

Phillip Salazar

Lab 4

Problem statement:

Create a program that is a simple ticketing system for a parking garage.

Output:

Hour in: 2

Minutes in: 34

Hours out: 3

Minutes out: 34

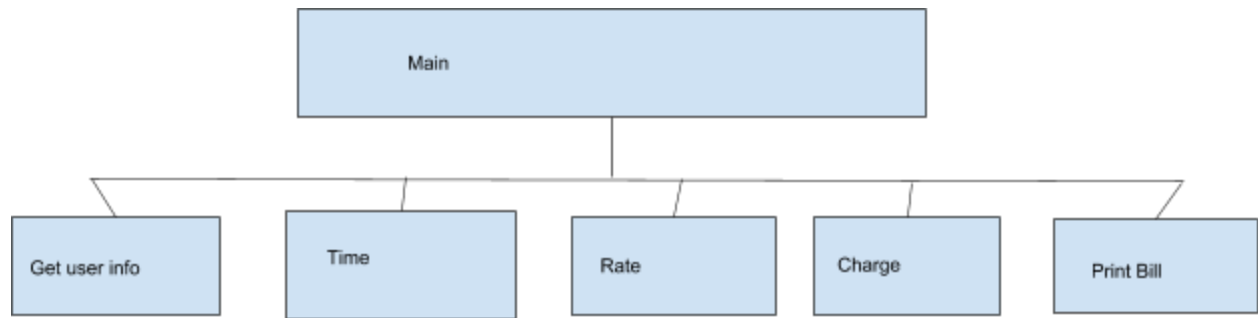
Hours Parked: 1

Minutes Parked: 0

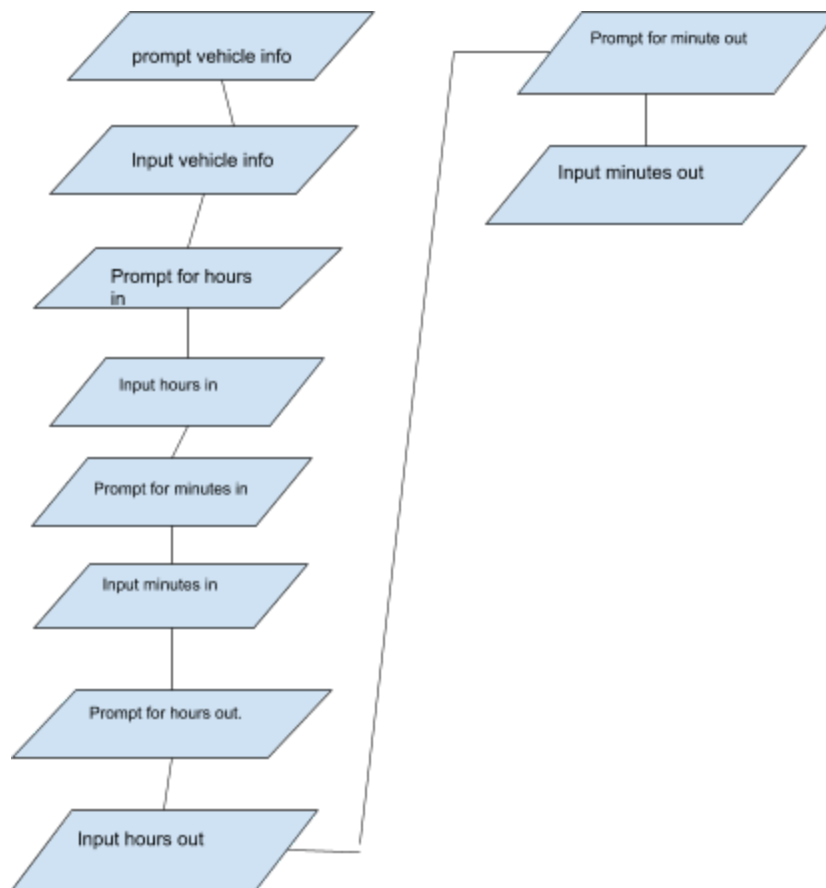
Rounded time parked: 1

Cost: 1.5

Flow chart:

