

LEARNING LOGICAL PROGRAMMING WITH STUDY CASE



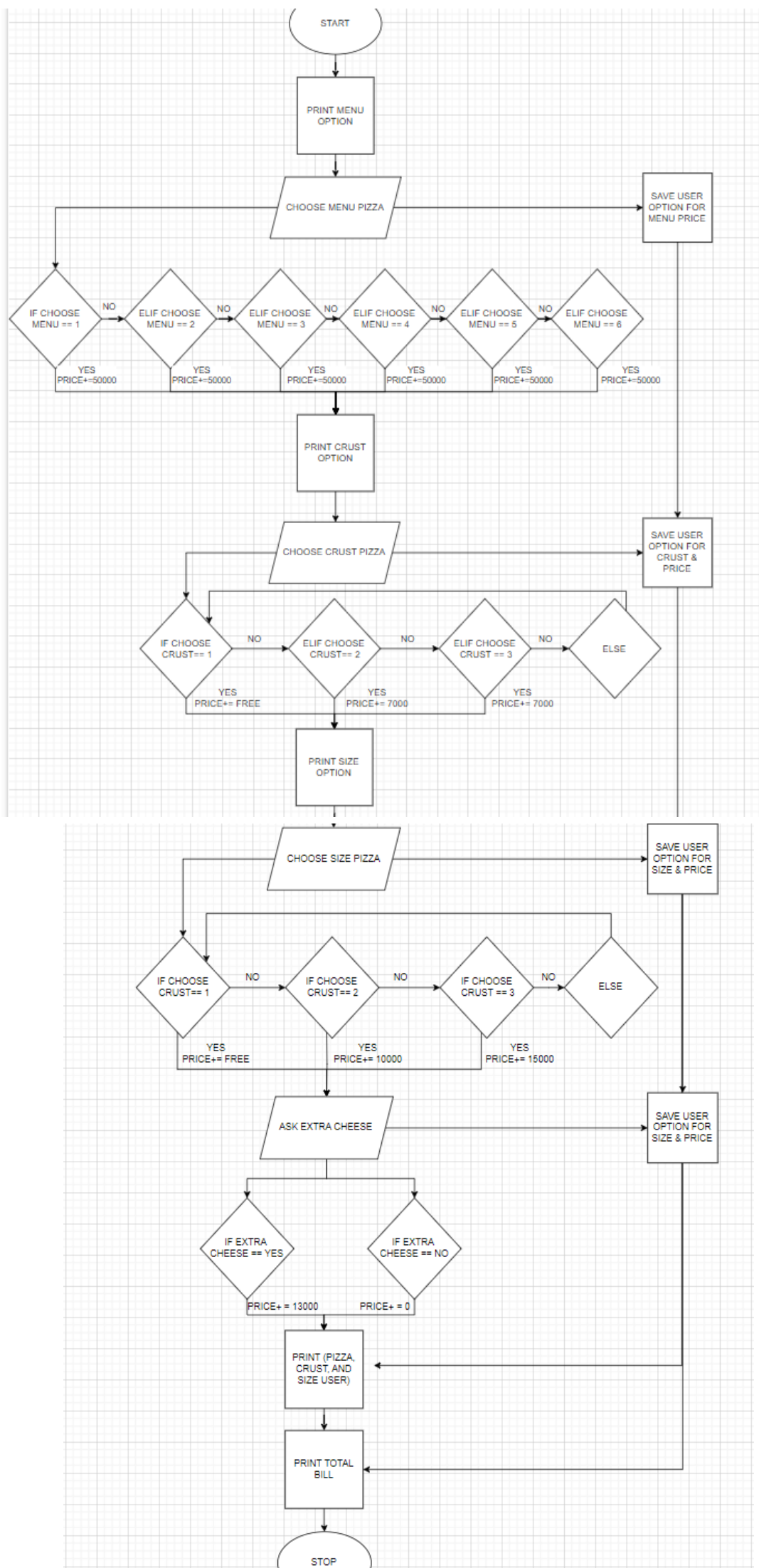
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**INFORMATICS MANAGEMENT STUDY PROGRAM
FACULTY OF VOCATIONAL
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EXPLANATIONS FLOWCHART

