



FACULTY OF COMPUTING

SECD2613 - SYSTEM ANALYSIS AND DESIGN

SEMESTER 2 2024/2025

**LECTURER'S NAME**

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**GROUP ASSIGNMENT 2 (DFD)**

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**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

**FACULTY OF COMPUTING**  
UTM Johor Bahru

**Semester II 2024/2025**

Subject : **SECD2613 System Analysis and Design**  
Task : **Assignment 2**  
Title : **Group Assignment 2 (DFD 5%)**  
Due : **15/6/2025**  
Submission : **Submit softcopy (in .pdf format) via e-learning**

**INSTRUCTIONS:**

1. Each group must consist of **3 to 4 students**.
2. All answers must be **handwritten**, then **screenshotted and compiled into a single PDF file**. The PDF must be **uploaded via the link provided in e-learning**.
3. **Plagiarism is strictly prohibited** – any group found **copying directly from another group** will result in **both groups receiving a mark of zero (0)**.

**QUESTION 1**

**Fruity Fresh Juice** is a family-run food business that prepares and sells a wide variety of meals. The business is planning to develop a system to facilitate its meal ordering process. Customers place orders by calling Fruity Fresh Juice directly. During the call, the staff collects the customer's information (phone number, name, and address) along with the order details. Once the order is confirmed, the system will calculate the total amount including tax and delivery charges.

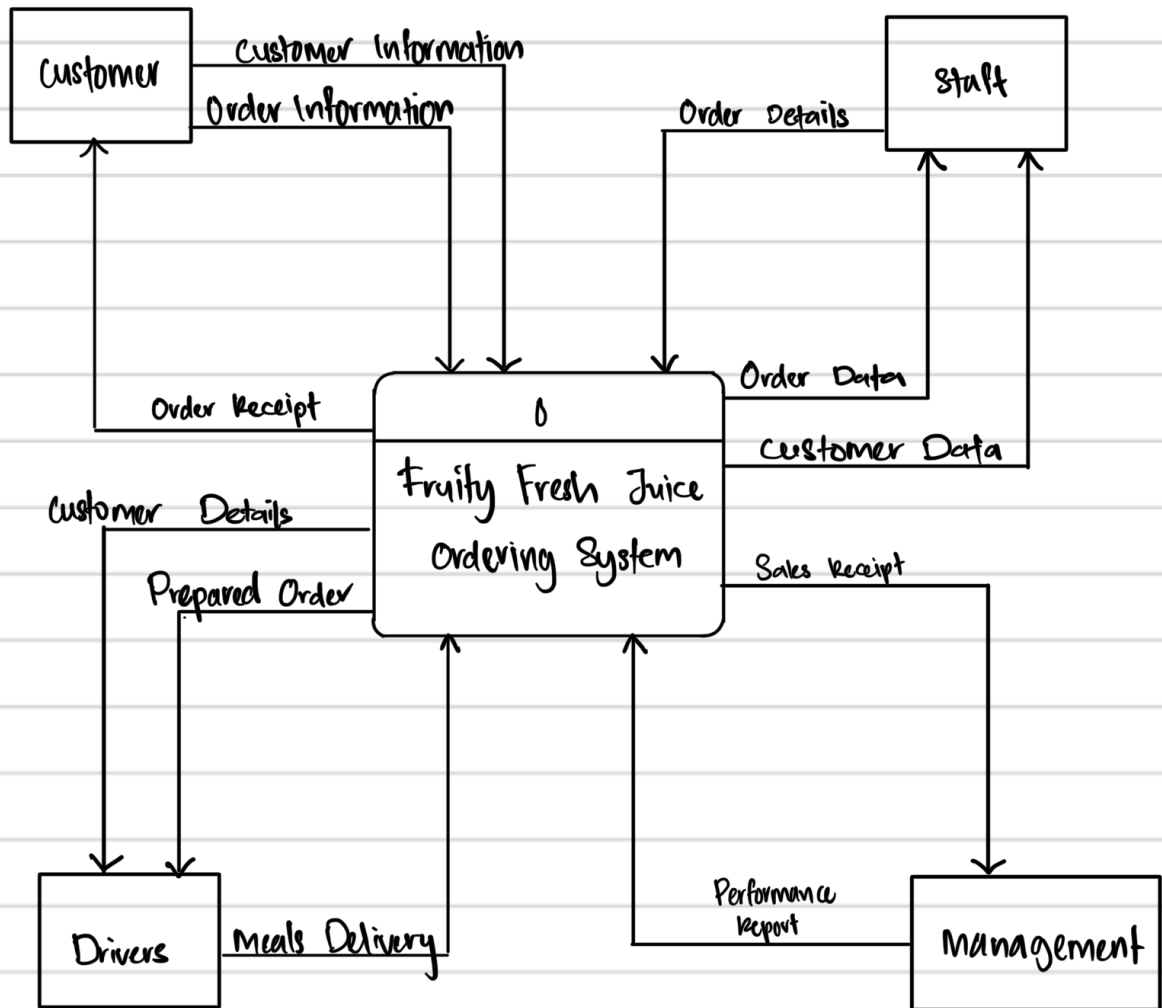
A receipt will then be printed and sent to the customer, and the order will be forwarded to the kitchen. After the meal is prepared, it will be handed over to the delivery driver along with the customer's information. The driver then delivers the meal to the customer.