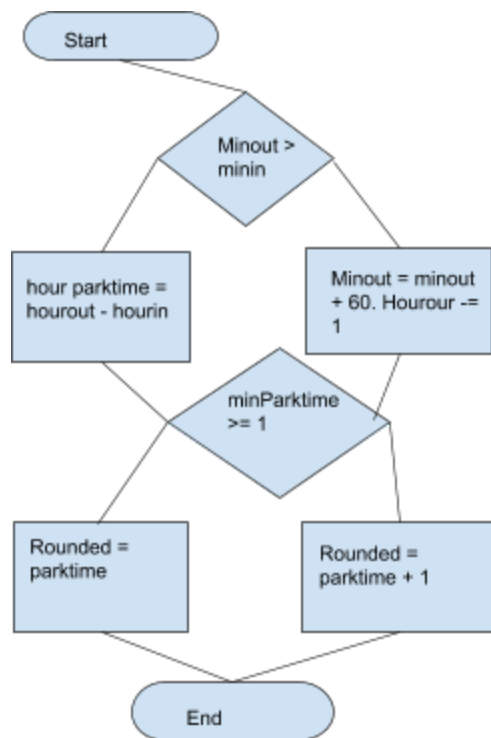


Flow chart for get user info



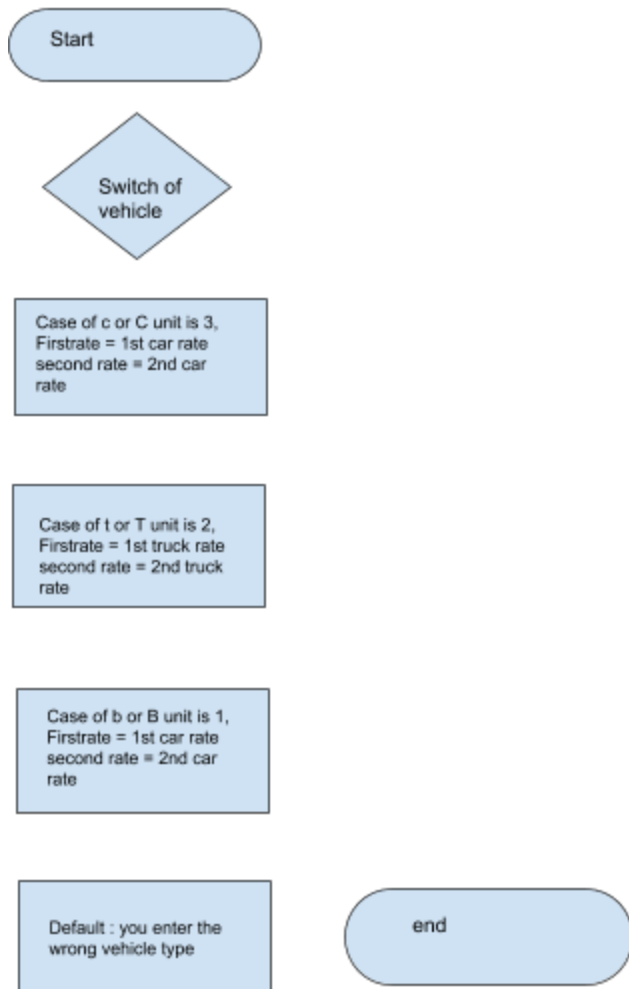
1. Start function
2. Prompt for vehicle
3. Input vehicle
4. Prompt hours in
5. Input hours in
6. Prompt for minutes in
7. Input minutes in
8. Prompt for hours out
9. Input for hours out
10. Prompt for minutes out
11. End function

Flow chart for Time



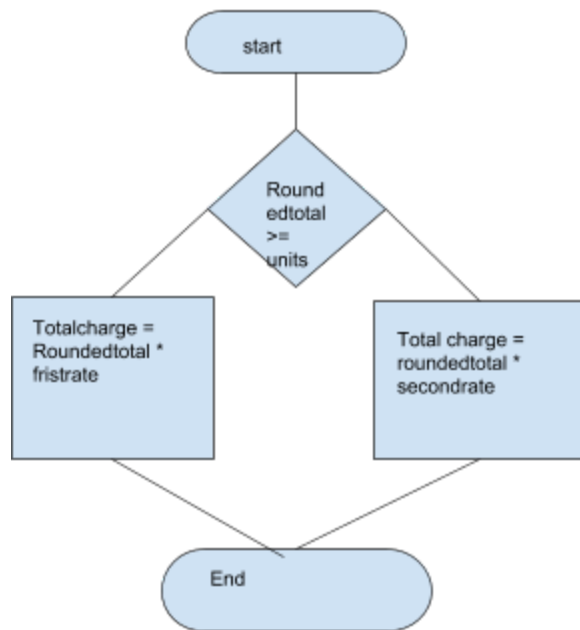
1. Start function
2. If statement checking minout is > than minin
3. If true add 60 to minout, and -1 to hour out
4. If false hour out equals hourout - hourin
5. If statement checking minparktime >= 1
6. If true rounded = parktime + 1
7. If false rounded = parktime
8. End function