1. Start is for starting the program.
2. Print menu option is for displaying the menu list.
3. Choose menu pizza is for user input and choose menu.
4. There's 6 menus of pizza and all of the price is same at Rp.50.000.
5. If user choose menu 1/2/3/4/5/6 the system will save the user option and add the price.
6. Print crust option is for displaying the crust menu.
7. Choose crust pizza is for user input and choose crust.
8. There's 3 option of crust.
9. If user choose 1/2/3 the system will save the user option and add the price.
10. And if the user choice is not on the list the system will set it to default (free option).
11. Print size option is for displaying the size menu.
12. Choose size pizza is for user input and choose size pizza.
13. There's 3 size options.
14. If user choose 1/2/3 the system will save the user option and add the price.
15. And if the user choice is not on the list the system will set it to default (free option).
16. Ask extra cheese for ask user to input and choose for extra cheese or not.
17. If user input yes/no the system will save the user option and add the price.
18. Print (Pizza, Crust, Size, and Extra Cheese) is for displaying the user choice.
19. Print total bill for displaying the total price that increases over time.
20. Stop for stopping the program.

EXPLANATION SNIPPET CODE

SAVING USER OPTION

```
1  # SAVING MENU USER OPTION
2  user_option = ""
3  # SAVING CRUST USER OPTION
4  user_crust = ""
5  # SAVING SIZE USER OPTION
6  user_size = ""
7  # SAVING EXTRA CHEESE USER OPTION
8  user_cheese = ""
9  # PRICE
0  price = 0
```

In line 2 user_option is used for saving user choice that we will get after user choose menu.

In line 4 user_crust is used for saving user choice that we will get after user choose crust.

In line 6 user_size is used for saving user choice that we will get after user choose size.

In line 8 user_cheese is used for saving user choice that we will get after user choose extra cheese.

Price is to declare that in this section the price is 0, after all happens the price will be increase.

#DISPLAY AND ASK MENU PIZZA

```
2  # ALL VARIANT PRICE Rp.50.000
3  # DISPLAY AND ASK MENU
4  print ("===== WELCOME TO PIZZARIA FASTBEAR =====")
5  print ("CHOOSE YOUR FAVORITE PIZZA")
6  print ("MENU\t\t\t\t\t| PRICE")
7  print (f"1. Frankfurter BBQ \t\t\t\t\t| Rp. 50.000")
8  print (f"2. Monsta Meat\t\t\t\t\t| Rp. 50.000")
9  print (f"3. Super Supreme \t\t\t\t\t| Rp. 50.000")
0  print (f"4. Chicken Lovers \t\t\t\t\t| Rp. 50.000")
1  print (f"5. Cheese Lovers \t\t\t\t\t| Rp. 50.000")
2  print (f"6. Sausage Cheese \t\t\t\t\t| Rp. 50.000")
3  menu_choice = input("Select your Pizza: ")
```

Print line 4 for displaying “welcome to pizzaria fastbear”

Print line 5 for displaying “choose your favorite pizza”

Print line 6 for displaying “all menus of pizza and all price”

Menu_choice = input for user input pizza option

MENU LOGICAL

```
# MENU LOGICAL
if menu_choice == "1":
    price += 50000
    user_option = "Frankfurter BBQ"
elif menu_choice == "2":
    price += 50000
    user_option = "Monsta Meat"
elif menu_choice == "3":
    price += 50000
    user_option = "Super Supreme"
elif menu_choice == "4":
    price += 50000
    user_option = "Chicken Lovers"
elif menu_choice == "5":
    price += 50000
    user_option = "Cheese Lovers"
elif menu_choice == "6":
    price += 50000
    user_option = "Sausage Cheese"
else:
    print ("input the correct value!!")
```

In this section if menu_choice == 1, price will add Rp.50.000, set the user_option as Frankfurter BBQ

elif menu_choice == 2, price will add Rp.50.000, set the user_option as Monsta Meat

elif menu_choice == 3, price will add Rp.50.000, set the user_option as Super Supreme

elif menu_choice == 4, price will add Rp.50.000, set the user_option as Chicken Lovers

elif menu_choice == 5, price will add Rp.50.000, set the user_option as Cheese Lovers

elif menu_choice == 6, price will add Rp.50.000, set the user_option as Sausage Lovers

Here is the example below:

```
CHOOSE YOUR FAVORITE PIZZA
MENU | PRICE
1. Frankfurter BBQ | Rp. 50.000
2. Monsta Meat | Rp. 50.000
3. Super Supreme | Rp. 50.000
4. Chicken Lovers | Rp. 50.000
5. Cheese Lovers | Rp. 50.000
6. Sausage Cheese | Rp. 50.000
Select your Pizza: 2
```

In terminal the user choose number 2 (Monsta Meat), the system will save the option and + price for Rp. 50.000, after that continue the program.