To monitor business performance, every customer order receipt is also sent to the management. Management uses this data to prepare and print periodic performance reports based on previous order records.

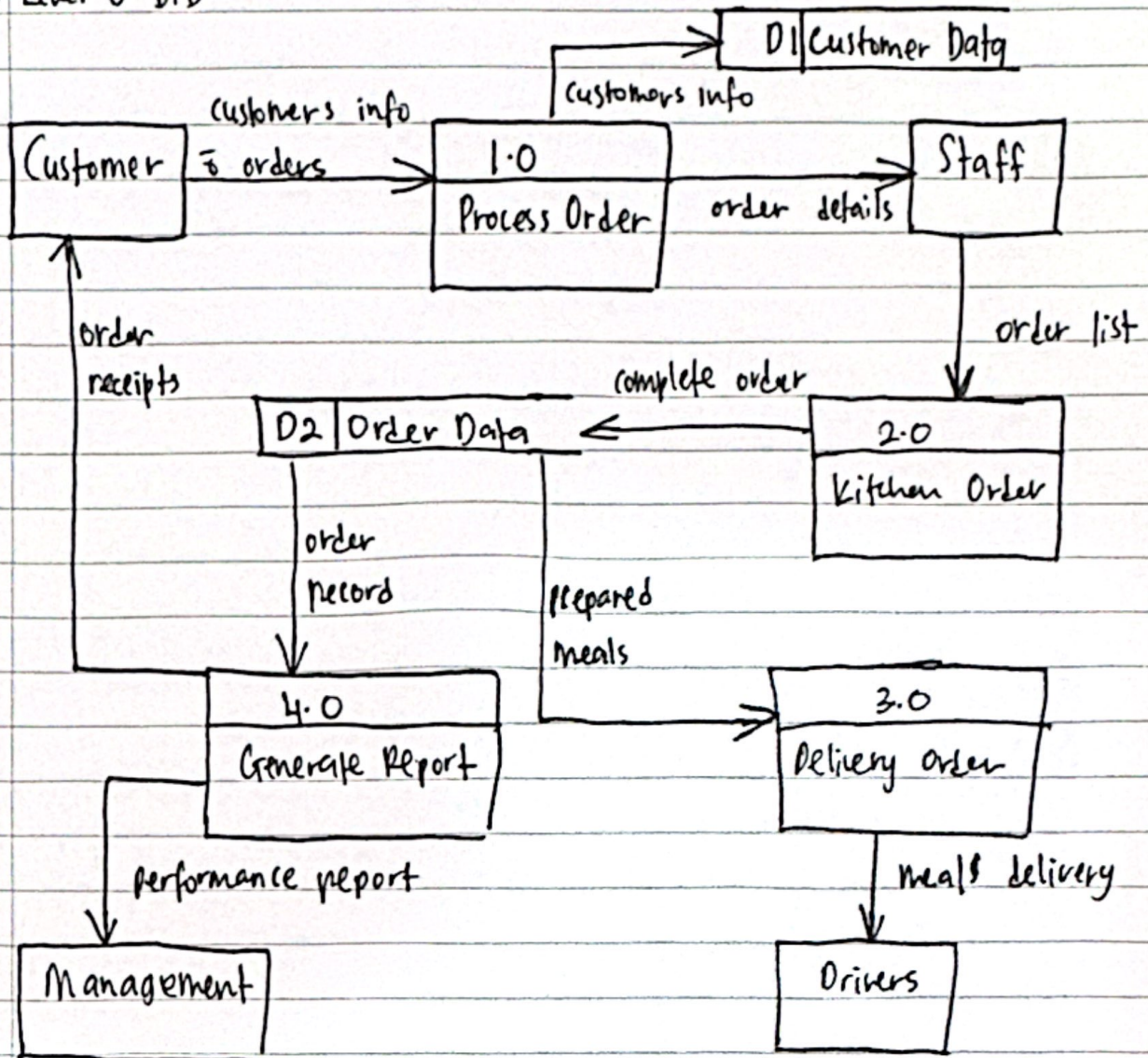
- a. Draw a **Context-level Data Flow Diagram (DFD)** for Fruity Fresh Juice.  
(5 marks)
- b. Develop the **Level 0 DFD** based on the Context Diagram from (a).  
(10 marks)
- c. Construct a **Child Diagram** for the process **“Prepare and Print Periodic Performance Report”**.  
(5 marks)

