Final Submission Write-Up

1. Project Design

**Cookout Estimation**

**Project Design**

* Print Welcome
* Ask user’s name
* Ask user the amount of guest and validate with a try-except statement
* Ask user if wants us to serve burgers
* While loop if the customer enters other inputs other than “Y” or “N”
  + If customer say Yes
    - Ask how many burgers for each question and validate with a try-except statement
    - break
  + Else If customer say No
    - break
  + Else
    - Ask user to re-enter again Y or N
    - Loop the entire while-loop again
* End While-loop
* Same while-loop for burgers
* Same while-loop for salads
* While True - Meal options
  + Ask user if wants chips and drinks
  + If yes
    - Charge 3 dollars
    - break
  + If No
    - Charge 0 dollars
    - break
  + Else
    - Ask user to re-enter valid input Y or N
* While True – Host calculation
  + Ask user for the party time and validate with a try-except statement
    - If party time is greater or equal than 3
      * Proceed calculation
      * Break
    - Else
      * Ask the user to re-enter. Minimum time for hosting a party is 3 hours
* While True – Coupon Code
  + If coupon code is JOSE-COUPON
    - Discount is 5 dollars
    - Break
  + Elif coupon code is nothing
    - Discount is 0 dollars
    - Break
  + Else
    - Ask user to enter a valid coupon code
* Calculate minimum packages needed for burgers, chicken patties, buns, salads, chips, sodas. By using math.ceil()
* Calculate the leftover for burgers, chicken patties, buns, bags, cans, salads, chips, sodas.
* Calculate out of pocket, (minimum packages needed \* packages cost ) for each item
* Calculate profit margin, 0.2 \* out of pocket
* Calculate catering cost, out of pocket + profit margin + host cost
* Print the calculations

2. Test Cases

Test Case 1 – WORST CASE

----------------------------------------------------------------

Welcome to McJose's Burgers! Let's estimate your cookout cost.

What is your name? Jose

Welcome Jose, How many guests will be attending the cookout? asd

Please enter a valid number

Welcome Jose, How many guests will be attending the cookout? 5

Would you like us to serve burgers? Y/N asd

Please enter Y for yes or N for no: y

Great, we'll serve burgers!

How many burgers do you think each person will eat? asd

Please re-enter a valid number

How many burgers do you think each person will eat? 5

Would you like us to serve chicken sandwich? Y/N asd

Please enter Y for yes or N for no: y

Great, we'll serve chicken sandwich!

How many chicken sandwich do you think each person will eat? asd

Please re-enter a valid number

How many chicken sandwich do you think each person will eat? 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Input Type** | **User Input** | **Expected Output** | **Actual Output** | **Pass?** |
| User input | Jose | Welcome Jose, How many guests will be attending the cookout? | Welcome Jose, How many guests will be attending the cookout? | Yes |
| User input | asd | Please enter a valid number | Please enter a valid number | Yes |
| User input | 5 | Would you like us to serve burgers? Y/N | Would you like us to serve burgers? Y/N | Yes |
| User input | asd | Please enter Y for yes or N for no: | Please enter Y for yes or N for no: | Yes |
| User input | y | Great, we'll serve burgers! How many burgers do you think each person will eat? | Great, we'll serve burgers! How many burgers do you think each person will eat? | Yes |
| User input | asd | Please re-enter a valid number. How many burgers do you think each person will eat? | Please re-enter a valid number. How many burgers do you think each person will eat? | Yes |
| User input | 5 | Would you like us to serve chicken sandwich? Y/N | Would you like us to serve chicken sandwich? Y/N | Yes |
| User input | asd | Please enter Y for yes or N for no | Please enter Y for yes or N for no | Yes |
| User input | y | Great, we'll serve chicken sandwich! | Great, we'll serve chicken sandwich! | Yes |

Test Case 2: WORST CASE

Would you like us to serve salad? Y/N asd

Please enter Y for yes or N for no: y

Great, we'll serve salads!

How many bowls of salads do you think each person will eat? asd

Please re-enter a valid number

How many bowls of salads do you think each person will eat? 5

Would you like chips and drink for each customer Y or N asd

Please enter Y for yes or N for no:

Would you like chips and drink for each customer Y or N y

How long will the party last, in hours? asd

Please re-enter a valid number

How long will the party last, in hours? 2

The minimum time for host a party is three hours. Please re-enter.

How long will the party last, in hours? 3

If you have a coupon code, enter it here. If you don't, press Enter to continue: asd

Please. Enter a valid coupon code

If you have a coupon code, enter it here. If you don't, press Enter to continue: JOSE-COUPON