DISPLAY AND ASK CRUST PIZZA

```
47 # DISPLAY AND ASK CRUST
48 print (f"\nChoose your Crust Choice")
49 print ("CRUST\t\t| PRICE")
50 print (f"1. Pan Crust\t| FREE")
51 print (f"2. Sausage Crust| Rp. 7.000")
52 print (f"3. Cheesy Crust\t| Rp. 7.000")
53 crust_choice = input(f"Crust for your pizza: ")
54 # CRUST LOGICAL
```

Print line 48 for displaying “choose your crust choice”

Print line 49 for displaying “all crust and all price”

Crust_choice =input for user input crust pizza option

CRUST LOGICAL

```
# CRUST LOGICAL
if crust_choice == "1":
    price += 0
    user_crust = "Pan Crust"
elif crust_choice == "2":
    price += 7000
    user_crust = "Sausage Crust"
elif crust_choice == "3":
    price += 7000
    user_crust = "Cheesy Crust"
else:
    print ("Value didn't exist, we set to default")
    crust_choice == "1"
    user_crust = "Pan Crust"
    price += 0
```

In this section if the crust_choice == 1, the price will add Rp. 0, and set the user_crust as Pan Crust

elif the crust_choice == 2, the price will add Rp. 7.000, and set user_crust as Sausage Crust

elif the crust_choice == 3, the price will add Rp. 7.000, and set user_crust as Cheesy Crust

and if none of above True, the system will set it to default (Pan Crust) the free one.

Here is example below :

```
Choose your Crust Choice
CRUST          | PRICE
1. Pan Crust   | FREE
2. Sausage Crust| Rp. 7.000
3. Cheesy Crust| Rp. 7.000
Crust for your pizza: 2
```

In this terminal user choose number 2 (Sausage Crust) for the Crust Pizza, the system will save user option and add the price for Rp. 7.000, after that continue the program.

DISPLAY AND ASK SIZE PIZZA

```
70 # DISPLAY AND ASK SIZE
71 print (f"\nChoose your Pizza Size")
72 print ("SIZE\t\t| PRICE")
73 print (f"1. Personal\t| FREE")
74 print (f"2. Medium\t| Rp. 10.000")
75 print (f"3. Large\t| Rp. 15.000")
76 size_choice = input("Size Pizza: ")
```

Print line 71 for displaying “choose your crust choice”

Print line 72-75 for displaying “all size and all price”

Size_choice = input is used for receive the user input

```
# SIZE LOGICAL
if size_choice == "1":
    price += 0
    user_size = "Personal"
elif size_choice == "2":
    price += 10000
    user_size = "Medium"
elif size_choice == "3":
    price += 15000
    user_size = "Large"
else:
    print ("Value didn't exist, we set to default")
    size_choice == "1"
    user_size = "Personal"
    price += 0
```

In this logical if size_choice == 1, the price will add for Rp. 0, and set user_size as Personal
elif size_choice == 2, the price will add for Rp. 10.000, and set user_size as Personal
elif size_choice == 3, the price will add for Rp. 15.000, and set user_size as Personal
and if none of above True, the system will set it to default (Personal Size) the free one.

Here is the example below :

```
Choose your Pizza Size
SIZE          | PRICE
1. Personal   | FREE
2. Medium     | Rp. 10.000
3. Large      | Rp. 15.000
Size Pizza: 2
```

In this terminal user choose number 2 (Medium size) for Rp. 10.000, the price will add for Rp. 10.000, and set the user_size as Medium, after that continue the program.