## Question 1

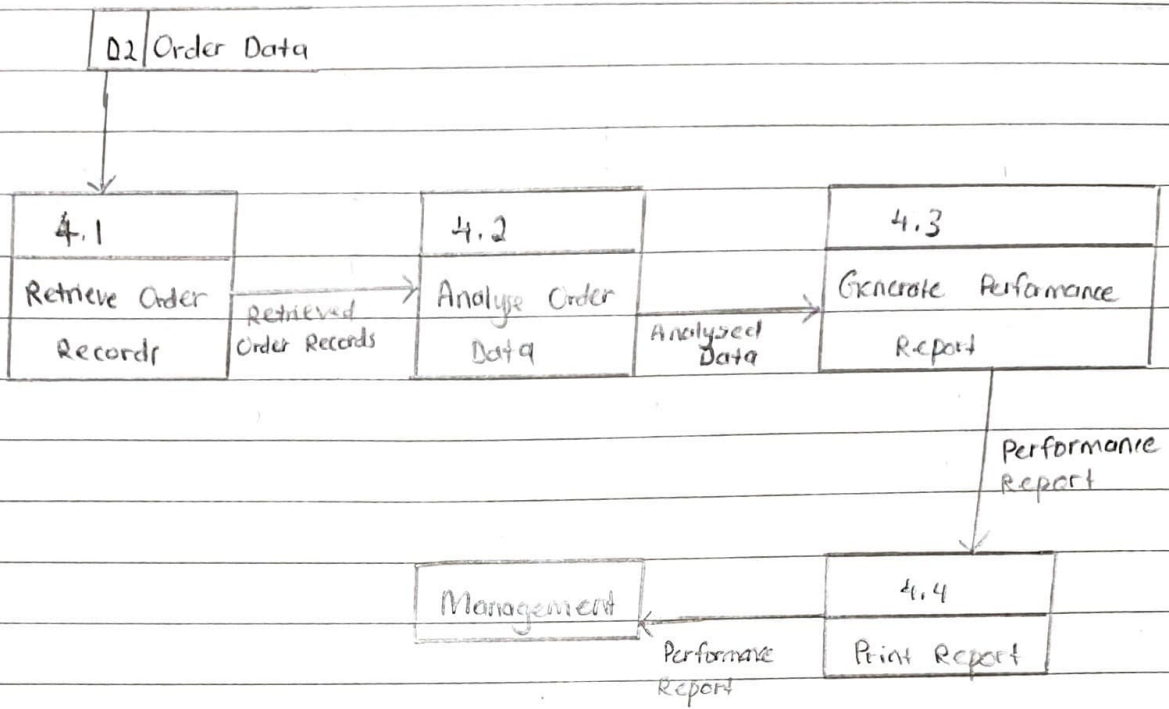
9) Context-level Diagram for Fruity Fresh Juice.



b) Level 0 DFD







## QUESTION 2

**PrintIt Quick** is a local printing service that specializes in fast and efficient printing solutions, offering everything from business cards to flyers and banners. The business aims to implement a basic yet effective system to handle customer orders and streamline customer service.

