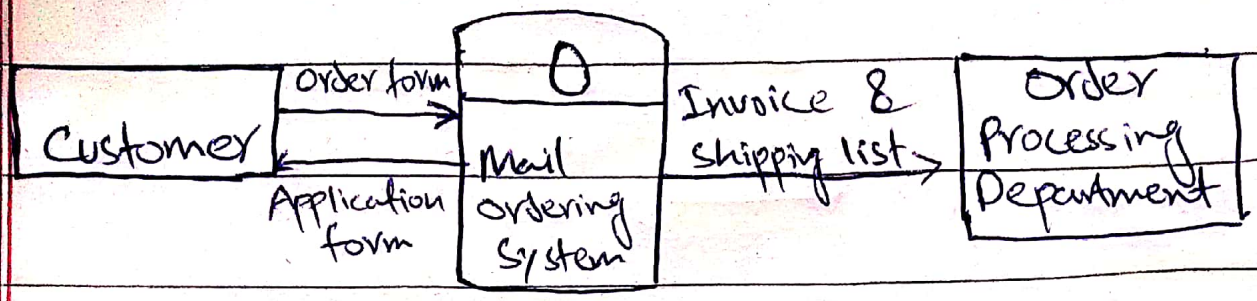
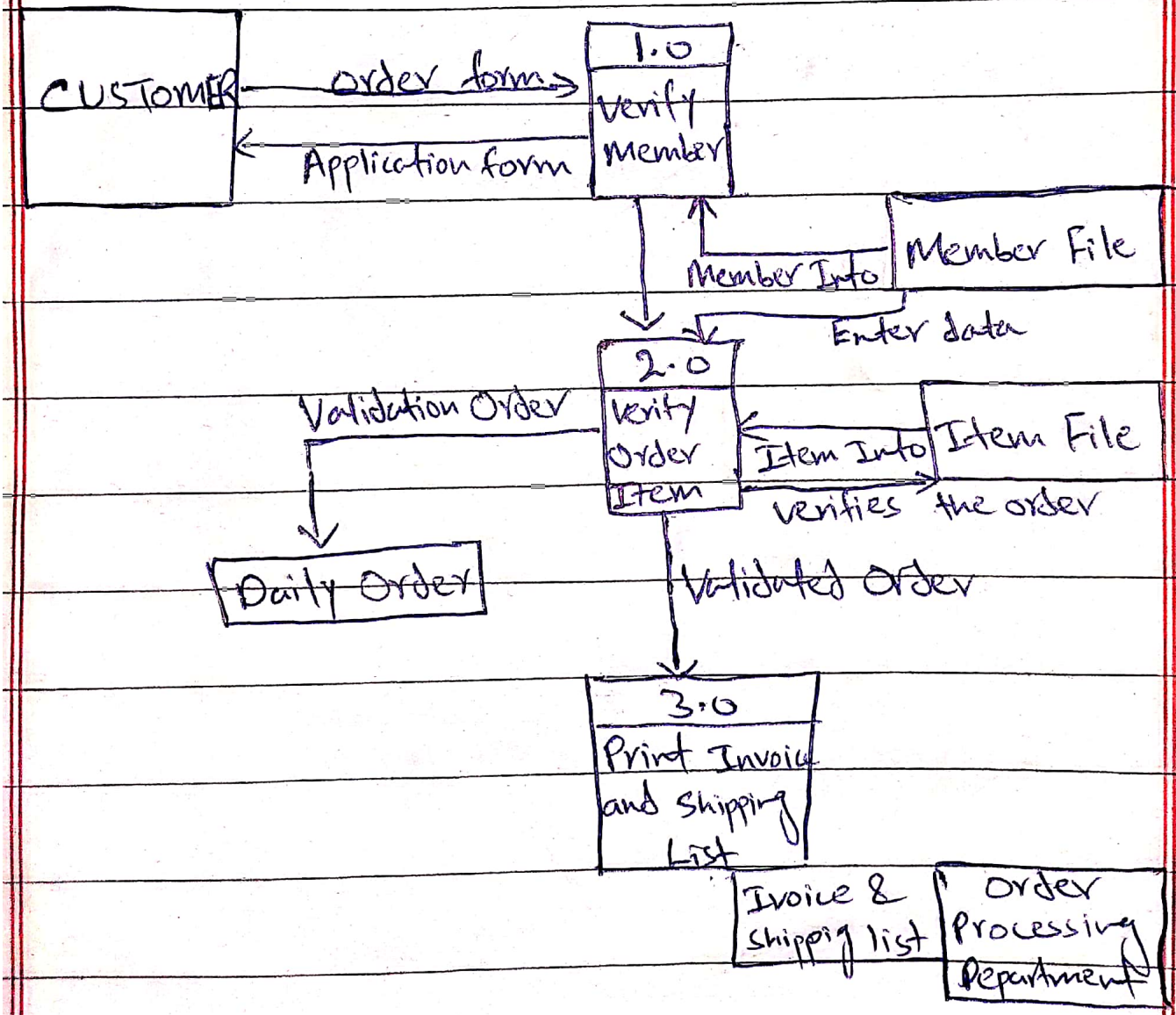
DFD Context Diagram