ASK FOR EXTRA CHEESE

```
# ASK FOR EXTRA CHEESE
extra_cheese = input("\nDo you want to add Extra Cheese for Rp.13.000? (yes/no): ")
# EXTRA CHEESE LOGICAL
```

In this section we ask costumer to add extra cheese or not for Rp. 13.000

```
if extra_cheese == "yes":
    price += 13000
    user_cheese = "With Extra Cheese"
elif extra_cheese == "no":
    price += 0
    user_cheese = "No Extra Cheese"
else :
    print ("Value didn't exist, we set to default")
    extra_cheese == "no"
    price += 0
```

In this section if extra_cheese == “yes”, the price will add for Rp. 13.000, and set user_cheese to “With Extra Cheese”

elif extra_cheese == “no”, the price will add for Rp.0, and set user_cheese to “No Extra Cheese”

and if none of above True the system will set for “No”, the free option.

```
Do you want to add Extra Cheese for Rp.13.000? (yes/no): yes
```

In this terminal the user choose yes for extra cheese topping. The system will save this option and add the price + Rp. 13.000 and will set user_cheese to “With Extra Cheese”.

#SUMMARY SECTION

```
107 print (f" ===== SUMMARY ORDER =====")
108 print (f"PIZZA\t\t: {user_option}\nCRUST\t\t: {user_crust}\nSIZE\t\t: {user_size}\nEXTRA CHEESE\t: {user_cheese}")
109 print (f" ===== TOTAL BILL =====")
110 print (f"THANKYOU FOR ORDERING IN PIZZARIA FASTBEAR")
111 print (f"Your Total bill is: Rp.{price:3,.0f}")
112 print (f" ===== END OF RECEIPT =====")
```

Print line 107 for display the header summary

Print line 108 for displaying what the user choice

Print line 111 for displaying the total price

Here is the exemple below :

```
===== SUMMARY ORDER =====
PIZZA          : Monsta Meat
CRUST          : Sausage Crust
SIZE           : Medium
EXTRA CHEESE   : With Extra Cheese
===== TOTAL BILL =====
THANKYOU FOR ORDERING IN PIZZARIA FASTBEAR
Your Total bill is: Rp.80,000
===== END OF RECEIPT =====
```

In this terminal the user choose pizza menu number 2 (Monsta Meat), and Crust number 2(Sausage Crust), Size number 2(Medium Size), and add Extra Cheese is yes. So the price result is Rp. 50.000 (price Pizza Monsta Meat), + Rp. 7.000 (price Sausage Crust), + Rp.

10.000 (price Size Medium) and+ Rp. 13.000 (price for Extra Cheese). After summed all the total will Rp. 80.000 as you can see in terminal.