Customers visit PrintIt Quick to place printing requests by providing their printing specifications (e.g., document type, paper quality, quantity) to the service assistant at the counter. The assistant records the customer's details (name and contact number) and provides a cost estimate based on the selected printing options. If the customer accepts the price, they make a full payment, and the assistant issues a receipt containing an order number.

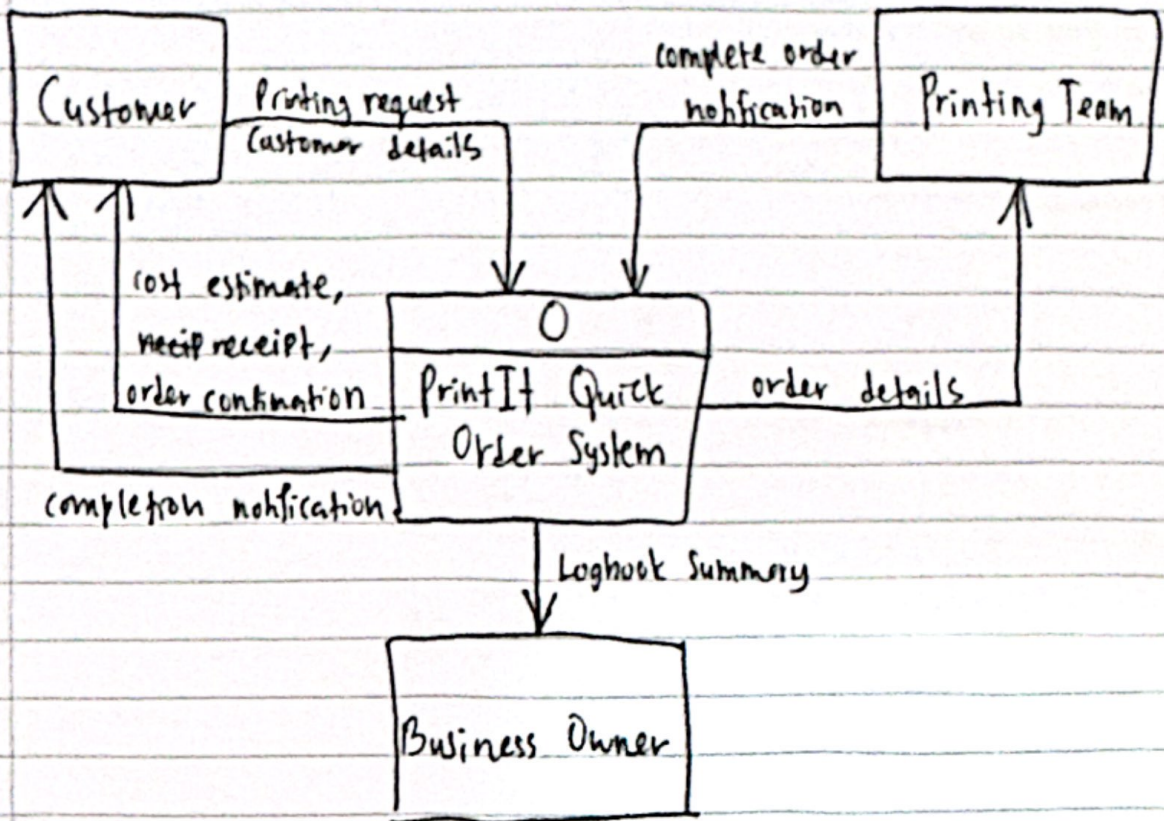
The order details are then forwarded to the printing team, who process and print the materials as specified. Once the printing is completed, the customer is notified via phone call or text message using the contact information provided earlier.

To track performance and ensure service quality, PrintIt Quick maintains a logbook that records all transactions — including customer information, order details, and payment records. At the end of each week, the business owner reviews the logbook to evaluate the number of completed orders and identify trends in customer requests.

This system enables PrintIt Quick to maintain a personal customer experience while ensuring that all orders are efficiently tracked and fulfilled.