Flowchart for rate



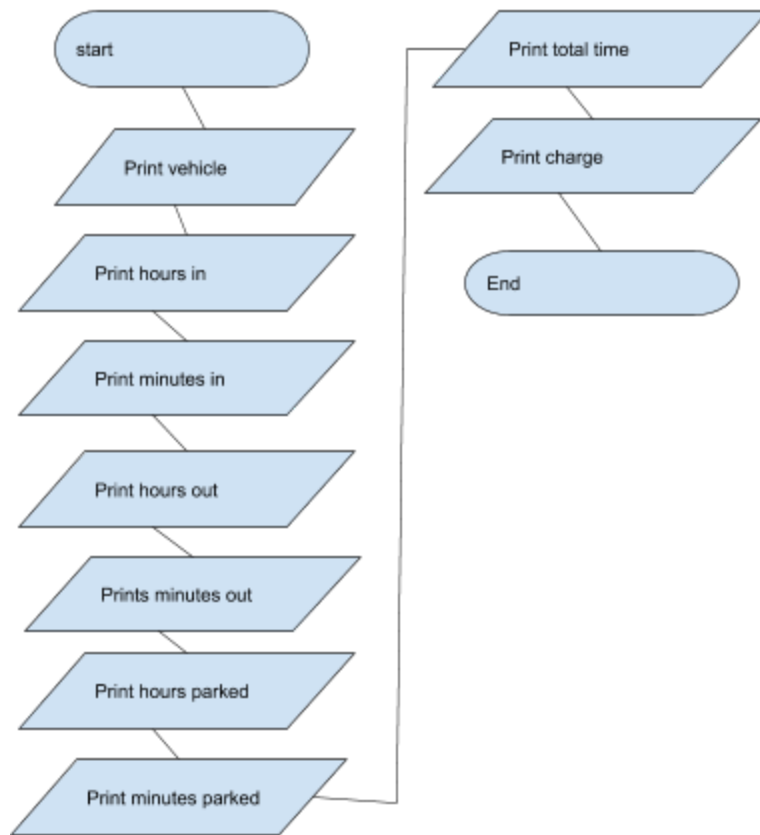
1. Start function
2. Switch statement
3. Case c or C: unit = 3. First rate is 1st car rate, second car rate = second car rate.
4. Case c or C: unit = 3. First rate is 1st car rate, second car rate = second car rate.
5. Case b or B: unit = 1. First rate is 1st but rate, second bus rate = second bus rate.
6. Default : you enter the wrong vehicle type.
7. End function

Flowchart for charge



1. Start function
2. If statement on roundedtotal >= units
3. If true total charge = roundedtotal * second charge
4. If false total charge = roundedtotal * fristrate
5. End function

Flowchart for print



1. Start function
2. Print vehicle
3. Print hours in
4. Print minutes in
5. Print hours out
6. Print minutes out
7. Print hours parked
8. Print minutes parked
9. Print total time
10. Print charge
11. End function

Input:

```
Terminal File Edit View Search Terminal Help
philiip@mr-grey:~/Documents/cpp_projects/Programming-one/lab4-imperactive$ ./lab
4
What is your vehicle type? b
Hours in: 2
Minutes in: 45
Hours out: 6
Minutes out: 25
```

Output:

```
Terminal File Edit View Search Terminal Help
philiip@mr-grey:~/Documents/cpp_projects/Programming-one/lab4-imperactive$ ./lab
4
What is your vehicle type? b
Hours in: 2
Minutes in: 45
Hours out: 6
Minutes out: 25

Your vehicle is a: b
Hours in: 2
Minutes in: 45
Hours out: 6
Minutes out: 25
The amount of hours you parked: 3
The amount of minutes you parked: 40
The rounded time you vehicle was here for: 4
The amount due!!! 13.1
philiip@mr-grey:~/Documents/cpp_projects/Programming-one/lab4-imperactive$
```


User instruction:

Open the terminal. Go the location of the executable. Type in ./lab4 then the terminal will prop up 5 questions vehicle type, hours in, minutes in, hours out, and minutes out. Then the program will spent things like total time parked and cost.

Comments:

The lab 4 was pretty challenging, and I didn't do input validation. Because I was feeling lazy, but everything worked. I didn't like the projects as much because I didn't come up with my own solution. If I would of done that it would have taken me an extra week. Overall it was kinda interesting, and challenging.