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Input Type** | **User Input** | **Expected Output** | **Actual Output** | **Pass?** |
| User input | asd | Please enter Y for yes or N for no: | Please enter Y for yes or N for no: | Yes |
| User input | y | Great, we'll serve salads! How many bowls of salads do you think each person will eat? | Great, we'll serve salads! How many bowls of salads do you think each person will eat? | Yes |
| User input | asd | Please re-enter a valid number. How many bowls of salads do you think each person will eat? | Please re-enter a valid number. How many bowls of salads do you think each person will eat? | Yes |
| User input | 5 | Would you like chips and drink for each customer Y or N | Would you like chips and drink for each customer Y or N |  |
| User input | y | How long will the party last, in hours? | How long will the party last, in hours? | Yes |
| User input | asd | Please re-enter a valid number. How long will the party last, in hours? | Please re-enter a valid number. How long will the party last, in hours? |  |
| User input | 2 | The minimum time for host a party is three hours. Please re-enter. How long will the party last, in hours? | The minimum time for host a party is three hours. Please re-enter. How long will the party last, in hours? | Yes |
| User input | 3 | If you have a coupon code, enter it here. If you don't, press Enter to continue: | If you have a coupon code, enter it here. If you don't, press Enter to continue: | Yes |
| User input | asd | Please. Enter a valid coupon code. If you have a coupon code, enter it here. If you don't, press Enter to continue: | Please. Enter a valid coupon code. If you have a coupon code, enter it here. If you don't, press Enter to continue: |  |

Test Case 3: GOOD CASE

Text

Description automatically generated

|  |  |  |
| --- | --- | --- |
| **Expected Output** | **Actual Output** | **Pass?** |
| Minimum packages of burgers: 5 | Minimum packages of burgers: 5 | Yes |
| Minimum packages of chicken sandwich: 0 | Minimum packages of chicken sandwich: 0 | Yes |
| Minimum packages of buns: 5 | Minimum packages of buns: 5 | Yes |
| Minimum box of chips: 1 | Minimum box of chips: 1 |  |
| Minimum pack of sodas: 2 | Minimum pack of sodas: 2 | Yes |
| Leftovers: 0 burgers, 0 chicken patties, 0 buns, 0 salad packages, 9 chip bags, 9 soda cans | Leftovers: 0 burgers, 0 chicken patties, 0 buns, 0 salad packages, 9 chip bags, 9 soda cans | Yes |
| Out of pocket cost: $158.00 | Out of pocket cost: $158.00 | Yes |
| Your host cost: $100.00 | Your host cost: $100.00 | Yes |
| Your subtotal: $289.60 | Your subtotal: $289.60 | Yes |
| Your discount: $5.00 | Your discount: $5.00 | Yes |
| TOTAL COST: $284.60 | TOTAL COST: $284.60 | Yes |

Text

Description automatically generatedTest Case 4: AVERAGE CASE

3. Learning Experience

The project 2 helped to better understand how to do menu-programs and helped to sharpen our programming skills in python. The assignment was about to collect data from user and perform some calculation in order to prompt the cost, profit, and price for the cookout. I was unfamiliar with these types of calculations, which complicate me at first point, but it was no impossible to code. So, I grabbed my paper and started doing this calculation to find out what these calculations meant. I related these calculations with an actual life example, such as restaurant or grocery stores where they calculate an estimate with respect to the cost of the product, profit, and discounts. While I was doing these calculations on paper sheet, I learned the process and coded the algorithm to find the minimum packages needed for each product and leftovers. At the beginning of the project, I first started to code the menu which took me a while to make it done. Thanks to my experience in my last project in coding the menu client, I did not have any inconvenience while doing so. However, there were some complications with Python. One of these, the do-while loop statement is not integrated in Python, which is helpful when creating menus, so I had to use another resource such as a while-True loop to loop again when user inputs wrong answers.

Moreover, I also learned how to implement try-except blocks in the menu-client part, which helped me to validate inputs from the user. In my view, the most valuable skill I learned from this assignment was how to use for while loops and try-except statement.

At the end, the program worked successfully and had not complications with user-program interaction. Each possible incorrect input was acknowledged so that the user re-enters another answer. Perhaps, I forgot to add a while loop for the whole menu so that it loops forever until the user decides to stop or not, but I am happy with the outcome of this assignment . Overall, it was a fun program to code, and I am ready for the next challenge coding program and projects.

4. Assumptions

* The user may choose any value for their names
* The user might enter a choice for the number of people attending the cookout less than 1 or negative number; however, the program will ask the user to re-enter the number of people again
* The user may choose if he wants burgers with a Y or N; however, if the user enters another input other than Y or N. The program will ask the user to re-enter again.
* The user might choose another value than a number for the amount of burgers for each person; however, the user will be asked to re-enter a value again.
* The user may choose if he wants chicken sandwich with a Y or N; however, if the user enters another input other than Y or N. The program will ask the user to re-enter again.
* The user might choose another value than a number for the amount of chicken sandwich for each person; however, the user will be asked to re-enter a value again.
* The user may choose if he wants salads with a Y or N; however, if the user enters another input other than Y or N. The program will ask the user to re-enter again.
* The user might choose another value than a number for the amount of bowls of salads for each person; however, the user will be asked to re-enter a value again.
* The user may choose if he wants chips and drinks with a Y or N; however, if the user enters another input other than Y or N. The program will ask the user to re-enter again.
* The user might choose another value than a number for the party time; however, if the user enters another input other than a number. The program will ask the user to re-enter again.
* The user will be asked to enter a coupon code, but if user enters a invalid coupon code, the program will ask the user to re-enter again; however, if the user enters space, the discount will be 0 dollars