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AUTOMATIC LAUNDRY MACHINE

CSCI 1300

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ABOUT THE PROGRAMMING

Embark on a digital laundry experience with our cutting-edge Automatic Laundry Machine Simulator! 🌀✨ Say goodbye to guesswork and embrace precision as our program intricately calculates the perfect price for your laundry journey.

Your laundry's weight, the touch of extra detergent magic, the chosen wash duration, and the dance of water temperatures – all elegantly choreographed to determine a tailored price just for you. 🌟👤

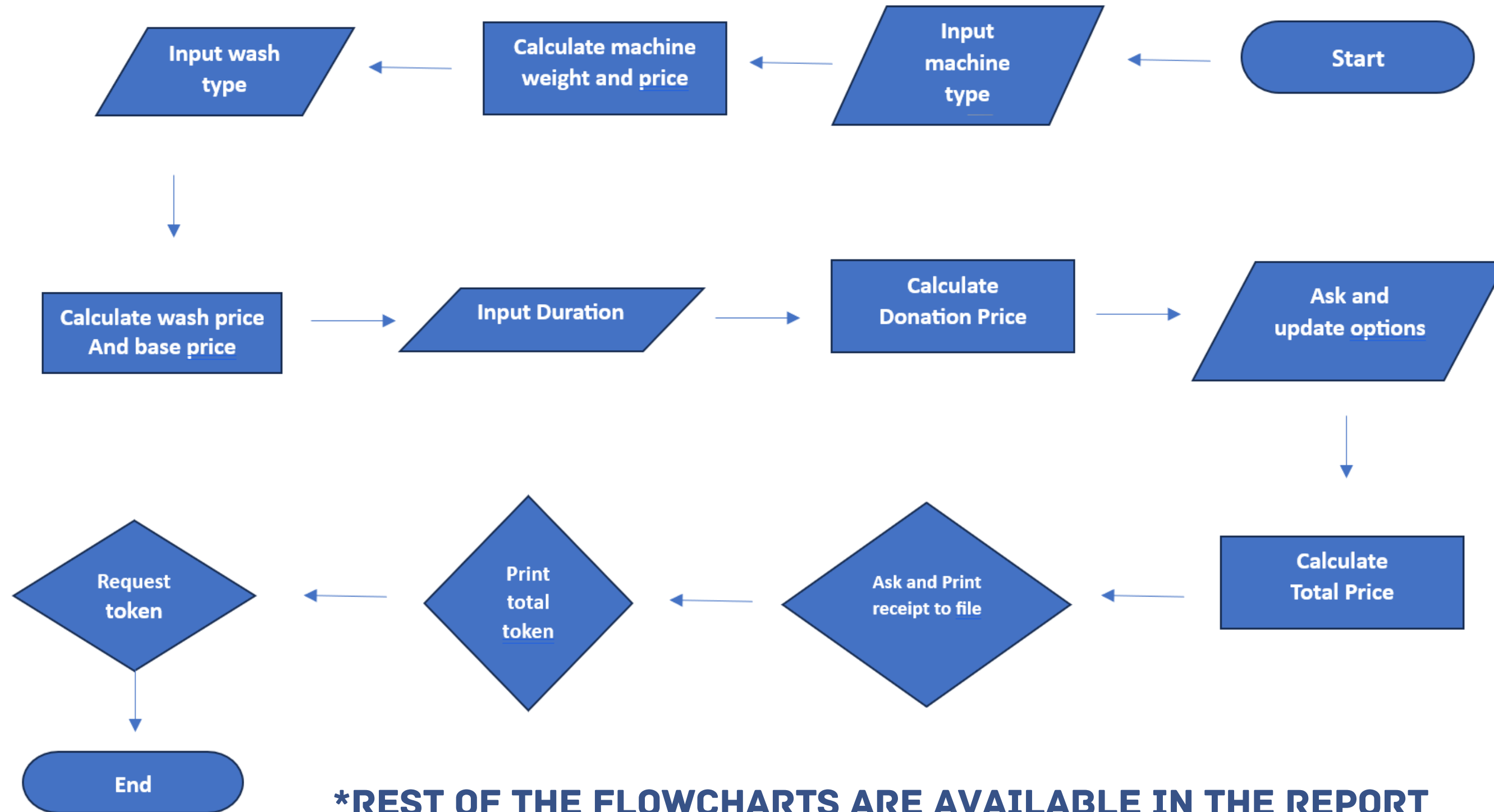
FEATURES

- **Weight-Based Pricing**
- **Type of Wash**
- **Additional Options**
- **Weight and Duration Tracking**
- **Payment System**
- **Payment Verification**
- **Update Options**



MAIN FLOW CHART

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***REST OF THE FLOWCHARTS ARE AVAILABLE IN THE REPORT**





METHODS

1

displayWelcome Message, isInteger

1. Displays a welcome message for the Automatic Laundry Machine program. Provides essential information, such as token value and available machine options.
2. check if input is an integer

2

Machine Methods (getMachineType, getMachineWeight, getMachinePrice)

1. Prompts the user to select a machine type
2. Returns the weight capacity of the selected machine type.
3. Returns the price associated with the selected machine type..

3

Wash Methods (getWashType, getWashPrice)

1. Prompts the user to select a wash type (Cold, Warm, Hot).
2. Returns the price associated with the selected wash type..

4

Duration Methods (getDurationOption, calculateDurationCost)

1. Prompts the user to select a wash duration option.
2. Calculates the cost based on the selected duration, considering additional charges for durations over 30 minutes

5

Detergent Methods (getAdditionalDetergent, calculateDetergentCost)

1. Prompts the user for additional detergent amount.
2. Calculates the cost of additional detergent based on the input amount.

6

Cost Calculation Methods (calculateWashPrice, calculateLaundryCost)

1. Returns the breakdown cost of the wash type.
2. Calculates the total laundry cost, including machine, wash, duration, and detergent costs.

7

Update Options & Token Conversion Method (convertToTokens)

1. Asks if user wants to update his previous options & goes back to that option
2. Converts the total cost to tokens, using a predefined token value.

8

Processing and Receipt Methods (processTokenInput, askForReceipt, printReceiptToFile)

1. Handles token input, prompts for receipt, and prints detailed receipt to a file.



OUTPUT

```
| Welcome to the Automatic Laundry Machine |
```

1 TOKEN = 0.50RM

```
Enter The Machine Type (OPTION 1-3): 1
```

Enter The Wash Type (OPTION 1-3): 2

Enter The Duration (OPTION 1-6): 2

Every additional 50ml = +1RM:
Enter Additional Detergent (in ml): 50

```
Enter your choice (1-5): 2
```

Wash Type updated to 3

Do you want to update any option?

- ```
Enter your choice (1-5): 5
```

Finish Editing. Returning to main menu.

Do you want to print the receipt? (1 for YES, 2 for NO):

1

Receipt has been printed to a file named: 'LaundryReceipt.txt' .

Total cost: RM 8.50

Tokens needed: 17 tokens

Enter the number of tokens: 17

Thank You for using our laundry service!

Total cost: RM 8.50

Tokens needed: 17 tokens

```
BUILD SUCCESSFUL (total time: 41 seconds)
```



Effortless Cleanliness, Seamless Efficiency



LaundryReceipt.txt

File Edit View

```
Total cost breakdown:
Machine price: RM 4.50
Wash price: RM 1.00
Duration cost: RM 2.00
Detergent cost: RM 1.00
```

Total cost: RM 8.50  
Total Tokens 17

```
┌-----┐
| THANK YOU FOR USING OUR SERVICE |
└-----┘
```