- a. Draw a **Context-Level Data Flow Diagram (DFD)** for PrintIt Quick. (5 marks)
- b. Create the **Level 0 DFD** based on the Context Diagram from (a). (10 marks)
- c. Develop a **Child Diagram** for the process “**Order Completion and Notification.**”. (5 marks)

a) Context-level diagram for PrintIt Quick

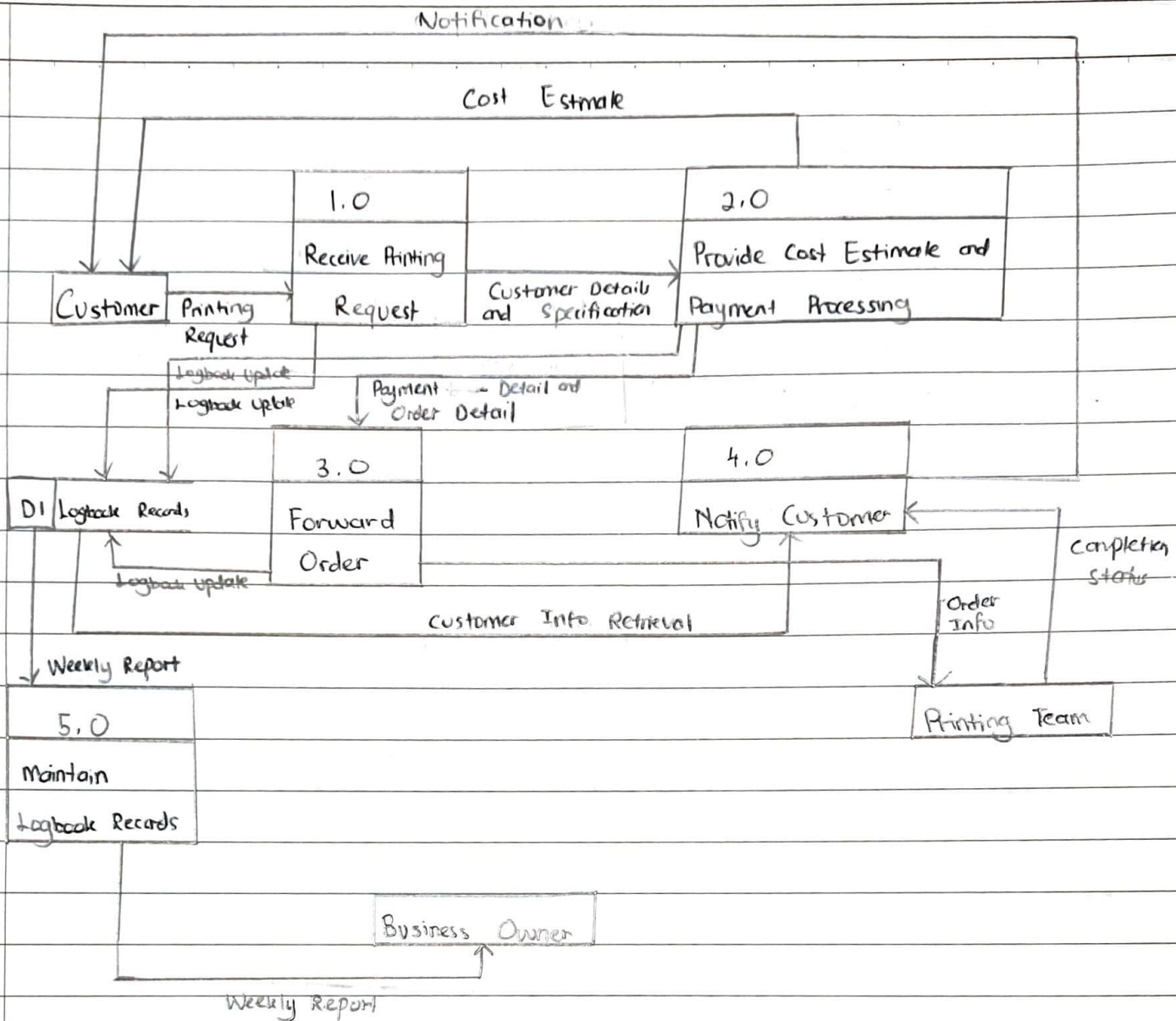




# Question 2b

No.:

Date:





## Question 2

c) Child Diagram for "Order Completion and Notification" process.