PREVIEW ALL CODE AND TERMINAL

SNIPPET

```
# SAVING MENU USER OPTION
user_option = ""
# SAVING CRUST USER OPTION
user_crust = ""
# SAVING SIZE USER OPTION
user_size = ""
# SAVING EXTRA CHEESE USER OPTION
user_cheese = ""
# PRICE
price = 0
# ALL VARIANT PRICE Rp.50.000
# DISPLAY AND ASK MENU
print ("===== WELCOME TO PIZZARIA FASTBEAR =====")
print ("CHOOSE YOUR FAVORITE PIZZA")
print ("MENU\t\t\t\t\t PRICE")
print (f"1. Frankfurter BBQ \t\t\t\t\t Rp. 50.000")
print (f"2. Monsta Meat\t\t\t\t\t Rp. 50.000")
print (f"3. Super Supreme \t\t\t\t\t Rp. 50.000")
print (f"4. Chicken Lovers \t\t\t\t\t Rp. 50.000")
print (f"5. Cheese Lovers \t\t\t\t\t Rp. 50.000")
print (f"6. Sausage Cheese \t\t\t\t\t Rp. 50.000")
menu_choice = input("Select your Pizza: ")
# MENU LOGICAL
if menu_choice == "1":
    price += 50000
    user_option = "Frankfurter BBQ"
elif menu_choice == "2":
    price += 50000
    user_option = "Monsta Meat"
elif menu_choice == "3":
    price += 50000
    user_option = "Super Supreme"
elif menu_choice == "4":
    price += 50000
    user_option = "Chicken Lovers"
elif menu_choice == "5":
    price += 50000
elif menu_choice == "6":
    price += 50000
    user_option = "Sausage Cheese"
else:
    print ("input the correct value!!")
# DISPLAY AND ASK CRUST
print (f"\nChoose your Crust Choice")
print ("CRUST\t\t\t\t\t PRICE")
print (f"1. Pan Crust\t\t\t\t\t FREE")
print (f"2. Sausage Crust\t\t\t\t\t Rp. 7.000")
print (f"3. Cheesy Crust\t\t\t\t\t Rp. 7.000")
crust_choice = input(f"Crust for your pizza: ")
# CRUST LOGICAL
if crust_choice == "1":
    price += 0
    user_crust = "Pan Crust"
elif crust_choice == "2":
    price += 7000
    user_crust = "Sausage Crust"
elif crust_choice == "3":
    price += 7000
    user_crust = "Cheesy Crust"
else:
    print ("Value didn't exist, we set to default")
    crust_choice == "1"
    user_crust = "Pan Crust"
    price += 0
```

```

# DISPLAY AND ASK SIZE
print (f"\nChoose your Pizza Size")
print ("SIZE\t\t| PRICE")
print (f"1. Personal\t| FREE")
print (f"2. Medium\t| Rp. 10.000")
print (f"3. Large\t| Rp. 15.000")
size_choice = input("Size Pizza: ")
# SIZE LOGICAL
if size_choice == "1":
    price += 0
    user_size = "Personal"
elif size_choice == "2":
    price += 10000
    user_size = "Medium"
elif size_choice == "3":
    price += 15000
    user_size = "Large"
else:
    print ("Value didn't exist, we set to default")
    size_choice == "1"
    user_size = "Personal"
    price += 0

# ASK FOR EXTRA CHEESE
extra_cheese = input("\nDo you want to add Extra Cheese for Rp.13.000? (yes/no): ")
# EXTRA CHEESE LOGICAL
if extra_cheese == "yes":
    price += 13000
    user_cheese = "With Extra Cheese"
elif extra_cheese == "no":
    price += 0
    user_cheese = "No Extra Cheese"
else :
    print ("Value didn't exist, we set to default")
    extra_cheese == "no"
    price += 0

print (f" ===== SUMMARY ORDER =====")
print (f"PIZZA\t\t: {user_option}\nCRUST\t\t: {user_crust}\nSIZE\t\t: {user_size}\nEXTRA CHEESE\t: {user_cheese}")
print (f" ===== TOTAL BILL =====")
print (f"THANKYOU FOR ORDERING IN PIZZARIA FASTBEAR")
print (f"Your Total bill is: Rp.{price:3,.0f}")
print (f" ===== END OF RECEIPT =====")

```

TERMINAL

```
===== WELCOME TO PIZZARIA FASTBEAR =====
CHOOSE YOUR FAVORITE PIZZA
MENU                                     | PRICE
1. Frankfurter BBQ                     | Rp. 50.000
2. Monsta Meat                         | Rp. 50.000
3. Super Supreme                      | Rp. 50.000
4. Chicken Lovers                     | Rp. 50.000
5. Cheese Lovers                      | Rp. 50.000
6. Sausage Cheese                     | Rp. 50.000
Select your Pizza: 3

Choose your Crust Choice
CRUST                                  | PRICE
1. Pan Crust                          | FREE
2. Sausage Crust                      | Rp. 7.000
3. Cheesy Crust                      | Rp. 7.000
Crust for your pizza: 3

Choose your Pizza Size
SIZE                                  | PRICE
1. Personal                          | FREE
2. Medium                           | Rp. 10.000
3. Large                            | Rp. 15.000
Size Pizza: 2

Do you want to add Extra Cheese for Rp.13.000? (yes/no): no
===== SUMMARY ORDER =====
PIZZA                                : Super Supreme
CRUST                                : Cheesy Crust
SIZE                                 : Medium
EXTRA CHEESE                         : No Extra Cheese
===== TOTAL BILL =====
THANKYOU FOR ORDERING IN PIZZARIA FASTBEAR
Your Total bill is: Rp.67,000
===== END OF RECEIPT =====
```

CONCLUSION :

This program is designed to simulate pizza ordering with various menu option, size, crust type, and extra cheese add-on. The program uses simple logic to store user selections and adjust the price based on the chosen options. Once all the selections are made, the system will display a summary of the order and the total price, which is calculated progressively. The program also includes default settings for each option, so if the user does not provide a valid choice, the system will automatically set a default option without additional cost. This process involves the use of logical flow, such as **if-else** statements, to validate user input, as well as the use of variables to store selections and calculate the total price.

Link github : <https://github.com/YAS-MAN/S1/blob/c34c3c54ba1447d83da5a22803e4762c22da6a0e/PIZZARIA%20FIX.py>