DFD Level 1 Diagram



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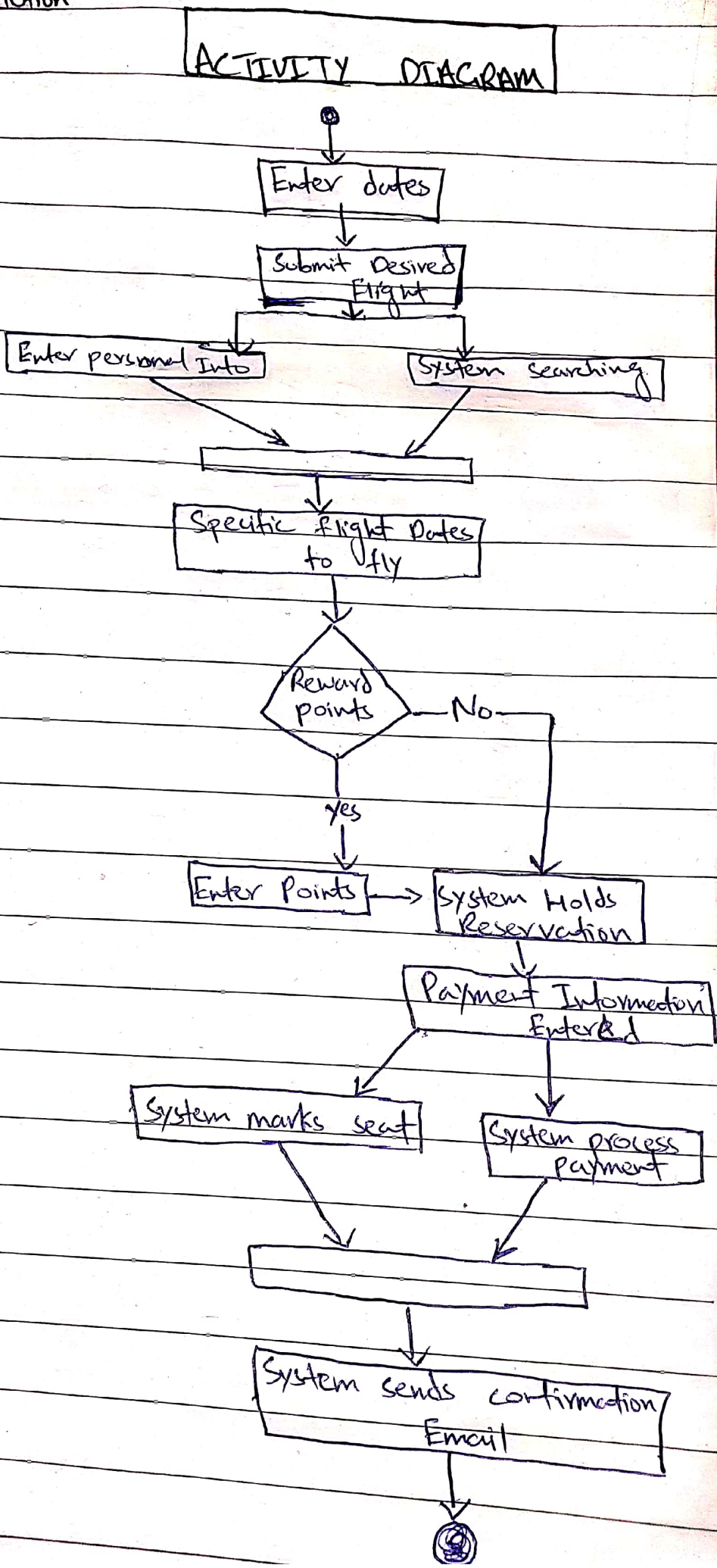
Q4

Solution



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